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SELECTED READINGS IN SOCIAL PSYCHOLOGY

EDITED BY

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Holt, Rinehart and Winston

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TO
THOSE WHOSE WRITINGS
ARE INCLUDED HERE
(and P. Y. E.)

PREFACE

Purpose of This Book

This volume is intended to answer the need for a collection of brief readings in social psychology. It has been prepared primarily for undergraduate students.

The book is designed to be used in conjunction with any textbook in social psychology. Although any text needs to be supplemented by assigned outside readings, only a limited number of professional journals and books are available in college libraries. The present materials, then, not easily available to most students, have been put together in a compact form.

This volume has also been published inexpensively, so that all students in a course can afford to own it.

How the Materials Were Selected

Over the years, literally thousands of articles and books have been read and examined by the editor. The question obviously arises, why were the present excerpts selected instead of others? There could have been a great many selections for each topic, but only one was chosen. This means that each selection was believed to be the "best" only in the sense that it was considered most suitable for inclusion in a group of brief readings for undergraduate students.

Undoubtedly other materials might have served as well for many of the topics; and, in fact, the editor has a number of alternative selections that could have been used. The problem may be compared to that of selecting articles of furniture for a living

room where guests may sit comfortably. Armchairs, over-stuffed chairs, wooden chairs, cane chairs, sofas, loveseats, settees, daybeds, and even stools might be considered—and each of these in a variety of woods, colors, makes, periods, and styles. But eventually one has to make decisions as to which pieces of furniture will be most useful and blend most harmoniously. And he cannot include *everything* he likes!

The same was true here—the editor had to decide what he believed would have the greatest practical use for students who are already reading a social psychology text. The selections are not supposed to be exhaustive, or all-embracing. The book does not attempt to "cover the field," for there is always the question of how "representative" only one selection can be for a given topic.

Accordingly, fifty short selections have been carefully chosen and edited in order to give students additional factual information about the broad scope of social psychology. The emphasis is on experimental and observational reports, and on summaries of significant empirical studies. Also brief selections have been used. No attempt has been made to write digests of books or lengthy articles.

Several other criteria also have been employed. Both "old" and "new" materials have been included, but with more emphasis on recent empirical studies. Excerpts have been included both from professional journals and books. From the student's standpoint, both "hard" and "easy" materials are found.

Representative writings have been included of *psychologists*—such as Gordon W. Allport, Bruner, Cantril, Coffin, Farnsworth, Klineberg, Lazarsfeld, Lewin, Lippitt, MacKinnon, Gardner Murphy, Lois B. Murphy, Newcomb, Postman, Sears, Sherif, Stagner; of *sociologists*—such as Albig, Cottrell, Landis, Robert S. Lynd and Helen Merrell Lynd, Nimkoff, Ogburn, Kimball Young; of *anthropologists*—such as LaBarre, Linton, and W. Lloyd Warner; and of some *other social scientists*. In general, the use of more than one selection by the same author has been avoided; but five psychologists are represented by more than one article or portion of a book.

How the Materials Are Arranged

The selections have been grouped under the following six headings:

I. Social Psychology and Its Methods
II. Biological and Social Foundations of Behavior
III. Some Individual Factors of Social Adjustment
IV. Behavior in the Presence of Others
V. The Social Psychology of Institutions
VI. Social Conflicts

These are the same headings as for the six parts of my *Social Psychology of Modern Life*. However, so that this book of *Selected Readings* may be used in conjunction with *any one* of the principal texts in social psychology, a special table is given on pages 483-493 which relates the readings to specific pages in *each* text. For ready reference, the table is arranged alphabetically by topics. This will also aid any reader who wishes to arrange the readings in some other order that appears preferable.

Almost all selections have been edited, but in such a way that they remain relatively complete. The editing has consisted primarily of deleting paragraphs or tables or illustrations when the sense of the selection could still be made in shortened form. In only a few instances have sentences within paragraphs been deleted. Dots (. . .) have *not* been used to indicate breaks in a selection; but each excerpt is printed as an intact whole.

How to Use This Book

As just indicated, this book is not supposed to provide a theoretical arrangement or framework for the materials of social psychology. Rather, it is a *supplement* to any one of the standard textbooks, or to a series of classroom lectures.

Each reader can provide his own grouping of topics; or he can follow the order of chapters in one of the texts. From thirteen textbooks which appear to have the widest current use, those pages

are listed to which the present readings seem most closely related (see table, page 483). The thirteen texts are:

1. C. Bird, *Social Psychology.* New York: Appleton-Century-Crofts, Inc., 1940.
2. E. S. Bogardus, *Fundamentals of Social Psychology* (4th ed.). New York: Appleton-Century-Crofts, Inc., 1950.
3. S. H. Britt, *Social Psychology of Modern Life* (rev. ed.). New York: Holt, Rinehart and Winston, Inc., 1949.
4. D. Katz and R. L. Schanck, *Social Psychology.* New York: John Wiley & Sons, Inc., 1938.
5. O. Klineberg, *Social Psychology.* New York: Harper & Brothers, 1940.
6. D. Krech and R. S. Crutchfield, *Theory and Problems of Social Psychology.* New York: McGraw-Hill Book Company, Inc., 1948.
7. R. T. LaPiere and P. R. Farnsworth, *Social Psychology* (3d ed.). New York: McGraw-Hill Book Company, Inc., 1949.
8. A. R. Lindesmith and A. L. Strauss, *Social Psychology.* New York: Holt, Rinehart and Winston, Inc., 1949.
9. T. M. Newcomb, *Social Psychology.* New York: Holt, Rinehart and Winston, Inc., 1950.
10. S. S. Sargent, *Social Psychology: An Integrative Interpretation.* New York: The Ronald Press Company, 1950.
11. M. Sherif, *Outline of Social Psychology.* New York: Harper & Brothers, 1948.
12. W. F. Vaughan, *Social Psychology.* New York: The Odyssey Press, 1948.
13. K. Young, *Social Psychology* (2nd ed.). New York: Appleton-Century-Crofts, Inc., 1944.

By reference to the table, teachers and students of social psychology can find the appropriate sections in the *Readings* to be used with any of these books. In the case of my own *Social Psychology of Modern Life,* for example, Chapter 3 (pages 25-40), "Biological Bases of Human Behavior," should be supplemented by reading Topic 4, "Biological Factors"; Chapter 9 (pages 166-198), "The Psychology of Irrationality," should be read with Topic 21, "Folklore," Topic 22, "Rumor," and Topic 9, "Deviant

Behavior"; Chapter 21 (pages 499-514), "Delinquency Patterns," should be supplemented with Topic 45, "Delinquency"; and so on. Similar arrangements, of course, can be worked out for other books.

In many instances the relationships are indirect between a quoted selection on the one hand, and the pages of a particular textbook on the other hand. This simply means that, wherever possible, additional aspects of the same topic are treated. Although *Selected Readings in Social Psychology* is not a complete substitute for other assignments outside of class, it provides a background of information so that other special assignments will become more useful to students.

The selection on Statistical Methods (Topic 3, pages 31-47) should be of genuine assistance to students without formal training in statistics. This selection gives a clearer understanding of some of the statistical terminology found in some of the present readings, and possibly in other outside assignments.

The helpful criticisms of Dr. George Horsley Smith (psychologist) of Rutgers University and of Dr. John A. Clausen (sociologist) of the U.S. Public Health Service are gratefully acknowledged.

S.H.B.

New York City,
January 1, 1950

Special Note

The principles used in editing this volume have been stated in the Preface. But it should be emphasized again that the deletions of sentences, paragraphs, tables, or illustrations within selections are *not* indicated.

Although the selections do not differ very much from the original, readers may wish to consult the books and journals from which they are taken, especially for related information which often precedes or follows the material quoted here.

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PART I

Social Psychology and Its Methods

The present article was written some years ago, and therefore does not include examples of *recent* studies in social psychology. It is included in this volume, however, because the point of view is believed to be fundamentally sound. It is intended to illustrate the tremendous importance of *empirical investigations.* It also demonstrates that the materials for social-psychological study may come from a variety of sources.

PAST AND PRESENT TRENDS IN THE METHODS AND SUBJECT MATTER OF SOCIAL PSYCHOLOGY *

Steuart Henderson Britt

I

Jay B. Karpf has written an excellent historical critique of social psychology, which presents the European background and then the development of social-psychological thought in the United States.[1]

I do not decry the importance of sound historical orientation, and a comparison of points of view; but I say that so much time has been spent in arguments between various "schools" of thought that entirely too little time has been devoted to systematic experimentation and observation. We may get so lost in "battles of words" that investigators in other fields may justly accuse us of sterility, or, worse still, of describing the obvious. The Murphys have rendered a genuine service in compiling be-

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* From "Past and Present Trends in the Methods and Subject Matter of Social Psychology," by Steuart Henderson Britt, *Social Forces,* 1937, Vol. 15, pp. 426-469. Reprinted by permission of the publisher, The Williams & Wilkins Company.

[1] Karpf, F. B., *American Social Psychology* (McGraw-Hill, 1932).

tween two covers the significant work in *experimental* social psychology;[2] yet the researches reported in their very excellent book have been criticized by some as lacking in real significance.[3]

II

"The social psychologies written by such outstanding men as Bogardus, Allport, McDougall, Young, Kantor, and Dunlap are so unlike one another that it would be entirely possible for a reader to understand any one of these volumes quite thoroughly and yet be painfully ignorant of much (or even of almost all) of the content of the others." [4]

An examination of textbooks in social psychology also reveals that many are still concerned with fostering a particular point of view. Students simply do not get excited over the history of social psychology, over a discussion of the "group mind," over the principles of hedonism. They do get very much interested and even excited over the very real problems which they themselves are facing: the detection of propaganda so as to cope with it; the matter of sex adjustment and marriage; the prevention of juvenile delinquency; the place of the church and religion in our society; the problems of "race" differences and race prejudice; the very urgent questions of pacifism and war. They want answers to such questions as: "To what extent do newspapers print 'true' news?" "What are the underlying myths and legends that cause friction between Gentile and Jew?" "How much was our entrance into the World War due to propaganda?" "Is the family necessary to the continuity of a nation?" "How may early family influences be overcome?" [5]

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[2] Murphy, G. and Murphy, L. B., *Experimental Social Psychology* (Harper, 1931).

[3] Their book has even been dubbed "a monumental compilation of trivial and patently insignificant research." [Michael, J. and Adler, M. J., *Crime, Law, and Social Science* (Harcourt, Brace, 1933), p. 80, ftn. 22.]

[4] Smoke, K. L., "The Present Status of Social Psychology in America," *Psychological Review,* 1935, Vol. 42, pp. 537-543, at 538-539. Smoke's Table, showing "approximate percentage of the material in recent books on social psychology which is devoted to representative topics listed in their subject indices," is well worth study.

[5] For a large group of such "practical" questions, see Cantril, Hadley, "The Social Psychology of Everyday Life," *Psychological Bulletin,* 1934, Vol. 31, pp. 297-330.

It is high time that we devoted more attention to the present-day empirical methods of experiment, of observation, and of statistics. Our real task is not to draw artificial lines around our field, but rather to make thorough, objective analyses of important problems.

III

Fortunately during the last decade an empirical attack has been made on many problems by social scientists. Social psychology of today is a far cry from that of the past, and the contrast is worth our attention. Social psychology of the "past" was tainted by too much "arm-chair" philosophizing—it was typified by wordy arguments and discussions of points of view. Social psychology of the "present" can be typified in one word: *empirical.*[6] The empirical method may be characterized by three important techniques: the experimental method; the use of first-hand observation; and the employment of statistics.[7] Probably the most important development of the empirical movement has been the emphasis on an experiential approach to social-psychological problems, and the concomitant "dropping out" of the tendency to rely on the personal opinion of oneself or others.[8] Although

[6] "*empirical* = 1. pert. to experience; 2. pert. to methods or conclusions based on observation or experiment. [Syn. (1) *experiential.* Contr. (2) w. *deductive* and *rational,* whether as a term of reproach (*i.e.,* lacking necessary theorizing), or as a term of praise (*i.e.,* avoiding rigorously all hypothesis except working hypotheses).]" [Warren, H. C., Ed., *Dictionary of Psychology* (Houghton Mifflin, 1934), p. 92.]

[7] Carmichael has shown that ambiguity has resulted from the use of the phrase "empirical psychology" in at least three major senses: in the historical sense, as experimental, that is, antithetical to rational and inferential; in the epistemological sense, as ontogenetic, that is, antithetical to nativistic; in the Titchenerian sense, as antithetical to hypothetical. (Leonard Carmichael, "What Is Empirical Psychology?," *American Journal of Psychology,* 1926, Vol. 37, pp. 521-527.) The second and third usages are not implied here.

[8] I should agree with Dewey, however, who suggests that social psychology is only making a good beginning and stands about where physical science stood three centuries ago. (Dewey, J., "The Need for Social Psychology," *Psychological Review,* 1917, Vol. 24, pp. 266-277, esp. 275-277.) Dewey also says that "all psychology is either biological or social psychology. And if it still be true that man is not only an animal but a social animal, the two cannot be severed when we deal with man." (Same citation, p. 276.)

social psychology has not succeeded in developing any *exact* social principles,[9] it is rapidly "coming of age."

I shall present some typical samples of social psychology of the "past," and then some examples of present-day work, in order to contrast the former "arm-chair" systems with our present-day empirical approach. In doing this I do not imply that the writings of the past were not important. In fact, they were of great significance, because of their stimulating influence on the thinking of other investigators of both the past and present, and because of their emphasis on the fact that there were problems of society which needed to be investigated. It would seem, however, that many of the early writers had some particular concept—often a "catch-phrase"—around which an entire system of social psychology was built. The concepts were presented almost as magic keys which would unlock the solutions to all social problems. Elaborate classifications were often devised, beautiful in phraseology but devoid of scientific merit. For example, Wundt built his entire social psychology around his already adopted views of individual psychology, and then went ahead with a classification of the "ages" of man: the age of "primitive man"; the totemic age; the age of heroes and gods; the era of humanity, which is "coming to be." [10] Walter Bagehot had this same predilection for neat categories, but a different classification of "ages": the preliminary age, with imitation and the "cake of custom" of primary importance; the nation-making age, with struggle and war, and conflict between "cakes of custom"; and, finally, the age of discussion, with government by discussion, and the development of tolerance.[11]

Durkheim, in France, built a system around one central concept; he wrote of *représentations collectives,* and emphasized the

[9] This has been shown by Har, who has examined some 136 supposed "social laws" and shown that they are in the main very general statements. Since our knowledge is so inadequate as to the conditions under which the various social tendencies interact on one another, he suggests that we refer, not to "laws," but to "statements of tendencies." [Kyung Durk Har. *Social Laws: A Study of the Validity of Sociological Generalizations* (University of North Carolina Press, 1930).]

[10] Karpf, Fay B., *American Social Psychology* (McGraw-Hill, 1932), pp. 51-65, esp. 58-59.

[11] Same citation, pp. 158-164, esp. 159-160.

importance of the group factor to the extent of practically ignoring the actions of the individual.[12] Tarde took the opposite stand, and put his emphasis on the individual factor in social causation; he wrote of the importance of *invention* by the individual, and then the spreading of inventions by *imitation* in the group.[13] Lévy-Bruhl had his own pet scheme, too, and developed Durkheim's *représentations collectives* in his explanation of *How Natives Think*.[14] Lévy-Bruhl did not make field studies of "Natives," but instead wrote within the academic "tribe" of the Sorbonne; he devised a supposed law of "contradiction" for civilized man and a supposed law of "participation" for primitive man, maintaining from the confines of his library that civilized man and primitive man are separated by a considerable gulf.[15]

Graham Wallas was another who wrote of problems of society without conducting experiments or making first-hand observations.[16] Like Trotter and Hobhouse, a great deal of his attention was devoted to an "arm-chair" discussion of instincts.[17] In the United States, Cooley wrote three important works on the social order without embodying any great amount of empirical material.[18]

These details have been given simply to illustrate the fact that past writers have been content to discuss problems of social psychology with no empiristic slant other than an attempt at "fact-mindedness." [19] Beautiful hypotheses have been expounded, detailed classifications built up, and new terms added to our vo-

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[12] Same citation, pp. 108-122.

[13] Same citation, pp. 93-122.

[14] Same citation, pp. 123-134.

[15] Lévy-Bruhl, Lucien (translated by Lillian A. Clare), *How Natives Think* (George Allen & Unwin, 1926), *passim*.

[16] Wallas, G., *Human Nature in Politics* (Houghton Mifflin, 1909), *The Great Society* (Macmillan, 1914).

[17] Trotter, W., *Instincts of the Herd in Peace and War* (T. Fisher Unwin, 1916); Leonard T. Hobhouse, *Mind in Evolution* (Macmillan, 1901).

[18] Cooley, C. H., *Human Nature and the Social Order* (Scribner's, 1902), *Social Organization* (Scribner's, 1909), *Social Process* (Scribner's, 1918).

[19] The attempt at "fact-mindedness" has perhaps been due in part to the influence of Auguste Comte (1790-1857), with his concept of a "social physics." His positivistic slant and his disdain of the introspective methods of his day affect even present-day investigations. [Compare Karpf (footnote 1), pp. 14-25.]

cabulary. All these things have been stimulating and helpful, but have not compared in significance with the empirical attitude so typical of the last decade—the experimental, observational, and statistical approaches.

IV

As contrasted with Wundt's philosophizing and Lévy-Bruhl's study while he lived in Paris of primitives who lived in the jungle, we have had a number of important empirical investigations within the past few years. The experimental, observational, and statistical methods have all been employed, in ways that were not dreamed of by our predecessors. Social psychology is no longer content merely to devise classifications and to invent new terms, but demands empirical verification of hypotheses. I will illustrate this by mentioning some of the important fields of study, and by giving an intensive sampling in each field of some of the major contributions. I wish to emphasize that the investigations which I mention are classified separately only in order to illustrate the principal techniques being employed today. The classification and arrangement is *not* a rigid one; *the types of studies mentioned in any one paragraph below are not mutually exclusive of the types of studies discussed in other paragraphs.*

1. *Tests.* The development of intelligence tests and aptitude tests into serviceable tools for education and industry may be cited as examples. The name Edward L. Thorndike is a synonym for progress in this work.

2. *Questionnaires.* Whereas tests measure ability, questionnaires are designed more for the measurement of conduct or attitude.[20] As examples of determining attitudes toward a particular act, the work of Goodwin Watson as to attitudes toward Orientals is in point,[21] and the work of Bogardus as to "social distance." [22] As examples of measurements of attitudes toward

[20] Symonds, P. M., *Diagnosing Personality and Conduct* (Century, 1931), p. 122 ff., 215 ff.

[21] Watson, G. B., *Orient and Occident: An Opinion Study;* see Murphy and Murphy, *Experiments in Social Psychology* (Harper, 1931), p. 626 ff.

[22] Bogardus, E. S., *Immigration and Race Attitudes* (Heath, 1928); see Murphy and Murphy, *Experiments in Social Psychology* (Harper, 1931), p. 629 ff.

certain concepts, we have the work of Floyd H. Allport and D. A. Hartman on attitudes toward the League of Nations, prohibition, etc.,[23] and that of Stuart A. Rice on *Quantitative Methods in Politics*.[24]

3. *Psychophysical studies.* Thurstone has been the chief advocate of the psychophysical technique for the measurement of attitude and opinion.[25] Instead of writing a philosophical discussion of what people *probably* believe about prohibition, or about the church, he has used empirical methods to find out what they *do* believe.[26]

4. *Genetic studies (biographies and case histories).* Much of psychological interest has been found in biographies of various people from Edgar Allan Poe to Mark Twain.[27] However, a definite empirical approach to a well-defined group of problems is best illustrated by the genetic studies of gifted children, by Professor Terman, Dr. Catharine Cox Miles, and others.[28] The need of social case workers for definite information as to a per-

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[23] Allport, F. H., and Hartman, D. A., "The Measurement and Motivation of Atypical Opinion in a Certain Group," *American Political Science Review*, 1925, Vol. 19, pp. 735-760.

[24] Rice, S. A., *Quantitative Methods in Politics* (Knopf, 1928).

[25] Thurstone uses the concept *attitude* "to denote the sum total of a man's inclinations and feelings, prejudice or bias, preconceived notions, ideas, fears, threats, and convictions about any specified topic," and the concept *opinion* to "mean a verbal expression of attitude." (Thurstone, L. L., "Attitudes Can Be Measured," *American Journal of Sociology*, 1928, Vol. 33, pp. 529-554, at 531.)

[26] Thurstone, L. L., same citation as footnote 25; "The Measurement of Opinion," *Journal of Abnormal and Social Psychology*, 1928, Vol. 22. pp. 415-430; "Theory of Attitude Measurement," *Psychological Review*, 1929, Vol. 36, pp. 222-241. Thurstone, L. L., and Chave, E. J., *The Measurement of Attitude: A Psychophysical Method and Some Experiments with a Scale for Measuring Attitude Toward the Church* (University of Chicago Press, 1929).

[27] For example: Robertson, J. W., *Edgar A. Poe: A Psychopathic Study* (Putnam's, 1923); Leacock, S., *Mark Twain* (Peter Davies, 1932); compare Woodworth, R. S., *Psychology* (Henry Holt, 3d ed. rev., 1934), pp. 131-133.

[28] Terman, L. M. (ed.), *Genetic Studies of Genius* (Stanford University Press): Vol. I., Terman, L. M., *Mental and Physical Traits of a Thousand Gifted Children* (1925); Vol. II, Cox, C. M., *The Early Mental Traits of Three Hundred Geniuses* (1926); Vol. III, Burks, B. S., Jensen, D. W., and Terman, L. M., *The Promise of Youth: Following Up Studies of a Thousand Gifted Children* (1930).

son's background and personality has resulted in the development of standardized techniques in social case work.[29]

5. *Personality studies.* Obviously related to the other types of studies mentioned is the field of personality. The Bernreuter *Personality Inventory* represents an important development in this field.[30] The series of studies by Hartshorne and May are another instance of the fact that social psychologists are no longer willing to wonder what people do in certain situations nor to write generalities about traits of character; instead Hartshorne and May set out to investigate "honesty" and "deceit" by means of experiments, first-hand observations, and statistics.[31]

6. *Physiological studies.* Although physiological methods have not been widely used in social psychology, they are illustrated by Howells' study of differences between religious radicals and religious conservatives,[32] and by numerous studies of emotion by Carney Landis.[33]

7. *Group studies.* Workers today actually investigate the true influence of groups on individual behavior. Floyd H. Allport has been a pioneer in this field.[34] Recent studies involving groups are Doob's analysis of propaganda,[35] and Hadley Cantril and Gordon W. Allport's investigation of the psychology of radio.[36]

8. *Field studies.* Theories of what certain people are probably like have given way to studies made in person by scientists who have taken the trouble to go into certain localities and in-

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[29] The importance of case studies has been emphasized by Richmond, M. E., *Social Diagnosis* (Russell Sage Foundation, 1917), and *What Is Social Case Work?* (Russell Sage Foundation, 1922).

[30] Bernreuter, R. G. (Stanford University Press, 1931).

[31] Hartshorne, H., and May, M. A., *Studies in the Nature of Character,* Vol. I, *Studies in Deceit* (Macmillan, 1928).

[32] Howells, T. H., "A Comparative Study of Those Who Accept as against Those Who Reject Religious Authority," *University of Iowa Studies: Studies in Character,* 1928, Vol. 2, No. 2, pp. 80.

[33] See Landis, C., "The Expressions of Emotions," Chap. 7, pp. 312-351, *A Handbook of General Experimental Psychology* (Clark University Press, 1934).

[34] Allport, F. H., "The Influence of the Group Upon Association and Thought," *Journal of Experimental Psychology,* 1928, Vol. 3, pp. 159-182; also his *Social Psychology* (Houghton Mifflin, 1924), pp. 260-291.

[35] Doob, L. W., *Propaganda, Its Psychology and Technique* (Henry Holt, 1935).

[36] Cantril, H., and Allport, G. W., *The Psychology of Radio* (Harper, 1935).

vestigate first-hand. This has been done in foreign cultures, as shown by Malinowski's *Crime and Custom in Savage Society,*[37] and by Margaret Mead's *Coming of Age in Samoa;*[38] and it has also been done in our own culture, as demonstrated by Thrasher's *The Gang,*[39] and by the Lynds' *Middletown.*[40]

9. *Psychoanalytic studies.* The psychoanalytic background has been the basis in large measure of such works as Malinowski's *Sex and Repression in Savage Society,*[41] and of Jerome Frank's *Law and the Modern Mind.*[42] A psychoanalytic and genetic approach is exemplified in Dollard's recent book.[43]

10. *Studies of institutions.* The study of any institution—whether the institution is religion, education, politics, law, or whatnot—entails a thoroughly empirical and objective attitude. Professor Robinson's *Law and the Lawyers* is the outstanding example of this approach.[44] Beaglehole's *Property* is another instance.[45]

11. *Contributions from general psychology.* An abundance of data has been gathered as to instincts, the learning process, the development of habits, and the mechanism of conditioning, which has tremendous import not only for social-psychological theories but for the types of research to be conducted.[46]

Once more I should call attention to the fact that the classifica-

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[37] Malinowski, B., *Crime and Custom in Savage Society* (Harcourt, Brace, 1926).

[38] Mead, M., *Coming of Age in Samoa* (William Morrow, 1928); also her *Growing Up in New Guinea* (William Morrow, 1930). Also, compare Benedict, R., *Patterns of Culture* (Houghton Mifflin, 1934).

[39] Thrasher, F. M., *The Gang: A Study of 1,313 Gangs in Chicago* (University of Chicago Press, 1927).

[40] Lynd, R. S., and Lynd, H. M., *Middletown: A Study in Contemporary American Culture* (Harcourt, Brace, 1929).

[41] Malinowski, B., *Sex and Repression in Savage Society* (Harcourt, Brace, 1927).

[42] Frank, J., *Law and the Modern Mind* (Brentano's, 1930).

[43] Dollard, J., *Criteria for the Life History—With Analyses of Six Notable Documents* (Yale University Press, 1935).

[44] Robinson, E. S., *Law and the Lawyers* (Macmillan, 1935).

[45] Beaglehole, E., *Property; A Study in Social Psychology* (George Allen & Unwin, Ltd., 1931).

[46] For instance, Bartlett has shown the signficance of "remembering" as a study in social psychology. [Bartlett, F. C., *Remembering: A Study in Experimental and Social Psychology* (Cambridge, University Press, 1932).]

tions I have given are not neat "pigeon-holes" all to themselves, but that they are interrelated. As to the three classifications which follow, they not only are intimately related to the above studies, but at the same time they typify the empirical method.

12. *Experimental studies.* Actual experiments in the laboratory may be illustrated by the devising of developmental norms for infants by Gesell and his associates.[47]

13. *Observational studies.* As an example, children have sometimes not been submitted to artificial conditions in order to study their social behavior, but they have been observed in natural situations, with tabulations kept of their activities as to dominance, submission, and the like.[48]

14. *Statistical studies.* The application of statistical techniques has given social psychologists of today tremendous advantages over those of the last century. The majority of the studies mentioned have employed statistics.

V

This sampling of studies shows that the keynote of present-day social psychology is truly *empirical.* It also demonstrates that the materials for social-psychological investigation are often gleaned from fields other than "pure" sociology and "pure" psychology: economics, anthropology, history, political science, law, or other "disciplines." This means, then, that the social psychologist of today must have a sound philosophical and historical background. He must have been saturated in the history of thought in order to have the proper perspective as to his own investigations. He must also have more than a passing acquaintance with the other social sciences; in many cases he must master the pertinent materials in some other field before even beginning an investigation. Finally, he must have the ability not only to assimilate but also to integrate pertinent facts and hypotheses from philosophy, history, and other fields with those in sociology and psychology.

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[47] Gesell, A., *The Mental Growth of the Pre-School Child* (Macmillan, 1925). *Infancy and Human Growth* (Macmillan, 1928); Gesell, A., and Thompson, H., *Infant Behavior: Its Genesis and Growth* (McGraw-Hill, 1934).

[48] See Bühler, C., The Social Behavior of Children, Chap. 9, pp. 374-416, *A Handbook of Child Psychology* (Clark University Press, 2d ed., rev., 1933).

2. COMMUNICATION AND OBJECTIVITY

Content analysis **is an important technique for the social scientist. One type of methodology is demonstrated below, as applied to a problem in *communication*—in this instance, communication by several newspapers. The analysis also shows the necessity for complete *objectivity* on the part of all analysts of behavior.**

TRIAL BY NEWSPAPER *

Joseph T. Klapper
and
Charles Y. Glock

On March 2, 1948, a subcommittee of the House Committee on Un-American Activities denounced Edward U. Condon, Director of the National Bureau of Standards, through the medium of the U.S. press. The subcommittee asserted that Dr. Condon "appears" to be "one of the weakest links in our atomic security." Its report, quoted in part by various newspapers, presented 27 paragraphs of "information . . . in substantiation of this statement." Part of this information consisted of excerpts from a letter written by FBI chief J. Edgar Hoover to Secretary of Commerce W. Averell Harriman.

Simultaneously the Department of Commerce, under which the Bureau of Standards operates, announced that Dr. Condon had been unanimously cleared by the Department Loyalty Board five days previously. Dr. Condon himself at once denied the subcom-

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* From "Trial by Newspaper," by Joseph T. Klapper and Charles Y. Glock, *Scientific American*, 1949, Vol. 180, pp. 16-21. This study was conducted by the staff of the Columbia University Bureau of Applied Social Research, of which Robert K. Merton is Acting Director. Reprinted by permission of the publisher and authors.

mittee's allegations, asserted his loyalty and reliability, and shortly thereafter expressed his eagerness for a public hearing by the Committee—an eagerness which he had expressed several times previously in response to similar accusations made by its chairman, Representative J. Parnell Thomas, in magazine articles published a year before.

During the succeeding four and one-half months the "Condon case" became a *cause célèbre.* At least three Congressional committees, the Federal Bureau of Investigation, the Atomic Energy Commission, two executive departments and President Truman himself played speaking roles in the drama. Numerous learned, scientific and juristic societies, as well as various individuals, eminent and otherwise, issued statements. In the course of the controversy, the Administration's refusal to surrender the FBI letter to Congress led to extraordinary Congressional repercussions, including an attempt to write into law certain provisions regarding the retention and release of data to Congressional bodies. The Condon case itself for a time became only an incident in this argument. It was revived on various occasions, however, by additional attacks on Dr. Condon and by statements in his support. From time to time the Committee promised to grant Dr. Condon a public hearing, but the hearing never took place. The case continued to be argued in the press, albeit less frequently, even after the Atomic Energy Commission announced on July 15 that "on the basis of the voluminous record before it, the members of the Commission" were fully satisfied as to "Dr. Condon's loyalty to the United States" and considered his clearance for access to restricted data to be "in the best interests of the atomic energy program."

The Committee on Un-American Activities itself has made no formal determination of its charges against Condon. The case has been conducted largely in the press. Many citizens have become concerned about the affair as a striking example of what has sometimes been called trial by newspaper. They believe that the Condon case poses the question of the responsibilities of modern organs of mass communication toward the liberties and reputations of individuals.

As a result of this interest, the Bureau of Applied Social Re-

U. S. Standards Chief Called Red Spies' Pal

By JERRY GREENE
of THE NEWS Bureau

Washington, D. C., March 1.—[1 Naming Dr. Edward U. Condon, [2 director of the National Bureau of Standards] as "one of the weakest links in our atomic security,] a [3 House Un-American Activities subcommittee today demanded he be fired or the Administration explain why he is retained.] [4 It charged that Condon "knowingly or unknowingly" associated with alleged Soviet espionage agents.] 5

STATEMENTS

1 Naming Dr. Edward U. Condon, as "one of the weakest links in our atomic security."

2 Dr. Edward U. Condon, director of the National Bureau of Standards

3 House Un-American Activities subcommittee today demanded he be fired or

4 House Un-American Activities subcommittee today demanded the Administration explain why he is retained

5 It charged that Condon "knowingly or unknowingly" associated with alleged Soviet espionage agents.

CONTENT ANALYSIS in this case begins with identification of statements, each of which expresses a single assertion. Here five statements in the first paragraph of a news article in the *Daily News* are isolated and marked and then listed in the table. Each statement is now ready for objective classification and analysis

search of Columbia University was asked by SCIENTIFIC AMERICAN and six eminent scientists to conduct a study of the press treatment of the Condon case. The scientists were: Harrison Brown and Harold C. Urey of the University of Chicago; Philip M. Morse of the Massachusetts Institute of Technology; George B. Pegram, Dean of the Columbia University Graduate Faculties; Charles Lauritsen of the California Institute of Technology, and John C. Warner of the Carnegie Institute of Technology.

The study that was undertaken is known in communications research as a "content analysis." In general terms this means a detailed examination of verbal or pictorial material for the purpose of providing an objective description of the material. For example, a literary critic who analyzes the novels of a given century to determine their political tenor is, in a sense, performing a content analysis. Students of mass communications, however, use the term in a narrower sense. They mean by it a study in which the material is classified according to objective criteria and thus rendered susceptible of statistical description.

The term itself, and the conscious practice of this discipline, are relatively new in social science, as is the whole field of communications research. It is only during the last 30 years that such giants of communication as the modern press, the radio and the screen have come to address and to influence whole populations at once. And it is only in the last decade or two that social psychologists have taken systematic note of these forces of opinion. Content analysis is one of several techniques they have developed for the objective study of the media of communication.

Content analysis has already been successfully employed in a number of complex inquiries. The treatment of minority groups in popular fiction, for example, has been examined through a content analysis of magazine stories. During the war content analysis was used with some success by Government agencies to predict enemy actions. Certain characteristic modes of speech were observed to have increased in frequency during enemy propaganda campaigns preceding surprise invasions. By observing the frequency of such modes of speech in current propaganda, U.S. analysts were able to note when a new invasion move appeared to be imminent.

THE METHOD

The Bureau of Applied Social Research and the sponsors of the analysis agreed at the outset that the study would be directed entirely to the press treatment of the Condon case, as distinguished from the case itself. Neither the Bureau nor the sponsors considered themselves qualified to evaluate or analyze the activities and statements of the various agencies and individuals involved. No attempt has been made, for example, to assess the truth or falsity of the charges brought against Dr. Condon. We have been content with noting in detail what charges against Dr. Condon were reported in the press, what support for these charges was there offered, and the like.

It was soon found that to analyze the material on the Condon case in a representative cross section of the whole U.S. press would be a huge task; even to determine what papers would constitute such a cross section would involve a research project of no mean dimensions. It was therefore decided to focus the study on the press of a single large city. Because of the number and variety of its dailies, the New York City press was selected. Material was drawn from all of the nine general daily papers of that city, *viz.*, the *Times,* the *Herald Tribune,* the *Daily News,* the *Daily Mirror, PM* and its successor the *Star,* all morning papers; and the *Sun,* the *World-Telegram,* the *Post Home News* and the *Journal-American,* all evening papers, some of them with week-end editions. The period studied was from March 1, 1948, to October 31, 1948, inclusive, *i.e.* from the issuance of the subcommittee report to a date three and a half months after the Atomic Energy Commission had cleared Dr. Condon.

The Bureau set out to approximate as closely as possible a complete coverage of all news articles on the Condon case in all issues of the nine New York newspapers during the given period. This coverage was sought by two independent means. All the papers were asked for a list of the dates on which articles mentioning Dr. Condon were published (replies were received from every paper except the *Mirror*). Library editions of all papers were then searched for the articles published on those dates. In addition, a press clipping service was retained to make an independent search

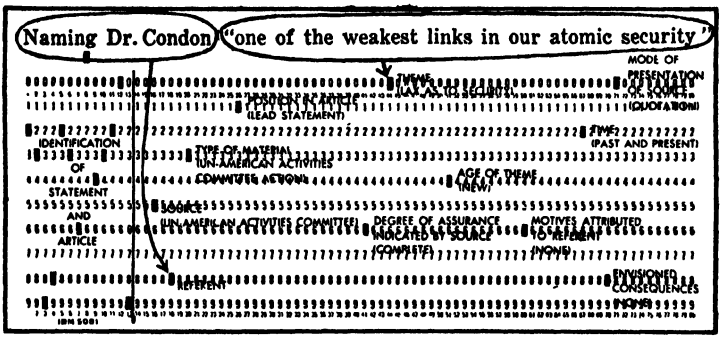
of all available editions of the nine papers for the entire period covered. Despite the precautions taken, it is quite possible that some articles or references to the case may have been missed. There may be variations in completeness of coverage from paper to paper. Any misses that occurred may be considered random, however; the missing material, if any, would not significantly affect the findings, which are almost always stated in terms of ratios or percentages.

All the relevant material in each news article was divided into "statements," each statement consisting of a single complete idea, *e.g.,* "Dr. Condon was denounced by the Thomas Committee." A statement might be a sentence or a single word; for example, "The martyred Dr. Condon will be called to testify" contains two statements: one that Dr. Condon will be called to testify, the other that he is martyred. The total number of statements in the 306 news articles examined was 4,589. Of these, 680 neutral statements of identification (*e.g.,* "Dr. Condon is director of the National Bureau of Standards") were eliminated, since analysis of them seemed purposeless. This left 3,909 for analysis.

The statements were then classified in various categories known as "dimensions," such as the identity of the person or group to whom the statement referred (called the "referent dimension"), the paper in which it appeared, the theme of the statement, the person or group who made it, the basis offered for the statement, and so on. There were 23 such dimensions. The crucial part of this process was the classification of the theme of the statement. To make this as objective as possible, the themes were subdivided at the outset into numerous specific categories, so that the classifiers or coders were not asked to decide whether a given statement was "favorable" or "unfavorable" to the referent (*e.g.,* Dr. Condon), but to describe it in terms of what it actually said. For example, a statement such as, "Dr. Condon is alleged to have associated with a Soviet spy" was classified under the theme: "Association with person in Soviet or Soviet-satellite circles who is allegedly subversive or an espionage agent." These various specific categories were later grouped under more general classifications to furnish the basis for analysis. Thus the statement quoted above

became part of a group headed: "Association with allegedly questionable persons." This group of statements in turn eventually was placed in the general category of statements unfavorable to Dr. Condon.

The statements were all coded on the basis of the original specific criteria. As a check on objectivity, each statement was coded by at least two different individuals, and discrepancies were submitted to several independent checks by supervisors. Thus every coded statement was the end product of a process involving



STATEMENT is classified in descriptive "dimensions." These include name of person or group to whom the statement refers (the "referent"), its theme, source, date, etc. Punched holes in coded card give a complete description of the statement. A statistical analysis is then made by running all cards through sorting machine.

the detailed breakdown of an article, the isolation of the statement, its classification by two different coders in 23 dimensions, comparison of the two codings, and final approval for the next operation.

After they were coded, the statements were recorded on International Business Machine (Hollerith) cards. It thus became possible to determine quickly, by means of IBM sorters, precisely what "demension combinations" existed, and in what degree. If it seemed desirable to know, for example, how many times the *Sun* reported a demand upon President Truman for release of the FBI letter, the machine was merely set to pick out the cards

punched 1/8 (column 1—hole 8: *Sun*), 18/5 (referent: Truman), 33/7 (demand for release of FBI letter). The results of the various machine "runs," taken individually or compared with one another, comprise the findings.

Despite the pains taken to ensure the highest possible degree of consistency, accuracy and objectivity, it must be remembered that we are here dealing not with the relatively stable phenomena of the physics laboratory but with the subjective phenomenon of language, which is as variable as human thought. Some degree of flexibility and interpretive inconsistency is therefore inevitable. While this margin of error is believed by the Bureau to be at the very minimum consistent with the nature of the task, one must lean backward in the interpretation of the findings. A very small percentage difference in two contrasted types of press treatment may not be significant in some cases; a notable percentage difference, however, can safely be regarded as significant.

The problem of the present study was to determine the nature of the "trial by newspaper" that Dr. Condon had received in the New York press. This involved a statistical measurement of the extent to which the newspapers treated him favorably or unfavorably. To that end the objective description of the press content on the case was analyzed as to the number of statements critical of Dr. Condon and those sympathetic to him; the number reporting demands for the FBI letter and those reporting refusals, and a miscellaneous category of statements that may be classified as neutral to Dr. Condon.

A statement was classed as unfavorable to Dr. Condon if it criticized him directly or reflected on him indirectly by supporting the Un-American Activities Committee's treatment of the case. An example of the first type of statement is: "Dr. Edward U. Condon . . . accused by a Thomas subcommittee . . . of associations with Soviet spies." An example of the second type: "McDowell insisted that the Committee's previous labeling of Condon stands as an 'almost perfect description.'" Similarly, a statement was classed as favorable to Dr. Condon if it supported him directly (*e.g.*, "Dr. Condon . . . whose integrity and patriotism have been fully recognized by his scientific peers"), or criticized the Committee (*e.g.*, "The . . . Committee's attack on Dr. Edward

U. Condon was condemned today as 'irresponsible' by 200 leading scientists").

Thus the statements on each side could be broken down into two categories: 1) anti-Condon and pro-Committee, 2) pro-Condon and anti-Committee. As will be seen, such a breakdown produced some interesting findings.

Analyses were made of the emphasis given to the respective statements and of the way in which they were presented. It must be kept in mind that this is not a study of the editorial statements made by the papers themselves but of their news coverage of the story; that is, of the statements made in the news columns by reporters and their sources. Obviously what a newspaper reports about an event is shaped to a large extent by the event itself. When a paper reported an event unfavorable to Dr. Condon it was under no obligation to create an event sympathetic to him to furnish a balance. Thus the fact that a paper may have reported more unfavorable than favorable events is not in itself necessarily a sign of bias. Bias may be shown, however, in the manner in which a paper reports an event and in its selection of which events to report and which to omit. An outside observer, lacking the newspapers' access to the events on which they based their reporting, can only judge their treatment of the Condon case by comparing the way in which the various newspapers dealt with the same events.

WHAT WAS SAID

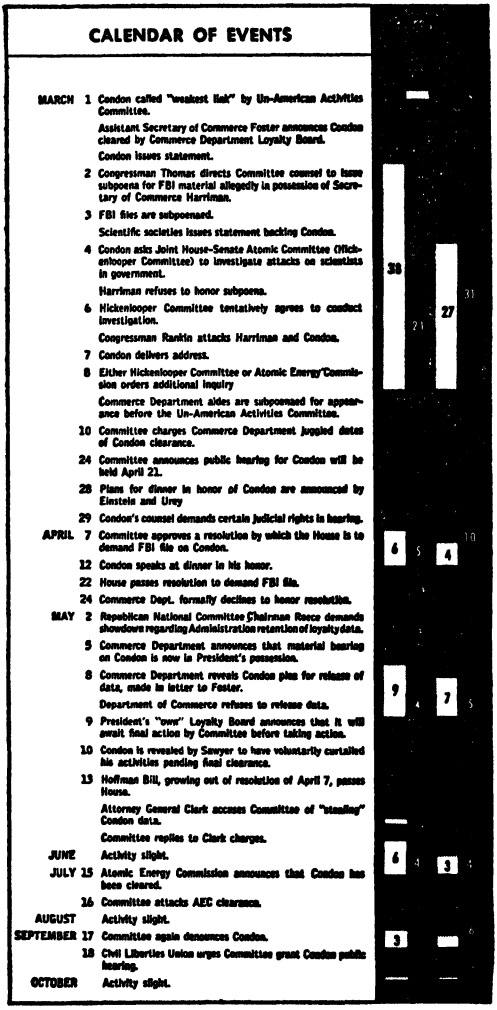
The first general finding is that in the New York press taken as a whole there was a preponderance of statements favorable to Dr. Condon. Of the 3,909 analyzed statements, 745 or 19 per cent were unsympathetic to Condon, and 971 or 25 per cent were sympathetic. These proportions, applying as they do to the total coverage by the entire New York press, are not particularly meaningful: few persons would consistently have read all nine papers and been exposed to this comprehensive coverage. More significant are the differences among the papers. The range of these differences is indicated in the percentages of pro-Condon and anti-Condon statements in the individual newspapers:

	Pro	Con
Times	65	35
Herald Tribune	64	36
Star	63	37
Post	57	43
World-Telegram	50	50
News	49	51
Mirror	47	53
Sun	43	57
Journal-American	18	82

(Because the *Journal-American* published relatively little on the Condon case, the findings for this paper may be less meaningful than for the others.)

Most of the pro-Condon statements were contributed by the first four papers—*Times, Tribune, Star* and *Post*—which accounted for neary two thirds of the total New York coverage of the story in terms of number of statements. In the four papers taken as a group, statements sympathetic to Dr. Condon outnumbered unsympathetic ones in a ratio of 17 to 10. In the other five papers, which have a much larger total circulation than the first group, statements unsympathetic to Dr. Condon predominated in a ratio of 13 to 10 for the group as a whole.

Analysis of the two categories of statements on each side of the case—*i.e.,* those relating directly to Dr. Condon and those relating to the Committee—revealed another interesting difference in the handling of the case by the two groups of papers. There were few statements in praise of the Committee's treatment of the case: of the total of the anti-Condon statements in all the papers fewer than one in 13 supported the Committee itself. When it came to the pro-Condon statements, however, there were contrasting results in the amount of criticism of the Committee in the two newspaper groups. In the *Times, Tribune, Star* and *Post,* more than one third of the statements on Dr. Condon's side consisted of criticisms of the Committee's procedure. In the other five papers, this proportion was nearer one fourth. In other words, the second group published a substantially smaller proportion of statements criticizing the Committee than did the first group.



CALENDAR of developments in Condon case shows how events shaped coverage of the story by newspapers. Bars at right indicate month by month percentages of statements favorable and unfavorable to Condon in two groups of papers. TTSP denotes *Times, Tribune, Star* and *Post.*

The statements favorable and unfavorable to Dr. Condon taken together accounted for 44 per cent of the 3,909 on the case. Of the rest, a surprisingly large group—some 15 per cent of all statements—concerned the struggle between Republican Congressmen and the Administration over the release of the FBI letter. The remaining 41 per cent of the statements in the case were classified as descriptive background of a neutral character.

A further breakdown showing how the treatment of Dr. Condon fluctuated during the progress of the case also yields significant information. In April, when the battle over the FBI letter reached its peak, the reflections of this event were markedly different in the two groups of newspapers. The *Times, Tribune, Star* and *Post* continued to give greater attention to the Condon case itself and to publish more pro-Condon than anti-Condon statements, although the ratio for the group fell to 12 to 10. In the other five papers, however, statements about the letter actually outnumbered statements about the Condon case proper, and the ratio of statements unsympathetic to Condon rose to 23 to 10. When the Atomic Energy Commission cleared him in July, the *Times, Tribune, Star* and *Post* presented a 14-to-10 ratio of statements favorable to him, but the other five papers, in spite of his clearance, remained on the other side of the fence; in that month they printed an average of 11 anti-Condon statements for every 10 pro-Condon. Thereafter there was relatively little press activity on the Condon case, but in September, when the Un-American Activities Committee promised new "shocking revelations," the statements published in the group of five papers were 26 to 10 anti-Condon. In other words, two months after his AEC exoneration, the five papers were still presenting a predominantly unsympathetic picture.

These are simply objective data revealed by the analysis. Whether they show that the New York press was fair or unfair in its coverage of the case is a matter of interpretation, which is beyond the scope of this analysis. The interpretation will depend on the standards applied by the observer. Some may consider that justice would have been served by a perfect balance of pro- and anti-Condon statements in a paper's reporting. On this point, however, the analysis developed certain other pertinent data.

The data had to do with the sources, character and repetition of statements on the case. Because this analysis dealt with statements concerning Dr. Condon himself, the findings from this point will include only statements directly pro- and anti-Condon; *i.e.*, they exclude the statements for and against the Committee. Of the statements against Dr. Condon, 88 per cent were made by members of the Un-American Activities Committee directly or in excerpts that they quoted from the FBI letter. The accusations against Dr. Condon were virtually a monopoly product of the Committee, for some of the remaining 12 per cent of anti-Condon statements were made by Dr. Condon himself or by his defenders in reviewing what the Committee had said about him.

On the other hand, the sources of the pro-Condon statements were legion. They included two departments of the executive branch of the government, the Commerce Department Loyalty Board, the Atomic Energy Commission, entire departments of leading universities, and dozens of scientists and scientific societies. Analysis of the weight given by the various papers to the sources of these statements yielded significant differences. The *Times, Tribune, Star* and *Post* gave considerably more attention to the width of Dr. Condon's support than did the other papers; 21 per cent of their pro-Condon statements were attributed to scientists and scientific societies, while in the other five papers only 4 per cent of the statements favoring Condon came from these sources. Indeed, it appears that those five dailies all but ignored the multitude of meetings, letters and statements in defense of Condon by reputable scientists and institutions. As a result, 77 per cent of the case for Dr. Condon as presented to the readers of those papers came from Dr. Condon himself, from representatives of the Administration, or from unnamed sources.

A similar analysis was made of the bases of the anti-Condon and pro-Condon statements and the relative weight given to them. The case against Dr. Condon was made up almost entirely of three charges: 1) that he associated with suspected persons, 2) that he was lax in regard to U.S. security, 3) that he was unfit in some other unspecified way.

Of the statements making the first charge, 89 per cent identified Dr. Condon's associates only in vague terms or did not iden-

tify them at all. His associates were generally described as persons "alleged" or "known" to be espionage agents, or as Soviet or Soviet-satellite diplomats, or as persons suspected of being subversive, without any specification as to why they were under suspicion or any evidence that Condon knew that his associates were under this vague cloud. Only eight per cent of the statements regarding association actually named his associates, and in most of these cases the charges were equally vague. With regard to Dr. Condon's "laxity," nearly all of the statements were simply assertions, most of them being repetitions of the phrase "the weakest link"; there was little or no specific indication as to how he may actually have endangered national security. In the third category, the allegations were even more vague. Indeed, whatever impression may have been produced on casual readers, the content analysis indicates that the case against Dr. Condon as presented in the newspapers may well have raised a question in careful readers' minds as to whether there was any case at all.

The case *for* Dr. Condon contains a substantial amount of specific material. About a quarter of the pro-Condon statements rest on the fact that he was cleared by official investigations. Other favorable statements are based on "two exhaustive FBI investigations" and several documents, still others on testimonials to Dr. Condon's loyalty and competence from a variety of sources. Yet in comparison with the case against Condon these facts were lightly treated by a majority of the New York papers, which throughout the case gave far heavier emphasis to the allegations by the Un-American Activities Committee than to the support of Dr. Condon from various sources.

HOW IT WAS SAID

A description of what the press said and what it omitted can give only a relatively superficial picture of its coverage. Equally important is the nature of the treatment, and the manner in which newspaper techniques affected the picture presented to the reader. These factors are difficult to analyze in any objective fashion, but the Bureau approached the problem from several new angles and obtained some fruitful results.

One approach was a test of the material by the criterion of the

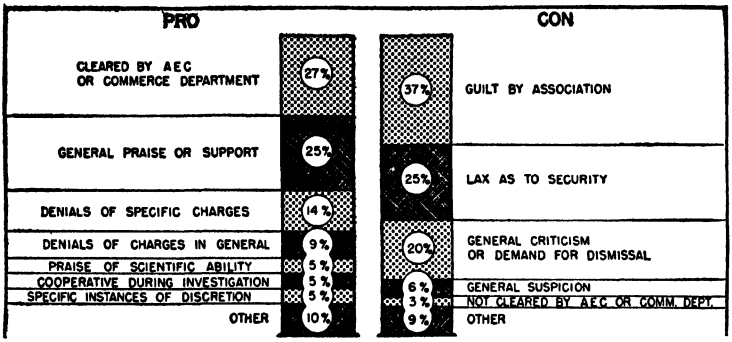
repetition of statements. In any continuing news story, it is to be expected that a newspaper will frequently find it necessary to review past events as background. In making the selection of what background information to print, the newspaper obviously exercises more selective judgment than it can with respect to the new material, for the background provides many more items from which to choose. If, for example, the Un-American Activities Committee announced that it intended to hold a hearing on the Condon case, the "news" was pretty well restricted to that fact, but in injecting background into the report a paper could choose from among a number of statements, such as that Dr. Condon had been accused of associating with spies, that he had been cleared by the Loyalty Board, and so on. Thus it is of considerable interest to see what the papers chose to include as background in their reports as the news developed.

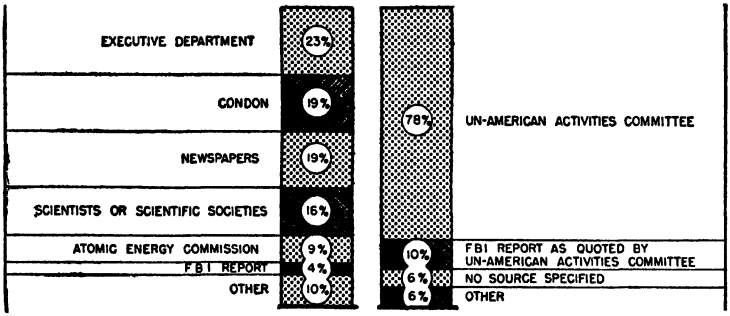
In the analysis of this phase of the newspapers' coverage, all statements printed within two days after an occurrence were classified as "new" and all others as "old." The general finding that resulted from this analysis was that in eight of the nine dailies the "old" or repeated statements built up the case against Dr. Condon more than the case for him. About 57 per cent of the case against him in the papers consisted of revivals of the original charges. On the other hand, criticisms of the Un-American Activities Committee were seldom repeated; only 11 per cent of the statements in this category were revivals.

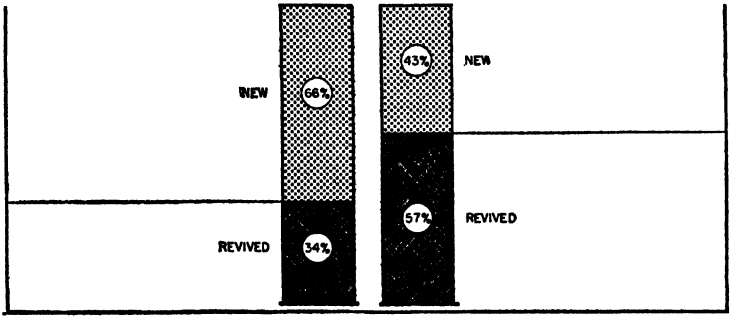
In every category of statements on the case except the one that covered criticisms of Condon, new statements outnumbered the old. The newspapers repeated general denunciations of him six times as often as they repeated general statements in his support. If they had published no "old" statements at all, the score for statements directly naming Condon would have been 416 pro to 301 anti, instead of 695 to 631 the other way.

There is no reason to believe that this result was deliberate. But the fact remains that the reporting techniques employed by the papers served to inflate the case against Condon far beyond its native size.

Another significant finding concerns the newspapers' handling of the Committee's promises of a hearing to Dr. Condon, and of


PRO
CON
CLEARED BY AEC OR COMMERCE DEPARTMENT
27%
GENERAL PRAISE OR SUPPORT
25%
DENIALS OF SPECIFIC CHARGES
14%
DENIALS OF CHARGES IN GENERAL
9%
PRAISE OF SCIENTIFIC ABILITY
5%
COOPERATIVE DURING INVESTIGATION
5%
SPECIFIC INSTANCES OF DISCRETION
5%
OTHER
10%
37%
GUILT BY ASSOCIATION
25%
LAX AS TO SECURITY
20%
GENERAL CRITICISM OR DEMAND FOR DISMISSAL
6%
GENERAL SUSPICION
3%
NOT CLEARED BY AEC OR COMM. DEPT.
9%
OTHER


EXECUTIVE DEPARTMENT
23%
CONDON
19%
NEWSPAPERS
19%
SCIENTISTS OR SCIENTIFIC SOCIETIES
16%
ATOMIC ENERGY COMMISSION
9%
F B I REPORT
4%
OTHER
10%
78%
UN-AMERICAN ACTIVITIES COMMITTEE
10%
F B I REPORT AS QUOTED BY UN-AMERICAN ACTIVITIES COMMITTEE
6%
NO SOURCE SPECIFIED
6%
OTHER


NEW
66%
REVIVED
34%
43%
NEW
57%
REVIVED

CASE FOR AND AGAINST Condon as presented in the New York press as a whole is summed up in this chart showing the percentages of statements in various pro and con categories. Charges against him were invariably vague.

ANALYSIS OF SOURCES of statements shows that anti-Condon case consisted largely of assertions by Thomas Committee. Scientists' defense of Condon got much less attention. "Newspapers" means no source specified.

REVIVED STATEMENTS represent repetition of old material in news stories. The newspapers repeated charges against Condon much more often than they did his exoneration, thus building up attack more than defense.

the breach of that promise. All the papers reported the promises much more often than the breach. Here again, however, there were substantial differences between the two groups of papers. The *Times, Tribune, Star* and *Post* published 14 statements on the Committee's promises for every 10 statements on its failure to keep the promise. In the other five papers as a group the ratio was about eight to one.

SUMMARY

Thus the content analysis produced these principal findings: the nine New York papers showed wide variations in their news treatment of the case, although all were reporting the same story. Some presented a picture predominantly favorable to Dr. Condon, some predominantly unfavorable. As reported in all the papers, the charges against Dr. Condon were vague. The width of the support of Dr. Condon received substantial attention in the *Times, Tribune, Star* and *Post* but very little attention in the other five papers. The background material revived for use in the running news stories had the effect of building up the case against Dr. Condon but did not build up his defense to anywhere near the same degree. All the papers reported the Committee's promise to give Dr. Condon a hearing far more often than they reported its failure to do so.

Such are the objective findings. The writers have attempted to avoid judgments, or have labeled them clearly when they seemed unavoidable. How or why the press treatments here described took the form that they did, and whether the papers should be commended or condemned are questions to be considered by interested students of the press.

3. STATISTICAL METHODS

This description of statistical methods should be helpful in understanding a great deal of the recent and current literature in social psychology. Statistics is one of the most important *tools* of the modern social scientist. Although the discussion below is principally related to personality, the statistical concepts are useful in many other connections. After an appropriate introduction to some fundamental concepts, the following topics are discussed: sampling; characterizing the distribution of variables; comparison of distributions; correlation; statistical analysis of attributes; and factors in the construction of questionnaires, rating scales, and tests. Fuller treatment of any of the concepts is to be found in any standard textbook in statistics. Also, see Selection 13, *Group Differences,* pages 104-119.

STATISTICAL METHODS IN PERSONALITY STUDY *

Kimball Young

Statistics deals chiefly with four matters: (1) *averages* of past events, (2) *variability* of measures about these averages, (3) *covariation* or correlation of two or more sets of events, and (4) the *probability* that unobserved events will conform to observed occurrences or events. In this section we shall review some of the more important methodological concepts and tools of statistics as they apply to the study of personality. No attempt will be made to present the technical as-

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* From *Personality and Problems of Adjustment,* by Kimball Young, New York. Appleton-Century-Crofts, Inc., 1940, Chap. 11, "Methods of Studying the Personality," pp. 236-248. Copyright, Appleton-Century Crofts, Inc. Reprinted by permission of the publisher and author.

pects of the subject.[1] We shall begin by noting the fundamental concepts, the nature of simple statistical procedures, and various cautions in regard to sampling. Then we shall quickly review some of the measures of central tendency, variability, and correlation. The section will close with a short discussion of the nature of validity and reliability of various instruments of measurement and a brief classification of the chief statistical devices now in vogue in our field.

Statistics begins with the counting or measuring of some sort of unit element or event or some quality or attribute produced by certain actions or conditions. In fact, the two basic constructs of statistics are the variable and the attribute. A *variable* is any trait, feature, element, or aspect of a situation or person which may be measured along a scale of equivalent units. The problem in measurement is one of stating the amount of the variable existing for each individual in a given sample or group of individuals. An *attribute* is a quality or unmeasured feature, trait, or item usually stated with reference to its presence or absence in a given situation or individual, or group of individuals. Strictly speaking, we cannot measure; we can only count attributes and take note of their proportional relationships in terms of their presence or absence. Attributes may be illustrated by conditions such as employment or illness, by mental traits such as punctuality or tact or aggression, or by a condition such as parent-child conflict.

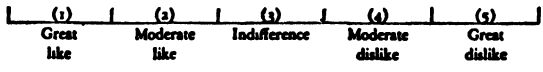
Distinctions are usually made between variables which are *continuous* and those which are *discrete* or discontinuous. In the former it is possible to have an unlimited gradation of values on a scale ranging from the highest to lowest, or most to least, e.g., in age, weight, or memory capacity. In the latter only limited gradations are possible; each value in a discrete series is separate or distinct, such as pupils, houses, or toys. Most of the variables dealt with in psychology are treated as if they were continuous.

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[1] The student will find the elements of statistics well described in Thurstone, L. L., *Fundamentals of Statistics,* 1925; Lundberg, G., *Social Research,* 1930; Arkin, H., and Colton, R. R., *An Outline of Statistical Methods,* revised edition, 1935; Guilford, J. P., *Psychometric Methods,* 1936; Garrett, H. E., *Statistics in Psychology and Education,* 2d ed., 1937; and other standard texts. The writer is indebted to his former colleague T. C. McCormick for certain materials and illustrations used in the preparation of this section.

Then, too, in comparing two variables we may treat them as either independent or dependent. The *independent variable* is the one which is considered as inducing or basically influencing the behavior or alterations of the other, the *dependent* one. For example, in studying the effect of the amount of schooling on earning capacity, we might consider the former to be the independent variable since it is believed to effect changes in the latter. Briefly, then, statistics is a method for treating variables and attributes which may be measured or counted, as the case may be.

In all instances variables and attributes should be carefully defined. In personality studies those variables which demark external features—for example, height, weight, years of age, number of children, parental income, or intensity of response to a stimulus—are relatively easy to determine. But, when we attempt to deal statistically with the aspects of the inner world of ideas, traits, attitudes, beliefs, emotions, values, and the like, the difficulties of definition are indeed great. Strictly speaking, none of these features of personality, of course, is observable by an outsider. They must be exposed by gesture, word, or action of the subject himself. Yet much attention has been given to developing various measuring instruments to get at the subjective life. The matter is illustrated by the familiar rating scale which consists of five, seven, or more equal units or steps. Thus, in order to secure a measure of the intensity of feeling or attitude of like or dislike with respect to some group, situation, individual, or other fact, we might arrange a fivefold scale as follows:



It is assumed that each step is equal in value to every other. That is, the shift in feeling from indifference to moderate like or moderate dislike is equal in amount to the shift from moderate to great like or great dislike. Such a scale may be used by an outside observer to rate another person or event, or it may be employed by the subject himself to express his own feeling-emotional responses to a given matter. Other illustrations of scales are the well-known intelligence tests wherein the units are meas-

ured on a scale of mental age or growth, so many correct answers or performances being requisite to securing a given month of mental age.[2] The well-known Thurstone "attitude tests" for measuring opinions or beliefs are constructed by having a series of statements classified by a large number of judges into eleven categories assumed to represent equal degrees of differences in opinion toward some such topic as war, peace, crime, industrial conflict, or race. By combining all the judgments each statement is given a score value, and this becomes the basis for constructing the measuring rod to determine the degree of liking or disliking, of approving or disapproving, the particular social-cultural phenomenon to be studied.[3]

In the treatment of attributes it is not possible to secure their measurement by means of a scale of equal units, but only an enumeration or notation of their presence or absence. And, because of the difficulties involved in using variables, students of personality are turning to attributes as the more convenient elements with which to work.

SAMPLING

It would be ideal, of course, if we could examine all the cases —called the "universe" or "population" or "supply"—which possess or reveal a given variable or attribute. But this is ordinarily out of the question, and we become obliged to select a sample which will typify or represent the larger universe of events or elements which we wish to investigate. A *sample* is a cross section of the larger total which may be treated as a representative or miniature distribution of the larger total itself. There are a number of matters which should be taken into account in any sampling procedure:

(1) The variable or attribute must be carefully defined and well understood by the observer so that the sample may be selected so as to represent adequately the "universe" in terms of the desired variable or attribute.

(2) The sample must be homogeneous and truly representative of the

[2] Terman, L. M., and Merrill, M. A., *Measuring Intelligence*, 1937.

[3] Thurstone, L. L., and Chave, E. J., *The Measurement of Attitude*, 1929.

larger universe from which it is chosen. *Homogeneity* refers to the resemblance of individuals to each other with reference to a given variable or attribute. *Representativeness* has to do with getting such individuals from the universe that we may be certain that they adequately typify or "stand for" the entire population. It should be borne in mind that the mere piling up of cases provides no assurance that a given sample is typical. In order to ensure representativeness the items may be chosen at random from the larger supply. Sometimes the supply itself is divided into strata or classes of some sort. In such an instance, we must select the sample cases so that each subuniverse or stratum is represented. Thus, if one planned to test a group of school children with an intelligence scale or test of language or the like, it would be proper to see that representative percentages were drawn from each age and sex class and from each economic-social stratum in the society in question.

(3) It is also well to check one sample by drawing another in the same manner, and to make sure that the universe itself remains constant through time, especially if one intends to apply the findings to the same universe at a later date.

CHARACTERIZING THE DISTRIBUTION OF VARIABLES

Having at hand a scale of units for measuring a given variable, such as a test or schedule, the statistician proceeds to apply the scale to his chosen sample—for example, a group of students, of parents, of workers in a factory or office, or of other individuals. Each participant will be given a score or numerical description of his performance—overt or verbal—on the test. All the separate scores or measures of the individuals for each unit along the scale may then be totaled to make what is termed a frequency table or display. (This may easily be graphically presented as a histogram or frequency polygon.) While a table or frequency diagram will furnish workers with a picture of the nature of the performance of the total group, we need some method of characterizing or typifying their distribution. For a simple frequency display of a variable, the two common measures are those of the *central tendency* and of the *dispersion* or spread. Measures of central tendency provide a single numerical index with which to typify an entire distribution of frequencies along a scale. We use such a concept in everyday parlance when we say that "on the average such and such is the case." The three averages used most

often in our field are the *arithmetic mean,* which is simply the sum of the scores divided by the number of subjects; the *median,* or midmeasure, which divides the distribution into two equal parts; and the *mode,* or most common score in a distribution.

Yet we may want to know more of a given frequency display than merely its central tendency. We wish to secure some index which will indicate the spread or range of the frequencies along the scale. For this purpose a variety of measures of dispersion may

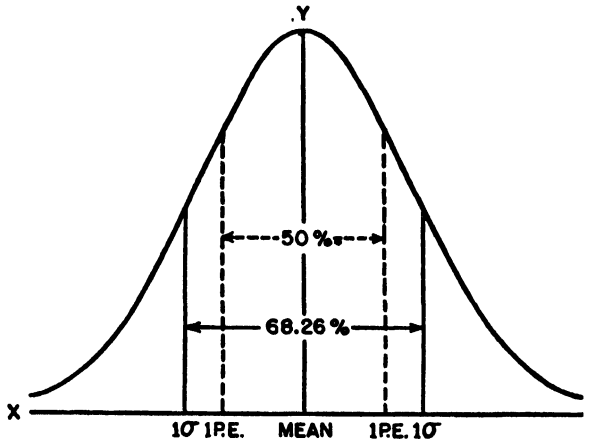


FIGURE 1. The normal probability curve, showing the percentages of the area included within 1P.E. and 1S.D. measured both plus and minus from the arithmetic mean.

be employed, such as the *mean deviation,* or M.D.; the *standard deviation,* or S.D., more often called *sigma* (σ); and the *probable error,* or P.E. These indexes of spread are computed by mathematical procedures which take into account the average deviation of the separate or individual scores from the index of the central tendency, usually the arithmetic mean. The S.D. is the most widely used measure of such deviations. In the normal or probability frequency distribution, if the distance equal to one S.D. is measured off on the scale (*X* axis) on both sides of the arithmetic mean (plus and minus), 68.26 per cent of the cases or scores

will fall within the limits indicated. (See Figure 1.) In terms of ideal probability the S.D. furnishes a means of obtaining uniform units of disperseness along a scale and thus enables us to compare directly the degrees of variability of two frequency distributions. It is a highly important device in comparing and correlating the measurement of two or more variables. The P.E. is essentially the same in principle as the S.D. It represents the range of dispersion measured plus and minus from the arithmetic mean within which 50 per cent of the cases or scores will fall. The P.E. is equal to .6745 times the S.D. While this index has no advantage over the S.D., it is frequently employed in education and psychology.

The S.D. of a distribution of arithmetic means or of any other statistical indexes or coefficients computed from samples is called the *standard error of the mean,* or the standard error of any other statistical measure. This index is particularly valuable in comparing two or more distributions in order to test the statistical significance of the differences between them.

As already noted, the distribution of attributes is essentially a matter of the frequency and proportionality of their presence or absence in a given sample. Since they are not distributed along a scale, measures of central tendency and of dispersion do not apply to them.

COMPARISONS OF DISTRIBUTIONS

As a rule we are not content with the mere computation of measures of central tendency or of variability, or with a statement of the occurrence or non-occurrence of attributes. We may wish to compare the averages and indexes of variability of two samples in order to discover whether these differences are due to chance or actually to some specific factor which we may isolate and analyze. This may be done by computing the standard error of the differences between the measures of central tendency, or of the differences in the indexes of deviation. The usual purpose in using this method is to indicate the influence of some new variable which has been introduced into a sample under more or less controlled conditions, or to uncover some such factor as may be responsible for a discovered difference in two otherwise similar distributions.

For example, assume a large sample of school children to be identical or highly similar with reference to variables A, B, C, D, . . . X, such as race, age, grade in school, economic status of parents, and so on. Having taken such factors into account in sampling, we then give these children a test of prejudice with reference to a given race or nationality group, and compute the usual measures of central tendency and deviation. With these facts in hand we next introduce a new variable, E, say a body of propaganda.

Thereafter, half of these children—called the test or "experimental" group—are shown a motion picture which is deliberately loaded with emotionalized propaganda against this particular race or nationality. The other half of the children—called the "control" group—are not exposed to this film. But after the subsample has been shown the picture, all the children are again tested with another form of the same scale for measuring this particular prejudice, and the averages and measures of variability are again computed, but for each subsample separately.

By taking the difference between the two means and dividing this by the standard error of that difference, we may obtain what is called a *critical ratio.* This affords a measure making it possible to determine whether the changes in the "experimental" group (assuming there be changes) were due to chance or to the operation of the new factor, E, the propaganda film. That is, by application of the statistics of probability (see below) it is possible to tell the degree to which this empirical difference found from the two test applications represents a genuine difference due to the introduction of E or whether it is due to accidental or chance factors which may have entered into the situation.

Such a ratio or index to show the difference between obtained scores and those possibly due to chance has become a useful device for testing the importance of factors believed to enter into performances on tests. A critical ratio of 3.00 or more means that we may be virtually certain that the observed difference is genuine and not due to chance or accident.

CORRELATION

We often wish to go beyond characterizing the central tendency or deviation, or the comparing of two distributions. The statistician may be interested in discovering how change—that is, increase or decrease—in one variable is associated with a corresponding change in another. Or he wishes to note concomitant

alterations in the frequency and proportionality among two or more attributes. This introduces the problem of covariation or correlation. There are a number of statistical indexes or ratios, usually called coefficients, for expressing covariation. These involve rather complicated mathematical assumptions and computations. They lie at the heart of much of our modern statistics, and we must briefly examine some of their assumptions and implications.

Let us return to the example of the physicist dealing with rather simple and direct relations of two variables, X and Y. He discovers, let us say, certain constant relations between them which show that, as one is altered, so is the other in a very precise and exact manner or amount. Successive observations of X and Y may be plotted on co-ordinate paper, and, if the increase or decrease in one variable is accompanied by a corresponding change in the other, the plotted points for X and Y will be found to lie along a straight line. Such precise relations of X and Y may be expressed in terms of a mathematical *function*. For example, we say that the circumference of a circle is a function of its diameter. If we call the circumference Y, and the diameter X, we may state their constant relations as an equation: $Y = 3.1416$ X. And, no matter what value we give to X, we can find a corresponding value for Y by using this equation. If we were to locate every pair of values of X and Y for a series of measurements of diameters and corresponding circumferences as a point on co-ordinate paper, the series of points would lie in a straight line. We would say that the function is a linear one. Since the physicist finds that the relations of X and Y—for example, between the volume of a gas and its temperature (with Z, pressure, held constant)—likewise fall along a straight line (with only very minute or slight deviations), he makes use of such a mathematical function to express his laboratory findings.[4]

In the biological and human sciences, the relations of X and Y

[4] Not all mathematical functions, of course, are linear; they may be curvilinear, parabolic, and so on. Nor do all correlations of natural phenomena fall along a line; natural scientists frequently use nonlinear formulae to express their results. So, too, in biology, psychology, and social science various mathematical formulae have been employed. But for our purposes the linear function serves well as an illustration.

are seldom, if ever, so exact. Other factors usually enter in to influence their interplay, so that, if the observed occurrences of X and Y together be plotted, the points may be found scattered along either side of a hypothetical straight line, or along a curve or some other line representing co-occurrence. (Of course, the points may be so distributed as to indicate little or no interrelation.) For instance, in agriculture one might wish to discover how the yield of wheat varies with the amount of acid-phosphate fertilizer put into the soil. But this is not so easy to determine, since other things than fertilizer affect yield, such as soil texture, humus, moisture, temperature, and the kind of seed used. In our work interfering factors may be even more complicated and difficult to take into account. Thus, in trying to discover if there be any direct or positive relationship between broken homes and the incidence of delinquency, not only should we have to observe the frequency or extent of the co-occurrence of these two events, but we should have to take cognizance of other factors, such as the economic status of the family, the character of the neighborhood culture, and the age of the children at the time of parental separation. Moreover, these elements vary greatly in their influence upon such conduct. And in addition there are often certain residual chance factors with which we must deal if we can.

In short, between the investigation of physical phenomena and the consideration of cultural and social psychological data there are at least three basic differences: (1) The materials of the latter show much greater complexity; there are many more variables and attributes to be reckoned with than in the natural sciences. (2) These phenomena reveal much greater variability among themselves, and hence it is much more difficult to predict results from one sample or situation to another. (3) There are many more chance or accidental factors which must be allowed for, if we would avoid drawing incorrect conclusions.

In our dealing quantitatively with data characterized by such complexity, variability, and residual factors, the statistics of probability and of correlation provides us with most useful tools. By wise use of such methods we are often able to isolate the important factors, to determine variations in the influences playing on

these factors, and above all else to reckon with the operation of chance effects that may serve to disturb the relations.

While we already have a good idea of the complex nature of our social psychological materials and have just noted some of the devices for dealing with them in terms of variables and attributes and with reference to their deviational features, we may well ask, what do we mean by chance? Broadly considered, *chance* refers to an extremely complicated set of causes the general character of which we may know but the detailed operation of which we do not comprehend. More accurately defined with regard to mathematical logic, the *Standard Dictionary* states that chance is "one of several events of which some one must and only one can follow a given antecedent, and no one of which is more likely to follow than any other." The theory of chance furnishes the basis for the calculation of the likelihood of the occurrence of certain events as against equal conflicting possibilities. Thus in the throw "of a die there is one chance in six that ace will turn up," and we say that the probability is $\frac{1}{6}$ that ace will appear among the total known possible occurrences.[5] In other words, probability is the ratio of the chances favoring an event to the total number of chances both for and against it. The difference between the mathematically most probable and the observed or calculated value of a given quantity is termed *error* (obviously not to be confused with what we ordinarily mean by the term *mistake* in an arithmetical computation). For our purposes chance factors are those minute causes which may influence our findings (produce "errors") but which cannot be directly controlled in experiments or tests. Yet we must reckon with these chance elements if our numerical results are to be at all sound. Fortunately there are at hand statistical devices which enable us to do so. We have already noted one of these in mentioning the critical ratio, and others become important with reference to measures of correlation.

Since our social psychological data are of such a complex char-

[5] It is interesting to note that the development of the theory of probability was partially stimulated by gamblers, who asked the mathematicians to tell them what the chances were of their winning or losing at dice or cards.

acter, they do not permit us to state the relations of X and Y as a strict mathematical function. But statistical devices of correlation or covariation do provide a method of calculating the significance of the observed departures from such a theoretical X and Y relation. Correlational methods facilitate the analysis of relations between variables X and Y where the measurements reveal considerable scatter on either side of a straight line. These divergences may be due to certain known but uncontrolled elements and to chance factors as well, and both must be taken into account.

In order to ensure reasonably satisfactory results in our study of correlation we need—in addition to careful definition of our variables and attributes—to take into account the following matters: (1) The sample should be not only representative and homogeneous, but large enough for us to make sure that many of the chance elements may cancel themselves out or be reduced to insignificant proportions. For example, as we increase the number of cases in a sample, other things being equal, the influence of the chance factors tends to decrease. (2) The worker with statistical techniques should be fully cognizant of the nature, advantages, and limitations of his mathematical tools. The easy application of formulae the full mathematical import of which is not understood has too often led to quite erroneous conclusions regarding some of our statistical data. (3) Even with sound mathematical methods we must be cautious in drawing inferences from our findings.

But, if these qualifications are kept in mind, the worker will often find that correlational devices furnish a useful means of dealing with complexity, variability, and chance as these influence the concomitant occurrence of two or more variables or attributes. We shall make no effort to discuss the specific techniques for computing these relations, but rather turn to mention briefly the more commonly used indexes of covariation.

Perhaps the simplest device for determining correlation is calculated by the *rank-order* method, where paired items or factors found for a given sample are arranged into two columns by order of rank, but no consideration is given to the scalar or numerical values of the items. A

convenient formula has been developed for securing a coefficient which will characterize approximately the extent of agreement in these two rankings. Thus, the rank order of a number of pupils as to their standing in an arithmetic examination might be correlated with their rank order in a test of rhetoric. The coefficient would provide a rough index of the association of ability in arithmetic with that in composition.

The most frequently used coefficient of correlation is that computed by the *product-moment* method and expressed by the symbol r. This device, invented by Karl Pearson, is useful for determining the dgree of relationship between variables whose measurements show considerable scatter around a theoretical straight line—that is, one which ideally would indicate perfect relationship. The type illustration is the distribution of two variables, X and Y, along two axes of co-ordinate paper and the use of the Pearsonian formula to provide a single index of the degree to which variation in X is accompanied by a corresponding variation in Y. If for every item change on the X axis we find a corresponding item change in Y, and in the same direction—that is, if they both increase together—we get a perfect positive correlation, denoted by $+1.00$. If every change in X is accompanied by a corresponding change in Y, but in the opposite direction—that is, as one increases, the other decreases—we get a perfect negative correlation, denoted by -1.00. Various degrees of less than perfect relationship are indicated by coefficients ranging between .00 and 1.00, either plus or minus. (The usual practice is to omit the plus sign before the positive index.)

Rarely do we find perfect positive or negative covariance in social or personality studies. It is generally agreed, however, that a correlation above .80 represents a very high degree of co-occurrence. Between .60 and .80 it is considered high, and between .40 and .60 fair. Those falling between .20 and .40 are considered to be low, and an r below .20 is of little significance (i.e., the "zero-order" correlations).

The Pearsonian product-moment method may also be used for expressing covariance among three or more variables. Two widely used devices are those of partial and multiple correlation.

Partial correlation enables us to estimate the influence of another factor on the relation of two variables. Thus one may be interested in the interrelations of honor (grade) points, X, intelligence, Y, and hours of study, Z. By means of partial correlation it is possible to "hold constant" the effect of any one of these three variables while determining the relationship of the other two.

Multiple correlation, R, permits us to estimate the combined influence of two or more variables on another. For instance, we could indicate—in the case just noted—the extent to which X, honor points, was determined by Y, general intelligence, and Z, study hours, when the latter two were combined.

By the use of elaborate intercorrelations among large numbers of test results, Spearman[6] and later others, developed the theory of general and specific factors in intelligence. From this work, in turn, has emerged the device called multiple-factor analysis, a complicated statistical method for treating a large number of intercorrelated items in order to show (1) the minimum number of independent fundamental factors which may be assumed to account for all the covariation in the larger complex of intercorrelations, and (2) the amount of loading or weight of each fundamental factor in each of the items in the larger complex. The method gets at the general factors—at best a small number—which tend to control the operation of a wide variety of variables.[7]

STATISTICAL ANALYSIS OF ATTRIBUTES

We have already noted that attributes cannot be measured but must be dealt with in terms of counting instead. Yet there are a number of convenient methods of revealing certain approximate associations or relationships between two or more sets of attributes. It would take us far afield to discuss these in any detail as to methods of computation, but we may make note of some of them in more or less common use.

(1) The *paired-comparison* technique consists in matching each item in a series of attributes with every other item with a view to constructing a scale or hierarchy of preferences among these attributes. Coutu's study[8] of preferences for certain professions used this method, and from

[6] Spearman, C., " 'General Intelligence,' Objectively Determined and Measured," *American Journal of Psychology,* 1904, Vol. 15, pp. 201-293. Spearman, C. E., *The Abilities of Man, Their Nature and Measurement,* 1927.

[7] Thurstone, L. L., *The Vectors of Mind,* 1935. Thurstone, L. L., "Primary Mental Abilities," *Psychometric Monograph,* 1938, No. 1.

[8] Coutu, W., "The Relative Prestige of Twenty Professions as Judged by Three Groups of Professional Students," *Social Forces,* 1936, Vol. 14, pp. 522-529.

his matchings he was able to compare the preferences of individuals in certain preprofessional groups for a series of twenty occupations. (On various uses of this method see Guilford.)[9]

(2) The *Chi-square test* (χ^2) does not measure any degree of relationship but does provide an index as to whether an empirically discovered association of attributes is significant or not in terms of probability. That is, it reveals the difference between the observed and the theoretical frequency and aids in determining whether deviations in a contingency table or the variations of an observed from a theoretical frequency distribution could have been produced by chance alone. Like the critical ratio, it is a test of statistical significance of empirical and theoretical differences.

Often such a rough measure of association of attributes is more revealing than items of behavior or inner life broken up into specific variables and submitted to the Pearsonian product-moment formula. Thus Dudycha[10] in his study of punctuality of a large sample of students got very different results from the use of the Pearsonian product-moment method and the use of the Chi-square technique. In order to use the former he measured punctuality to classes, meals, and entertainment in terms of small fractions of time that students were early or tardy. The correlation coefficients were nearly all low and meaningless. Yet, when he combined his units into very broad categories, such as tendency to be early, punctual, or tardy (ignoring the amounts of time involved), and applied the nonlinear method of Chi-square, he discovered distinct clustering of differences among his sample in reference to these attributes.

(3) The *coefficient of contingency,* C, furnishes another means of testing the probability that the association of a number of attributes is greater than that which we might expect by chance. This method was employed by Young and Oberdorfer[11] in dealing with the degree of association between certain political preferences of college students and those of their parents, a matter which could not well be stated—in terms of the data—by a Pearsonian *r*.

(4) The *biserial correlation,* r_{bis}, permits the correlation of a quantitative or measured variable, X, with dichotomous or dual categories of attributes, Y and Z. Thus one might compare the number of children in a sample of families with the number that remained in school and

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[9] Guilford, same citation as footnote 1.

[10] Dudycha, G. J., "An Objective Study of Punctuality in Relation to Personality and Achievement," *Archives of Psychology,* 1936, Vol. 29, No. 204.

[11] Young, K., and Oberdorfer, D. W., "Factors Influencing Student Political Opinion," *Public Opinion Quarterly,* 1938, Vol. 3, pp. 450-456.

with the number who left school before they were eighteen years of age. Or one might correlate "mental age" with judgments as to whether a sample of school children were "socially adjusted" or "not socially adjusted."

(5) The *tetrachoric correlation* coefficient provides an index of the relation of two factors, either quantitative or qualitative, which may be broken down into dichotomous classes, considered as either continuous or discontinuous series. With this one might correlate the success or failure of a group of teachers in the classroom with the fact that they had, or had not had, previous training in pedagogical methods.

FACTORS IN THE CONSTRUCTION OF QUESTIONNAIRES, RATING SCALES, AND TESTS

Since much effort has gone into attempts to construct instruments for the measurement or other statistical analysis of traits, attitudes, interests, opinions, values, and the like, we must review some of the features of these devices and some of the conditions necessary for making them statistically reliable and valid.

(1) A *questionnaire* is a formal list of queries designed to elicit information about a person's ideas, traits, attitudes, opinions, aspirations, values, etc. If we secure straightforward "Yes" or "No" replies, the data may be treated by methods of dealing with attributes. If intensity of reactivity or feeling, or frequency of occurrence, is obtained, the results may be dealt with as variables. (2) A *rating scale,* as indicated above, is a set of equivalent units from high to low intensity, by means of which observers may record their judgment of others or of themselves. (3) A *test* is usually only a more specific and carefully prepared questionnaire calling for answers or performances which may be recorded on a scale of units of ability, attitudes, or reactivity. Those who devise tests usually employ the statistics of probability and assume that the reactions may be treated as falling along a continuous scale of variables. It should be noted that many so-called personality tests are but poorly constructed rating schemes or questionnaires. The term *test,* in fact, is often loosely used.

In the construction of scalar rating schemes and tests, it is important not only to define the variables closely and to determine the best type of items to be rated or tested, but also to take into account the reliability and validity of such instruments.

Since it is seldom possible to measure an entire universe of data, we must, obviously, depend upon sampling, and one may well ask how we know whether we would always get the same results if we repeated a measurement under the same conditions. That is, how nearly do the measures based on our sample truly represent the universe? This can be checked by what are known as measures of *reliability*. These enable us to discover the extent or degree to which a test or a rating scale is logically consistent with itself. The reliability of a scale may be discovered in three distinct ways: (1) by repeating the administration of a scale to the same group after the lapse of a certain interval of time; (2) by correlating two equivalent forms of a given test; and (3) by giving the test once to a large sample and then dividing the item scores—usually the odd-numbered against the even-numbered—so that one half may be correlated with the other. (This is often called the "split-half" method.) In any case satisfactory coefficients of reliability should be in the neighborhood of .90 or better. But many scales in use have shown reliabilities considerably below this figure.

Validity refers to the degree to which a scale actually measures what it is assumed to measure. Thus an instrument may reveal a satisfactory coefficient of reliability and yet fail to measure the variable it is supposed to. The determination of validity is not easy, and all too often the makers of tests retreat to the sophistry of operationalism by stating that a given instrument merely measures what it measures!

PART II

Biological and Social Foundations of Behavior

4. BIOLOGICAL FACTORS

This brief excerpt shows why the student of social psychology should not overlook or neglect the importance of *biological factors* in understanding social situations. Several significant experimental studies are summarized. All of these have a direct relationship to a more realistic interpretation of personality.

THE INTERDEPENDENCE OF OUTER AND INNER PRESSURES *

Gardner Murphy

Many of the general principles relating to the influence of the endocrines upon personality structure are illustrated by the thyroid. It is worth while to proceed from the clinical study of extremes to the experimental study of average individuals. The classical picture of extreme hyperthyroidism is seen in Graves' disease. Since a major function of the thyroid is the regulation of the rate at which the body fuel is burned—the lowest oxidative rate, or basal metabolic rate, of the individual—the diagnosis rests not only upon grosser evidences of thyroid hyperactivity but upon determination of an extreme rate of oxidation. Directly or indirectly related to the same imbalance are rapid pulse and respiration, sweating, and emaciation. The classical psychological picture in Graves' disease is one of extreme hyperactivity, nervousness, general restlessness,

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* From *Personality: A Biosocial Approach to Origins and Structures*, by Gardner Murphy. New York: Harper & Brothers, 1947, Chap. 5, "The Elementary Biology of Motivation," pp. 97-101. Copyright, Harper & Brothers. Reprinted by permission of the publisher and author.

a condition of general and unremitting stress. The opposite picture, in cases of hypothyroidism (called cretinism when congenital, myxedema when appearing for the first time in maturity), yields the expected low pulse and respiratory rate, and many indices of retarded tempo of activity.[1]

Here, however, the beautiful symmetry of the expected relation begins to fail. Hypothyroid patients are often nervous and restless, as are hyperthyroid patients. Torpor, poise, or serenity may be found in individual cases, but the general run of clinical descriptions fails to yield a *psychological* antithesis to the condition found in Graves' disease. Maybe there is something wrong with the way in which the relation of glands to personality has been stated.

An investigation by John Levy is instructive.[2] A group of problem children characterized by hyperactivity was compared in terms of basal metabolic rate with a group characterized by hypoactivity. The first group showed on the average a *lower* basal metabolism than the second. The groups were small and a repetition was obviously necessary. But in the meantime such data as these will constitute a disturbing paradox only if one forgets the everyday adjustments of normal persons. The excited overresponsive individual may try to slow down, to take it easy; the chronically tired and strained person may learn, consciously or unconsciously, to spend his energy thriftily, to avoid waste and excitement. So, too, the person long cooped up, who is suffering from insufficient activity, feels better when he can begin to take exercise, and he will tend to an activity level which is high not in spite of but because of a rather low metabolic rate. If one wishes, this may all be called "compensatory"; or it may be schematized as the end result of trials and errors, and with reference to a way of living that gives more satisfaction. It remains true that in general there is a positive relation between thyroid and general activity; the glandular situation yields its results not in a simple

[1] Hoskins, R. G., *Endocrinology: The Glands and Their Functions,* 1941.

[2] Levy, J., "A Quantitative Study of the Relationship Between Basal Metabolic Rate and Children's Behavior Problems," *American Journal of Orthopsychiatry,* 1931, Vol. 1, pp. 298-310.

and obvious way, like an organist's pulling a stop to get a given tone quality, but through a devious, complex route.[3]

In the usual schematizations of the roles of the endocrines, emphasis has been placed upon their effects upon nervous functions. Clinically, however, effects in the reverse direction have long been obvious. As Levy's study suggests, the nervous system can activate, and can therefore derange the endocrines. It is a common finding that a fright, a nervous shock, leaves an individual with a hyperthyroid condition. A neurochemical cycle is involved. We are dealing with no one-way street from glands to external traits; excess thyroid activity may lead to apprehensiveness, but it may also arise from it.

A modern approach to the problem appears in a study of sixty cases of Graves' disease, in fifty-four of which a history of apprehensiveness *preceded* the onset of clinical signs of hyperthyroidism.[4] The cerebral and autonomic systems were both involved, and the involvement was scarcely attributable to a thyroid condition. Here very complex interactions indeed are involved. [With regard to tropisms, it is believed] that inner systems can be understood only in terms of the dynamics of inner-outer relations. We seem, correspondingly, to have found empirical evidence that our picture of the endocrine system (as of every organic system) must be so drawn as to emphasize forces outside the

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[3] There may possibly be something of the same sort in Steinberg's demonstration that a group of adolescent girls achieved speed in psychological tests not in direct relation but—so far as the data went, for the findings were not cleancut—in inverse relation to their basal metabolic rates. (Steinberg, J., "Relation Between Basal Metabolic Rate and Speed," *Archives of Psychology*, 1934, No. 172, 39 pp.) The correlation, however, was only three times its probable error when the effects of age were held constant. If not a chance finding, the conclusion would be that the girls tended to work faster when the tissue tempo was slower. The study differs essentially from Levy's in that we are dealing here not with spontaneous speed in the general activity level but with approximately the *maximum* speed attainable by the individual in a rather uniform test situation. Whether our "compensatory" functions could operate here in the same fashion as that shown by the overwrought man's spontaneous slowing down can hardly be determined.

[4] Mittelmann, B., "Psychogenic Factors and Psychotherapy in Hyperthyreosis and Rapid Heat Imbalance," *Journal of Nervous and Mental Diseases*, 1933, Vol. 77, pp. 465-488.

system, traceable in large measure to forces outside the skin, that control in a patterned fashion the patterned functions of the system.

All this may likewise be illustrated in the relation between *gonad development* and sexual-social maturation. Individual differences in the changes at puberty are generally large in mammals, particularly so in man. Though the mean menarche age for American girls is in the neighborhood of thirteen years, about a sixth pass the critical point before twelve, and another sixth not till after fourteen.[5] The "corresponding" mean age for boys is about fourteen and a half, with comparable variability. The single criteria of menarche and germ-cell ripening are sufficient to show that there are personality changes directly associated with the process, for, after elaborately controlling disturbing factors, Stone and Barker[6] demonstrated that the post-menarchical status as such is in some degree associated with greater interest in boys and in feminine status; consequently, girls of the same *age* may differ in their tendency to cling to girlhood or to press toward womanhood.

But these endocrine functions prove to be very complex. The pattern of sexual maturation, initiated largely by the anterior pituitary, involves many endocrine and other organs. It is increasingly clear that puberty, like all other phases of development, is a process in which no single indicator describes the physiological picture; the bone, skin, and vascular system, as well as the more obvious secondary sex characteristics, must be considered, though the changes are to some degree interlocked. And there are not only multiple causes, but multiple *expressions* of the process. The boy may develop a deep voice but scant facial hair; in the same way, he may develop some psychological aspects of "masculinity" but remain childlike in others; or the psychological syndrome, directly dependent on inner mechanisms that do not over-

[5] Shuttleworth, F. K., "The Physical and Mental Growth of Girls and Boys Age 6 to 19 in Relation to Age at Maximum Growth," *Monographs of the Society for Research in Child Development*, 1939, Vol. 4, No. 3.

[6] Stone, C. P., and Barker, R. G., "The Attitudes and Interests of Premenarcheal and Post-menarcheal Girls," *Journal of Genetic Psychology*, 1939, Vol. 54, pp. 27-71.

lap perfectly with those reflected in somatic growth, may as a whole lag behind them. For the girl who is physiologically more mature than she is psychologically, the situation is confusing at best, and at worst sheer chaos; to be puzzled, amused, or disturbed by boys, or all three at once, is "unacceptable" adolescent behavior unless boys are at the same time *interesting* to her.

Moreover, environmental factors profoundly affect the puberty pattern, so that even the apparent differences between races in rate of maturing must be seen against the background of climatic, cultural, and other factors. The average menarche age of Nordic girls in Denmark is about fourteen, while among girls of Danish stock in the United States, according to Franzblau,[7] it is more than six months less. Climate and diet hardly explain this. Indeed, our tendency to derive behavior from the biochemical system must be tempered by noting the continuous and often marked effects of the behavior world, the cultural world, upon the biochemical system. Indeed, just as we have seen thyroid activity both causing behavior responses and in turn being caused by them, it seems probable that the same is true of the gonads. The ages of menarche and of menopause in various cultural areas reflect not only the stock but the way of life, the cultural and ecological situation of the individual; so, too, individual sex interest and sex attitude probably operate through the autonomic system to affect sex maturing.

Moreover, the effects of puberty are to "classify" one socially, and one responds to his classification. In the California Adolescence Study there were a handful of late-maturing boys who constituted an unhappy, maladjusted group.[8] Not only were their interests somewhat marked off from those of the majority, but they were aware of their peculiar status, bewildered to see the group moving from them; they were shy, irritable, or confused. In such instances the role of the endocrines can never be simply a direct one; in a society such as ours, to be fully masculine or

[7] Franzblau, R. N., "Race Differences in Mental and Physical Traits," *Archives of Psychology*, 1935, No. 177.

[8] Bayley, N., and Jones, N. C., "Some Personality Characteristics of Boys with Retarded Skeletal Maturity," *Psychological Bulletin*, 1941, Vol. 38, p. 603.

fully feminine is essential to status. But the problem does not concern merely a few exceptional unfortunates. Every man is more obviously "masculine" in some respects than in others, every woman more "feminine" in some respects than in others. Each individual is necessarily concerned to develop, maintain, and exhibit enough of the available standard traits to win full status as a genuine and complete member of his sex group. Personality reflects not only the endocrine balance but the socially ordered responses to this balance.

In discussing the behavior which results from tensions, we have been content, up to this point, to say that inner disequilibrium leads to general restlessness. The restlessness, however, is never completely diffuse and generalized. Just as the inner disequilibrium is partly local, partly general, so the restlessness, the sensitizing of certain pathways leading to the muscles (the lowering of their thresholds), is partly general, partly local. The result is that beyond the general restlessness appear the specific earmarks betraying the specific character of the disturbance. The specific and local responses include those of striped muscles and of unstriped muscles, of duct glands and of ductless glands. The hungry man, says Carlson,[9] exhibits not only general distress; as a strong stomach contraction occurs, there is a gush of saliva. The hungry infant sucks, though no breast is near. Stone's[10] rats, Craig's[11] doves, show upon sexual maturation not only restlessness in general, but a simultaneous activation of many sexual reflexes. McQueen-Williams' [12] "male" rats that were artificially made into "females" by gland transplantation are tremendously sensitized to nesting material and to baby rats.

In other words, a region of organic disturbance both radiates disturbance through the blood stream to other points and affects the nervous system specifically. Since there is always some tone in

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[9] Carlson, A. J., *The Control of Hunger in Health and Disease*, 1916, p. 90.

[10] Stone, C. P., "The Initial Copulatory Response of Female Rats Reared in Isolation from the Age of Twenty Days to the Age of Puberty," *Journal of Comparative Psychology*, 1926, Vol. 6, pp. 73-84.

[11] Craig, W., "Male Doves Reared in Isolation," *Journal of Animal Behavior*, 1914, Vol. 4, pp. 121-133.

[12] McQueen-Williams, M., "Maternal Behavior in Male Rats," *Science*, 1935, Vol. 82, pp. 67-68.

living muscles, a chemical disturbance in the blood stream can so alter thresholds as to make a relatively inactive muscle relatively active. The nervous network can throw muscles into action. But not only is there *more* response; there is local movement that, indeed, is often *coordinated* as well.

5. *RACE*

Few words have been as misused as "race." The following excerpts from a chapter of a book dealing with race differences suggest a *scientific* definition of race, and also how it is to be differentiated from *nation* or *language*. Biological, psychological, and cultural approaches are important in any treatment of this question.

RACE *

Otto Klineberg

DEFINITION

Whatever else the term "race" may be found to include, it must at least refer to the presence in a population of certain *physical* characteristics. One writer[1] defines a race as "a group of human beings set apart from others by one or more marks of physical difference." To this simple definition one further qualification should be added, namely, that if this group is to be regarded as a race, the physical traits distinguishing it must be determined by heredity. Obviously, a group of men who have lost their legs in a war, or whose growth has been stunted by defective nourishment, will not constitute a race. The physical traits used as a criterion of race must be at least relatively (though not absolutely, as will be seen later) independent of the more obvious environmental influences; they must "breed true," they must be handed on from generation to generation.

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* From *Race Differences*, by Otto Klineberg. New York: Harper & Brothers, 1935, Chap. 2, "Race," pp. 17-20, 25-29. Copyright, Harper & Brothers. Reprinted by permission of the publisher and author.

[1] Hankins, F. H., *The Racial Basis of Civilization: A Critique of the Nordic Doctrine*, p. 262. New York, 1926.

A race, then, may be defined as a large group of men possessing in common certain physical characteristics which are determined by heredity. The other, non-physical, qualities which have been ascribed to races are in this sense secondary, in that they do not belong to the concept or definition of race; they are not used, for example, in race classification.

Even in connection with physical or morphological characters, it is important to bear in mind certain qualifications to which the concept of race is subject. When two races are described as differing in any particular physical feature—for example, in stature—strictly speaking, this ought to mean that every member of the one race differs in that respect from every member of the other.[2] Actually, when Mongoloids (for example, Japanese) are described as short, and North Europeans (for example, Swedes) as tall, this does not mean that all Japanese have the same (short) stature, nor that every Japanese is shorter than every Swede. Japanese vary greatly, and so do Swedes, and there is a great deal of overlapping—that is to say, there are many Japanese who are taller than many Swedes. This variability within any one racial group is recognized in the definition of a race[3] as "a great division of mankind, the members of which, though *individually varying*, are characterized *as a group* [italics ours] by a certain combination of morphological and metrical features, principally non-adaptive, which have been derived from their common "descent." There is no homogeneity within each race, and no sharp line between one race and another. "All the diversities which exist are variable, and pass into each other by insensible gradations." [4]

It follows that when two races are being compared, it usually means little to say that one race is characterized by the possession of one trait, and the other race by the possession of another. There is too much variability within each race to permit of such a comparison. Evidently the so-called racial traits are not inherited equally in the case of every individual or every family belonging to that particular race. Inheritance takes place in family lines; and among both Japanese and Swedes, to revert to the ex-

[2] Boas, F., *Anthropology and Modern Life*. New York, 1928.
[3] Hooton, E. A., *Up from the Ape*. New York, 1931.
[4] Pritchard, A., *The Natural History of Man*, p. 644. London, 1885.

ample cited, there are both tall and short families, and therefore tall and short individuals. The two groups do differ, however, in the measure of central tendency (the average or median stature), and in the distribution of statures in the total population; they may still be compared from this point of view, and the amount of difference noted, as well as the amount of overlapping in the two distributions.

This has an important practical consequence which is, however, seldom fully recognized. If there is always overlapping, general statements made about a race will not necessarily apply to any particular member of that race. North Europeans are, as a group, tall, but many of them are short. If a certain individual is known to be a North European, it cannot be assumed that he will be tall. Any extension of group descriptions to the individual will always be open to question. This point has especial significance in connection with psychological comparisons; even if we believe, let us say, that Negroes as a group differ from Whites as a group in any of the aspects of intelligence or personality, we have no right to regard every Negro as differing from every White, or to expect that all Negroes will behave similarly in similar situations. This may seem too obvious to require emphasis; yet there is probably no error in the study of race into which it is easier to fall. It is permissible to speak of group differences only when care is taken not to apply the results of group comparisons to individuals.[5]

CLASSIFICATION

A race, then, is characterized by the possession of certain inherited physical traits, and racial classification is based upon the distribution of physical traits in different populations. So far there may be said to be substantial agreement among physical anthropologists, but with this the agreement ceases. Granting that physical traits are important, it remains to be decided which trait is most important for purposes of classification; it is clear that the classifications will not be the same if, let us say, skin color is selected by one anthropologist and the shape of the head by

[5] Boas, F., *Anthropology and Modern Life.* New York, 1928.

another. Since there appears to be no objective way of deciding which trait is to be preferred, there are a great many different racial classifications, all of them equally subjective and equally arbitrary.

RACE AND NATION

To assume any sort of identity between race and nation is clearly unjustified. Race is a zoological concept; it refers to physical type; nation is a political concept implying boundaries and an independent government. The absurdity of identifying the two is clearest in the case of the American "melting pot" nations, each with an almost boundless heterogeneity of physical characteristics. Similarly among the European nations, it is at once clear that the political boundaries have nothing to do with physical type. References to a French or German or Italian race are meaningless.

RACE AND LANGUAGE

There is even more confusion between race and language, and many terms which properly apply only to language have been used as if they had also a racial connotation. It is wrong, for example, to speak of a "Latin" race, in spite of the frequency with which that phrase appears in popular literature. Latin is of course a language, and "Latins" can mean only those groups whose languages are of Latin origin—among others, the French, Italians, Spaniards, Portuguese and Roumanians. Of these, the Spaniards and Portuguese are mostly Mediterranean in type, Roumanians are largely Alpine, Italians are partly Alpine and partly Mediterranean, and the French are a mixture of all three European types, with the Alpine predominating. Clearly, there is no race or physical type to which all Latins may be said to belong.

The term "Aryan" as applied to race is also meaningless. Students of linguistic science have given the name Aryan to the parent language from which most European languages presumably developed. Aryans, then, would be the people who speak a language derived from the original Aryan or Indo-European; if such a language is spoken by Negroes or Polynesians, they too may legitimately be called by that name. If it is preferred to restrict the

term to those who were the first to use an Aryan language, it is still impossible to give it a precise racial significance, for no one knows to what physical type these original Aryans belonged.

There is no "Semitic" race; when Arabs and Jews are described as Semites, all that can legitimately be meant is that Arabic and Hebrew both belong to a group of languages known as Semitic. As to physical type, Arabs are predominantly Mediterranean. Many Jews belong to the same general type, but these are definitely in the minority; if there is any one type which occurs more frequently than another, it is the Alpine. There is clearly no one physical type which can be described as Semitic. As far as the Jews are concerned, a very large number of investigations have revealed so much variability in physical type, with skin color ranging from very blond to very dark, and cephalic index from extreme dolichocephaly to extreme brachycephaly, that almost all anthropologists (with the exception of those whose views are influenced by purely political considerations) agree that a distinctively "Jewish race" does not exist.

6. AGE FACTORS

This selection illustrates some of the well formulated attitudes toward various age groups, from the cradle to the grave. These attitudes are important factors in the *personality development* of people in the United States. "Plainville" is a typical rural community—essentially a prototype of many an American's "home town."

SEX AND AGE GROUPS *

James West

In Plainville, as in all human societies, the most fundamental social division is into the two sexes, male and female. Almost from birth the infant begins to receive differential treatment in accordance with supposed inherent sexual differences in personality. Within at most a year or two, the individual is expected to demonstrate the personality traits that are attributed to its own sex. At "the walking age," throughout childhood and youth, in the time of full maturity and adult life, and during the period of old age and decline, Plainville males and females enjoy privileges and are bound by duties, interests, and viewpoints that are theirs by sex alone—or more accurately stated, by sex and the age-status to which at any given time they have attained. Yet Plainvillers group themselves by age alone, regardless of sex. The age categories for younger members of the society are especially numerous because childhood is the period of growth and of both formal and informal education. A listing of these categories follows, in frequently used local terms.

"Babies" ("babes," "infants") are ordinarily infants in arms.

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* From *Plainville, U.S.A.*, by James West. New York: Columbia University Press, 1945, Chap. 2, "Social Structure: General," pp. 107-114. Copyright, Columbia Universtiy Press. Reprinted by permission of the publisher and author.

By extension the term also frequently applies to toddlers; also to any child of preschool age. Also, in pity, or in forgiveness for a misdeed, to later childhood, or even to middle or late youth. "She married when she was only a baby (perhaps she was sixteen) . . . How can you expect him not to destroy things, when he's only a baby? (He is eleven, and breaks more cultivator pins at plowing than his father does.") Again, the term "baby" may be used as a severe disciplinary "insult" by a parent who wishes with finality to put an "upstart youngster" in its place: "Let a baby drive a car? You can drive it as soon as you quit wearin' didies (diapers)!" (The victim may be a sixteen-year-old son who wants the car for a date.) An "infant in the eyes of the law" is any boy under twenty-one or any girl under eighteen.

Children ("kids," "young-uns," "little ones," etc.): these terms connote, by one usage, all offspring of whatever age. ("My young-uns is all grown up and got kids of their own and some of *them's* got children.") They mean ordinarily, however, any children big enough to run about and play informally outdoors with other children and not "too big to be ashamed just to play." Children leave off most informal outdoor play shortly after adolescence. After that, girls begin to "talk" more than they play, and boys confine most of their "play" to formal games like baseball. Hunting, swimming, and certain other boys' recreations are not called "play." "Children," in the ordinary sense, are sub-categorized into "small children," including "tots," "toddlers," or "little bitty (teeny) children" and "large children." Children are also categorized as "school children" (and by extension "high school children"), "kids big enough to help (or work)," etc. Another way in which natives "describe" children is according to school grade or high school class; this is an extension of an earlier method of telling what "reader" (Primer to Fifth or Sixth Reader) a child was "in." Children themselves, though in some activities they "play in herds," in other activities grade themselves very narrowly by age or size to the exclusion of other children.

There is a significant gap in clear local terminology for the age just after adolescence before full growth and maturity have been attained. The word "children" is felt to be inadequate or at

least vaguely pejorative ("they don't like it") for youngsters at this stage, yet they are still too young to be included clearly among the "young people." The latter term means primarily the marriageable but still unmarried people, and secondarily the young married people—particularly those still without offspring. This gap in terminology doubtless reflects several historical and social factors, for example: (1) the historically recent retarding of the approved age for marriage; (2) "high school education," which keeps half the youngsters in a subordinate role later than the age at which many of their parents and grandparents "married and settled down"; (3) the partially recognized anomaly of being sexually old enough for adult work and parenthood without having the social and economic privileges of adults; and (4) the fact that intense discriminations based on age or size, or both, are felt and practiced by all members of this group. In these discriminations envy is directed toward others a year older or "a size bigger"; contempt is often felt toward inferiors in age and size.

The gap is bridged partly by the loosely restrictive word "youngsters" (which insults nobody from age two to age twenty and flatters people in their early twenties), partly by extending the sense of the phrase "young people" somewhat downward in time, and partly by adding modifiers to the word "children," for instance, "older children," "great big children," "children nearly grown," "high school children" or "high school age children," "children nearly big enough to start sparkin' (courting)." Boys of this age are sometimes called "lads," though the word "lass" is seldom applied to girls. The noun "adolescent" is lacking in local phraseology. The word "youth," meaning "a young man," is also lacking. The age under discussion is sometimes called the "shy age," or the "timid age," or the "age of greatest embarrassment."

Those whom the community calls primarily the "young people" are "at the sparkin' age." Boys of this age are also likely to be at the "wild oats stage," though "nice girls" are not privileged to "sow any wild oats." This is the age of "good times," "dates," and "courtship." It is the age when people "used to have

parties and enjoy 'em," before automobiles, motion pictures, and religious sanctions ended parties and dances. Nowadays it is the age when girls "like to read love stories and see them fool movies," and boys "like to see just how *fer* and how *fast* they can drive." It is also the age when it becomes "quite a problem" for parents to provide spending money for boys. Both "children" and "grown people" are on the whole strictly excluded from the recreational association of young people, though slightly younger brothers and sisters, and mothers, often receive reports from a family member in this group. These reports cover "who all was there and what everybody said and did," and are considered very interesting. For younger members in the family they serve as a spur toward growing up, and to parents they provide a check by which to judge and control, or attempt to control, the conduct and morals of dating youth.

At marriage, people become "married people," though this phrase includes in primary connotation neither the "young married people" whose functional participation in community life as married adults has not fully begun, nor the "old married couples" whose similar participation has begun to wane. The term "married people" primarily means the heads of families who are "in the prime of life." Their children are in school, and they are interested in maintaining the schools. They go to church and take their children to church, or "they should." They vote and are interested in the outcomes of elections. They work and "manage" as full adults. Were it not for the "strangle hold" which a few old people have on much of the money and land in the country they would "run the community."

"Old people" are those whose children have married and left home, whose physical vigor has begun to decline ("they can't do as much as they used to"), whose "minds are not as active as they used to be," whose "interests" are becoming less alert, whose opinions are no longer received with the respect once given them. They are usually "no longer interested in the schools" except to "try to keep taxes down," but they are "more interested in church than they used to be." They continue to vote "as long as they can get to the polls." Most of their social life is with the old. They are,

in order of descending respect, the "old couples," the "old widows and widowers," the "old bachelors" and the "old maids." A term of either kindly pity or respect for the old is to call them "the agèd." A term of either pitying or callous contempt is the term "the old and childish." An "old person" with property, or still able to work and manage, is considered somewhat "younger" than one of the same age who "draws the pension" or who is "failing" physically.

A Plainviller's passage from one stage of life into a later stage is marked by various events, acts, rituals, or ceremonies and by conventionalized sentiments and verbal statements. At his birth there is "rejoicing" by kinsmen and interested neighbors; his mother may receive a pre-birth or post-birth "shower" of useful articles. His first tooth, step, "pants," long pants, chore and work proficiencies, paid job, barber-shop haircut, "whiskers," date, and so forth—all symbolize stages in his development and identify him with an age-group. Most of these are "small events," but emotions about them are felt, stated, and shared. His first day in school is a "high point" to himself and to his mother, who "always cries" when she sends him, dinner bucket in hand, down the road to the schoolhouse. Everybody jokes and brags on a "first year scholar." Annual promotion cards are important instruments of age-grading, but the first great "high point" after starting school is "finishing the eighth grade." Here he gets a diploma. Another high point comes in the following fall, if he enters high school. If he doesn't, he falls into a limbo without progress until he "starts working for himself," or marries. In high school, however, he passes from Freshman to Senior, and finally receives another diploma, an extremely important ritualistic event. Meanwhile, he has probably been "saved" and baptized, at age twelve or fourteen.

Dates, appropriate clothing, permission to use the car, symbolize his passing into the group of young people. Acceptance by limited sectors of his new group may come through "starting to drink" or by proving his "manhood" through sexual intercourse. Marriage is a high ceremonial, symbolized by a license, a certificate, a "shivaree," and much "joking." Later events of great

importance in "placing" him are: the births of children, a first child especially; the "first-child-to-leave-home," the "last-child-to-leave-home"; the "first signs of old age" (graying hair, baldness, inability to do as much work as formerly, inability to "make his children mind like he used to"); perhaps widowerhood; occasionally "retirement"; and finally, death.

7. STATUS AND PRESTIGE

The thesis of *The Theory of the Leisure Class,* from which the passages below are quoted, is significant. It is that, in general, people tend to use their financial surplus so as to impress other people with the fact that they have a surplus. The ways and means for creating that impression are called *conspicuous consumption.* Stuart Chase has said in this connection: "Superior people lord it over their pecuniary inferiors by wasteful expenditures, whereupon the inferiors move heaven and earth to improve their status by spending to the limit themselves." The following materials give some examples of our *pecuniary* culture. See also in this connection Selection 37, *Social Class,* pages 361-366.

OUR PECUNIARY CULTURE *

Thorstein Veblen

PECUNIARY CANONS OF TASTE

The code of reputability in matters of dress decides what shapes, colours, materials, and general effects in human apparel are for the time to be accepted as suitable; and departures from the code are offensive to our taste, supposedly as being departures from aesthetic truth. The approval with which we look upon fashionable attire is by no means to be accounted pure make-believe. We readily, and for the most part with utter sincerity, find those things pleasing that are in vogue. Shaggy dress-stuffs and pronounced colour effects, for in-

* From *The Theory of the Leisure Class: An Economic Study of Institutions,* by Thorstein Veblen. New York: The Modern Library, 1934, Chap. 6, "Pecuniary Canons of Taste," pp. 131-132, and Chap. 6, "Dress as an Expression of the Pecuniary Culture," pp. 167-168. Copyright, 1899, 1912 by The Macmillan Company. Reprinted by permission of The Viking Press, Inc., New York.

stance, offend us at times when the vogue is goods of a high, glossy finish and neutral colours. A fancy bonnet of this year's model unquestionably appeals to our sensibilities to-day much more forcibly than an equally fancy bonnet of the model of last year; although when viewed in the perspective of a quarter of a century, it would, I apprehend, be a matter of the utmost difficulty to award the palm for intrinsic beauty to the one rather than to the other of these structures. So, again, it may be remarked that, considered simply in their physical juxtaposition with the human form, the high gloss of a gentleman's hat or of a patent-leather shoe has no more of intrinsic beauty than a similarly high gloss on a threadbare sleeve; and yet there is no question but that all well-bred people (in the Occidental civilised communities) unaffectedly cleave to the one as a phenomenon of great beauty, and eschew the other as offensive to every sense to which it can appeal. It is extremely doubtful if any one could be induced to wear such a contrivance as the high hat of civilised society, except for some urgent reason based on other than aesthetic grounds.

By further habituation to an appreciative perception of the marks of expensiveness in goods, and by habitually identifying beauty with reputability, it comes about that a beautiful article which is not expensive is accounted not beautiful. In this way it has happened, for instance, that some beautiful flowers pass conventionally for offensive weeds; others that can be cultivated with relative ease are accepted and admired by the lower middle class, who can afford no more expensive luxuries of this kind; but these varieties are rejected as vulgar by those people who are better able to pay for expensive flowers and who are educated to a higher schedule of pecuniary beauty in the florist's products; while still other flowers, of no greater intrinsic beauty than these, are cultivated at great cost and call out much admiration from flower-lovers whose tastes have been matured under the critical guidance of a polite environment.

DRESS AS AN EXPRESSION OF THE PECUNIARY CULTURE

Other methods of putting one's pecuniary standing in evidence serve their end effectually, and other methods are in vogue al-

ways and everywhere; but expenditure on dress has this advantage over most other methods, that our apparel is always in evidence and affords an indication of our pecuniary standing to all observers at the first glance. It is also true that admitted expenditure for display is more obviously present, and is, perhaps, more universally practised in the matter of dress than in any other line of consumption. No one finds difficulty in assenting to the commonplace that the greater part of the expenditure incurred by all classes for apparel is incurred for the sake of a respectable appearance rather than for the protection of the person. And probably at no other point is the sense of shabbiness so keenly felt as it is if we fall short of the standard set by social usage in this matter of dress. It is true of dress in even a higher degree than of most other items of consumption, that people will undergo a very considerable degree of privation in the comforts or the necessaries of life in order to afford what is considered a decent amount of wasteful consumption; so that it is by no means an uncommon occurrence, in an inclement climate, for people to go ill clad in order to appear well dressed. And the commercial value of the goods used for clothing in any modern community is made up to a much larger extent of the fashionableness, the reputability of the goods than of the mechanical service which they render in clothing the person of the wearer.

Without reflection or analysis, we feel that what is inexpensive is unworthy. "A cheap coat makes a cheap man." "Cheap and nasty" is recognised to hold true in dress with even less mitigation than in other lines of consumption. On the ground both of taste and of serviceability, an inexpensive article of apparel is held to be inferior, under the maxim "cheap and nasty." We find things beautiful, as well as serviceable, somewhat in proportion as they are costly. With few and inconsequential exceptions, we all find a costly hand-wrought article of apparel much preferable, in point of beauty and of serviceability, to a less expensive imitation of it, however cleverly the spurious article may imitate the costly original; and what offends our sensibilities in the spurious article is not that it falls short in form or colour, or, indeed, in visual effect in any way. The offensive object may be so close an imitation as to defy any but the closest scrutiny; and yet so soon as the coun-

terfeit is detected, its aesthetic value, and its commercial value as well, declines precipitately. Not only that, but it may be asserted with but small risk of contradiction that the aesthetic value of a detected counterfeit in dress declines somewhat in the same proportion as the counterfeit is cheaper than its original. It loses caste aesthetically because it falls to a lower pecuniary grade.

8. CULTURAL FACTORS

Below is a brief excerpt from an article by an anthropologist on the importance of *cultural* factors. He shows that determinants of emotions and gestures include not only physiological and anatomical factors, but also cultural aspects. The examples given illustrate why he is "wary of those who speak of an 'instinctive' gesture on the part of a human being."

THE CULTURAL BASIS OF EMOTIONS AND GESTURES *

Weston LaBarre

The anthropologist is wary of those who speak of an "instinctive" gesture on the part of a human being.

A rocking of the skull forward and backward upon its condyles, which rest on the atlas vertebra, as an indication of affirmation and the rotation upon the axis vertebra for negation have so far been accepted as "natural" and "instinctive" gestures that one psychologist at least[1] has sought an explanation of the supposedly universal phenomenon in ascribing the motions of "yes" to the infant's seeking of the mother's breast, and "no" to its avoidance and refusal of the breast. This is ingenious, but it is arguing without one's host, since the phenomenon to be explained is by no means as widespread ethnologically, even among humans, as is mammalian behavior biologically.

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* From "The Cultural Basis of Emotions and Gestures," by Weston LaBarre *Journal of Personality*, 1947, Vol. 16, pp. 49-56. Reprinted by permission of the publisher.

[1] Holt, E. B., *Animal Drive and the Learning Process* (New York, 1931), p. 111, and personal conversations.

Indeed, the Orient alone is rich in alternatives. Among the Ainu of northern Japan, for example, our particular head noddings are unknown:

> the right hand is usually used in negation, passing from right to left and back in front of the chest; and both hands are gracefully brought up to the chest and gracefully waved downwards—palms upwards—in sign of affirmation.[2]

The Semang, pygmy Negroes of interior Malaya, thrust the head sharply forward for "yes" and cast the eyes down for "no." [3]

> The Abyssinians say "no" by jerking the head to the right shoulder, and "yes" by throwing the head back and raising the eyebrows. The Dyaks of Borneo raise their eyebrows to mean "yes" and contract them slightly to mean "no." The Maori say "yes" by raising the head and chin; the Sicilians say "no" in exactly the same manner.[4]

A Bengali servant in Calcutta rocks his head rapidly in an arc from shoulder to shoulder, usually four times, in assent; in Delhi a Moslem boy throws his head diagonally backward with a slight turning of the neck for the same purpose; and the Kandyan Singhalese bends the head diagonally forward toward the right, with an indescribably graceful turning in of the chin, often accompanying this with a cross-legged curtsey, arms partly crossed, palms upward—the whole performance extraordinarily beautiful and ingratiating. Indeed, did my own cultural difference not tell me it already, I would know that the Singhalese manner of receiving an object (with the right hand, the left palm supporting the right elbow) is not instinctive, for I have seen a Singhalese mother *teaching* her little boy to do this when I gave him a chunk of palm-tree sugar. I only regretted, later, that my own manners must have seemed boorish or subhuman, since I handed it to him with my right hand, instead of with both, as would any courteous Singhalese.

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[2] Landor, A. H. S., *Alone with the Hairy Ainu* (London, 1893), pp. 6, 233-234.

[3] Skeat, W. W., and Blagden, C. O., *Pagan Races of the Malay Peninsula* (London, 1906; 2 vols.).

[4] Klineberg, Otto, *Race Differences* (New York, 1935), p. 282.

One day I asked a favorite informant of mine among the Kiowa, old Mary Buffalo, where something was in the *ramada* or willow-branch "shade" where we were working. It was clear she had heard me, for her eighty-eight-year-old ears were by no means deaf; but she kept on busying both hands with her work. I wondered at her rudeness and repeated the request several times, until finally with a puzzled exasperation which matched my own, she dropped her work and fetched it for me from in plain sight: she had been repeatedly pointing with her lips in approved American Indian fashion, as any Caucasian numbskull should have been able to see.

Some time afterward I asked a somewhat naïve question of a very great anthropologist, the late Edward Sapir: "Do other tribes cry and laugh as we do?" In appropriate response, Sapir himself laughed, but with an instant grasping of the point of the question: In which of these things are men alike everywhere, in which different? Where are the international boundaries between physiology and culture? What are the extremes of variability, and what are the scope and range of cultural differences in emotional and gestural expression? Probably one of the most learned linguists who have ever lived, Sapir was extremely sensitive to emotional and sublinguistic gesture—an area of deep illiteracy for most "Anglo-Saxon" Americans—and my present interest was founded on our conversation at that time.

Smiling, indeed, I have found may almost be mapped after the fashion of any other culture trait; and laughter is in some senses a geographic variable. On a map of the Southwest Pacific one could perhaps even draw lines between areas of "Papuan hilarity" and others where a Dobuan, Melanesian dourness reigned. In Africa, Gorer noted that

> laughter is used by the negro to express surprise, wonder, embarrassment and even discomfiture; it is not necessarily, or even often a sign of amusement; the significance given to "black laughter" is due to a mistake of supposing that similar symbols have identical meanings.[5]

Thus it is that even if the physiological behavior be present, its cultural and emotional functions may differ. Indeed, even within

[5] Gorer, Geoffrey, *Africa Dances* (New York, 1935), p. 10.

the same culture, the laughter of adolescent girls and the laughter of corporation presidents can be functionally different things; so too the laughter of an American Negro and that of the white he addresses.

Many in fact of these motor habits in one culture are open to grave misunderstanding in another. The Copper Eskimo welcome strangers with a buffet on the head or shoulders with the fist, while the northwest Amazonians slap one another on the back in greeting. Polynesian men greet each other by embracing and rubbing each other's back; Spanish-American males greet one another by a stereotyped embrace, head over right shoulder of the partner, three pats on the back, head over reciprocal left shoulder, three more pats. In the Torres Straits islands "the old form of greeting was to bend slightly the fingers of the right hand, hook them with those of the person greeted, and then draw them away so as to scratch the palm of the hand; this is repeated several times." [6] The Ainu of Yezo have a peculiar greeting; on the occasion of a man meeting his sister, "The man held the woman's hands for a few seconds, then suddenly releasing his hold, grasped her by both ears and uttered the Aino cry. Then they stroked one another down the face and shoulders." [7] Kayan males in Borneo embrace or grasp each other by the forearm, while a host throws his arm over the shoulder of a guest and strokes him endearingly with the palm of his hand. When two Kurd males meet, "they grasp each other's right hand, which they simultaneously raise, and each kisses the hand of the other." [8] Among the Andaman Islanders of the Gulf of Bengal:

When two friends or relatives meet who have been separated from each other for a few weeks or longer, they greet each other by sitting down,

[6] *Report on the Cambridge Expedition to the Torres Straits,* Haddon, A. C. ed. (Cambridge, 1904; 5 vols.), IV, p. 306; Thomas Whiffen, *The North West Amazons* (London, 1905), p. 259.

[7] Hitchcock, R., The Ainos of Yezo, in *Papers on Japan,* pp. 464-465. See also Landor, A. H. S., *Alone with the Hairy Ainu* (London, 1893), pp. 6, 233-234.

[8] Perkins, J., Journal of a Tour from Oroomish to Mosul, Through the Koordish Mountains, and a Visit to the Ruins of Nineveh, *Journal of the American Oriental Society,* 1851, 2, 101; Charles Hose & William McDougall, *The Pagan Tribes of Borneo* (London, 1912; 2 vols.), I, 124-125.

one on the lap of the other, with their arms around each other's necks, and weeping or wailing for two or three minutes till they are tired. Two brothers greet each other in this way, and so do father and son, mother and daughter, and husband and wife. When husband and wife meet, it is the man who sits in the lap of the woman. When two friends part from one another, one of them lifts up the hand of the other towards his mouth and gently blows on it.[9]

The allegedly "instinctive" nature of such motor habits in personal relationships is difficult to maintain in the face of the fact that in many cases the same gesture means exactly opposite, or incommensurable things, in different cultures. Hissing in Japan is a polite deference to social superiors; the Basuto applaud by hissing, but in England hissing is rude and public disapprobation of an actor or a speaker. Spitting in very many parts of the world is a sign of utmost contempt; and yet among the Masai of Africa it is a sign of affection and benediction, while the spitting of an American Indian medicine man upon a patient is one of the kindly offices of the curer. Urination upon another is a grave insult among Occidentals, but it is part of the transfer of power from an African medicine man in initiations and curing rituals. As for other opposite meanings, Western man stands up in the presence of a superior; the Fijians and the Tongans sit down. In some contexts we put on more clothes as a sign of respect; the Friendly Islanders take them off. The Toda of South India raise the open right hand to the face, with the thumb on the bridge of the nose, to express respect; a gesture almost identical among Europeans is an obscene expression of extreme disrespect. Placing to the tip of the nose the projecting knuckle of the right forefinger bent at the second joint was among the Maori of New Zealand a sign of friendship and often of protection;[10] but in eighteenth-century England the placing of the same forefinger to the

[9] Radcliffe-Brown, A. R., *The Andaman Islanders* (Cambridge, 1922), p. 117 and p. 74, n. 1.

[10] Klineberg, Otto, *Race Differences* (New York), 1935, pp. 286-287, citing Lubbock, J., *Prehistoric Times* (New York, 1872); Best, E., *The Maori* (Wellington [N.Z.], 1924; 2 vols.); Lowie, R. H., *Are We Civilized?* (New York, 1929); and Hollis, A. C., *The Masai, Their Language and Folklore* (Oxford, 1905), p. 315.

right side of the nose expressed dubiousness about the intelligence and sanity of a speaker—much as does the twentieth-century clockwise motion of the forefinger above the right hemisphere of the head.

9. DEVIANT BEHAVIOR

Selection 8, *Cultural Factors,* pages 73-78, shows the importance of *culture* as a determinant of forms of emotional and gestural expression. The present selection illustrates the wide range of other types of behavior as well, according to different cultures. This suggests careful consideration of what is really meant by *"abnormal"* behavior. This does not necessarily imply justification for *any* kind of behavior if the culture permits; but it does suggest the need for more realistic understanding of "deviant" acts.

PERSONALITY AND PATTERNS OF CULTURE *

A. H. Maslow

THE RELATIVITY OF CULTURE

The anthropologist can teach us many things, but one lesson that we *must* learn from him is that of *cultural relativity.* We must be able to think of the single human being as inextricably imbedded in a social matrix from which it is impossible to free him completely, and we must understand further that this cultural matrix is only one of many. We must treat the individual first as a member of a particular cultural group, and only after this can we attempt to treat him as a member of the general human species.[1]

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*From *Psychology of Personality,* by Ross Stagner. New York: McGraw-Hill Book Company, Inc., 1937, Chap. 22, "Personality and Patterns of Culture," by A. H. Maslow, pp. 409-419. Copyright, McGraw-Hill Book Company, Inc. Reprinted by permission of the publisher and author.

[1] See in this connection W. G. Sumner's description and illustrations of ethnocentrism (*Folkways,* pp. 13-15). See also Sherif, M., *Psychology of Social Norms,* Chap. VII.

We shall attempt to indicate briefly a few ways in which the assumption of such a standpoint may have repercussions on our general ways of thinking about personality, and we shall point out a few of the innumerable questions that clamor for attention as a consequence.

RANGE OF HUMAN BEHAVIOR

The study of individual differences has been confined almost entirely to members of western culture. Even a cursory scanning of the anthropological literature indicates that the psychologist has neglected the tremendous possibilities of variation in almost all human behavior categories that are apparent when we study many cultures rather than one alone. In any single cultural group we find that only certain sections of the complete range of human behavior are observable. Another phrasing of this fact would be that practically all the members of a cultural group behave alike to a great extent, and that this similarity also extends to preceding generations, but that the group as a whole behaves differently in many ways from other cultural groups.

If, for instance, we turn our attention to abnormal behavior, we can find in other cultures many kinds of abnormality that we do not find in our own (at least in the same form). Among the Siberian Chukchee we find a peculiar type of insanity that we never meet in our own group. We find a very similar type of insanity in the "lattah" of the Hindus. Among the Malay a special type of insanity called "amok" is found to exist. Many groups accept as normal, and even desirable, phenomena which we should call delusions, hallucinations, hysterical or neurotic behavior.

The range of possible emotional behavior is almost unlimited. While it is true that the human being has a given repertoire of physiological emotional responses that is fairly consistent for the species (although not completely so), we find that these reactions can be pressed into the service of almost any occasion. Generally we may say that practically any situation or any stimulus that we may conceive of will in some part of the world be able to call forth any one of the limited repertoire of physiological emotional responses. We need refer only to Klineberg's[2] short discussion of

[2] Klineberg, Otto, *Race Differences.* New York: Harper & Brothers, 1935.

this question. He points out that what makes us jealous will not necessarily make other people jealous, and what makes other people jealous will not make us jealous; what makes us angry will make other people happy, etc. The situations that will arouse various emotional responses in us are so universal within the limits of our own culture that we come to think of such stimulus-response connections as innate, as natural, as God-given perhaps. The American who does not resent insults to his wife or to his mother is a perverted creature, we think, and condemnation of such a person is general in his group. Yet in other cultures such remarks are not considered grounds for anger. Similarly it is obvious that the Japanese expresses his emotions in a very much more inhibited way than, say, the Southern European. These examples will suffice so long as we are fully aware of the fact that many more can be given.

The range of human behavior is far greater than we ordinarily realize, with our vision limited as it is by our own milieu. The incredible repertoire of human behavior and achievement that could be constructed by cataloguing many cultures one after another would completely modify our conception of the behavior potentialities of human beings at birth.[3] Skills that we consider unusual other people consider quite normal and usual. Feats of endurance and strength that we might consider beyond human capacity are commonly found in other cultures. The feats that are very common for the Hindus let us say, in the field of auto-suggestion, hypnosis, etc., are almost completely unknown to our western cultures, except perhaps to a few students of the esoteric. The facts seem to be that a Hindu can walk on live coals without hurt, that he can go into week-long trances, that he can control in an amazing way many of his physiological functions that we consider beyond voluntary control.

If we turn to the American Plains Indians, with their general dependence upon the search for individual visions, we find them

[3] Of course, the adult has lost most of the potentialities theoretically ascribable to him at birth. A grown-up "culturally conditioned" individual has generally only the behavior potentialities of his group. For instance, it is very difficult for him to learn to speak a new language perfectly although he *could* have spoken this language perfectly if brought up from the beginning in a group that spoke it.

voluntarily undergoing all sorts of physical tortures that are to us simply inconceivable. These Indians have been known to dissect out their own shoulder muscles and hang themselves from a tree by these muscles for days at a time in the search for mystic personal visions. We cannot dismiss such behavior as "weird" or "peculiar" or "abnormal." We must think of such behavior as *normal in a certain milieu,* and we must very definitely include such behavior as part of the common-human repertoire.

With regard to personal characteristics we find again that we have been provincial or ethnocentric in our appreciation of the range of individual differences. If we concern ourselves for the moment with how personality expresses itself with regard to dominance and subordination, we find again the almost limitless range between high and low. We can run the gamut in our anthropological reading from the highly dominant Plains Indian to the completely mild and submissive and subordinate Arapesh of New Guinea.[4] The general average of dominance in the Arunta is far higher than the American general average; in the Arapesh it is far lower than that of the general average of our culture, and these extremes generally range far beyond our extremes. We find other cultures built up on the concept of the paranoiac personality as an ideal (the Dobu).

What we would call delusions run to unbelievable extremes in the Ojibwa. Characteristic of these is an incident reported as follows: a man killed a little girl because she laughed as she walked along the road. He interpreted this as referring to him in spite of the fact that the girl did not even know he was there.[5] If we turn to neuroticism we find whole cultures in which practically everyone is neurotic by our lights. We can as easily find cultures in which practically no one is neurotic by our cultural standards. Self-sufficiency varies greatly also. The Ojibwa Indian can go out alone on his hunting trails for months without ever seeing another person and not mind this, but in other cultures we find the individual far more dependent upon the presence of his neighbors than we would consider normal.

[4] See Mead, M., *Sex and Temperament in Three Primitive Societies.* New York: William Morrow & Company, Inc., 1935.

[5] Landes, R., *The Ojibwa Woman.* Columbia University Contributions to Anthropology, 1938, Vol. 31, pp. 255.

These are only a few illustrations, but they serve to illumine the general thesis. Whether these differences are hereditary or environmentally determined need not concern us for the moment. The fact remains that they exist, that *the range of human behavior* in almost any department is *greater than the range that we can find within our own culture.* It would be naïve then for us when we speak of the range of individual differences to limit ourselves to America or to Western Europe.[6]

THE CONCEPT OF ABNORMAL BEHAVIOR

Any discussion of the phenomena of abnormality of behavior must begin with definition and reclassification of terms and of behavior phenomena. The cultural point of view will make this task lighter and will also give it greater validity, since a good deal of the word chopping that may be found in the psychological literature is due to what we may call psychological provincialism. Our discussion will take its departure chiefly from a recent paper by Benedict[7] which the student is strongly urged to read because of the stress which this writer places on the cultural determination of normality and abnormality.

We have already pointed out the fact that norms of behavior are a function of the particular culture under consideration. It must be clearly realized that different cultures have different norms. What is unusual in one culture is the rule in another, what one culture considers abnormal another considers normal, what is cast out and despised by one group as unnatural and psychopathological is the very trait that another group nurtures as a desirable foundation for its whole social pattern. Thus abnormality must be considered as relative to the culture and, as a consequence, cannot be altogether understood except when the culture is understood, in its fundamental emphases, its norms of behavior, its ideals and its judgments passed on different kinds of behavior.

Any ethical judgments on behavior are a judgment of a cul-

[6] This is essentially a tremendous "sampling error," a failure to get a sufficiently representative sample of human behavior.

[7] Benedict, R., "Culture and the Abnormal," *Journal of General Psychology*, 1934, Vol. 10, pp. 59-82.

tural group. The same judgment is not necessarily made by other groups. Such judgments are then clearly relative, since it seems to be coincident with the presence of norms of behavior in a culture that there are also present norms of ethical judgment to be passed on deviations from these norms.

This is not to say that any easy generalizations may be made on this basis. These judgments have a certain specificity. A deviation upward from the norm of behavior *a* may be disapproved, a deviation upward from the norm of behavior *b* may be approved, while for *c* it may call forth pity, for *d* sympathy, and so on. Other deviations may not be noticed at all, in spite of the fact that they may be uncommon. An unusually great amount of stinginess, physical strength, sympathy, pugnacity, sickliness or sexual passion are all reacted to in different ways in our own culture, and these ways of treatment will be found to be entirely different in other cultural groups.

This cultural judgment very often is independent of any external criterion that we can determine either in terms of adjustment to the cultural world or of biological survival value for the group or for the individual. All we can say is that the group as a whole reacts in such a way to such and such behavior, and in a completely different way to other behavior, for no immediate reason except that preceding generations have reacted in the same way. The origin of such attitudes in the group is a historical-anthropological question and cannot be considered here. It is the present consequences of these general group attitudes, wherever they come from, in which we are interested.

The Deviant Personality. However we may define the norm, whether as the most commonly occurring behavior or as the behavior that is approved by the culture as a whole, or as behavior that is well adjusted or not psychopathological, we shall still find deviations from the norm. Generally it may be assumed that the deviant is a product of the interaction of the individual's basic temperamental make-up[8] with the patterns of his culture. We cannot at the moment speak of absolute deviance from a universal human standard, since we know little of the human, univer-

[8] We may arbitrarily define this phrase by including in it all tendencies to social behavior that are organically determined.

sally taken. Most deviance must be considered as relative to a particular cultural setup, in spite of the fact that some qualifications of this statement are necessary. For instance, admitting that it is largely true that the deviant in one culture could *in most cases* be able to find in some place in the world a culture to which he could have adjusted well, if he had been born with it, still it seems probable that there are some personalities so constituted that they could not adjust to *any* society. The later stages of paresis, for instance, would so far deprive an individual of the essential minimum traits of humanness that it is inconceivable that he would be welcomed into any cultural group extant. Stuporous melancholia and catatonia are other examples.

Such apparent exceptions to the general rule that the deviant is largely a cultural product serves only to impress us even more with the importance of this rule. Many examples can be cited, on the other hand, of personalities that our group considers biologically or pathologically deviant, who might conceivably be able to adjust to societies other than our own. The paranoiac, for instance, we confine to asylums; but there are several well-known cultures that have, as an important characteristic of their normal and ideal personalities, a strong paranoid trend. In such cultures, indeed, it is just the person who is not sufficiently paranoid who becomes the deviant. The epileptic, the senile dement, the maniac, the feeble-minded, the schizophrenic, the hysteric—all have their normal or even honored places in one culture or another. Delusions, hallucinations, affective, intellectual and conative "disorders" of all sorts are normal and desirable occurrences in some corner of the world. The very core of many a culture is a concept of personality that we should consider psychopathic.

In the face of such phenomena, it behooves us to tread softly in our discussions of abnormality, deviance and personality. We must become even more cautious in our ethical or moral judgments. It is justifiable, of course, to approve or disapprove of certain behavior, but no references can or should be made to universal or absolute criteria of goodness or badness of behavior for the simple reason that there are none such. Nor will there be until science takes this task in hand. One culture cannot judge another culture in terms of its own standards without risking the

charge of provincialism. The biologist, however, is able to say that a taboo on the most plentiful source of food is bad in terms of biological survival. The psychologist may say that cultural suppression of such and such a fundamental human urge will create more unhappiness and conflict than if there were no such repression. He may say that very widely differing social norms for various strata or classes within a single cultural group produce so much friction, maladjustment and conflict that they should be wiped out. Scientists in all fields may one day cooperate in some such endeavor and tell us the best way to run our own culture in terms of more absolute scientific judgments.

10. SOCIAL CONTROL

Many are the means of *social control* in various cultures for the regulation of behavior and conduct. A few of the methods of control are described below for a typical American community. "Middletown" is a midwestern community of some 30,000 people.

THE MACHINERY OF GOVERNMENT *

Robert S. Lynd
and
Helen M. Lynd

A large part of this city business consists in the preservation of those group sanctions and taboos which have become solidified into laws and therefore depend for their maintenance not only upon the support of public opinion but upon official enforcement. Protected and to a degree constrained by this body of law and public opinion, all the activities of living go forward; a Middletown citizen does not operate a factory, build a home, drive his car, or even take a drink of water or empty his garbage without both depending upon and being limited by these group regulations.[1] The activity of prosecuting, judging, and trying offenders against these laws constitutes

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* From *Middletown: A Study in Contemporary American Culture,* by Robert S. Lynd and Helen Merrell Lynd. New York: Harcourt, Brace and Company, 1929, Chap. 24, "The Machinery of Government," pp. 427-434. Copyright, Harcourt, Brace and Company. Reprinted by permission of the publisher and authors.

[1] Of 1,497 arrests in Middletown in 1924, 324 were for intoxication, 196 for violating the liquor law, 148 for violence to persons, 163 for speeding, eight for driving while intoxicated, eighty-six for being suspects, seventy-eight for sex offenses, seventy-two for being fugitives from justice, fifty-two for gambling, twenty-three for failure to provide, twelve for illegal voting, 242 for violence to property and ninety-three for "other causes."

traditionally the most imposing and revered department of Middletown's public business; the most prominent building in the city is the domed court house; the first public institutions in the state for the care of special classes were prisons for law-breakers.

New laws are continually becoming operative in Middletown, made either by the city itself or by the larger geographical units of which it is a part, as new occasions for violation of persons or property emerge. Meanwhile, with the notable exception of the development of the juvenile court, the machinery for their enforcement has remained substantially the same as in the simpler community of thirty-five years ago. The efficacy of this system theoretically depends upon at least six factors: knowledge of the laws on the part of the people; apprehension of offenders by the police, except in less overt cases, such as breach of contract, infringement of patent, and so on, where charges are brought by the offended parties; a fair trial before a jury of twelve "good men and true" selected at random from the citizens; the wisdom and justice of the judge conducting the trial; the emergence of the truth in the clash between lawyers, each riding his case like a jockey to win; the efficacy of punishment in deterring the offender from repeating his misdeeds.

Actually, however, at each one of these points Middletown is experiencing some difficulty in making its traditional, relatively unchanging system of law and justice work under present-day conditions. In the first place, although every one is assumed to know every law and ignorance is no defense in case of infringement, the constantly growing mass of local laws has not been assembled since 1905, and one of the city's ablest lawyers remarked that "no one knows what ordinances are on the books." Furthermore, although Middletown depends for its detection of law-breakers primarily upon the vigilance of its police force,[2]

[2] The following statement in a local paper in 1900 still represents fairly accurately Middletown's view: "Many theories are advanced nowadays as to the most available and efficacious means for the prevention of crime; but among all the remedies suggested, none will go so far toward accomplishing the end desired as alertness and efficiency on the part of patrolmen." As over against this attitude may be noted the statement of Raymond Fosdick in his *American Police Systems* that "even were we to secure 100 per cent. efficiency in our patrol and detective work, most crimes would still go unhindered." (New York: Century, 1920), p. 355.

these men, like other political appointees, are not chosen primarily for fitness for their posts, and are not infrequently bandied about between mayor and Board of Safety in a struggle for political dominance.

In regard to its judges, Middletown's attitude varies from individual to individual. It has great confidence in the judge of the superior court whose judgment has been reversed by a higher court only once in the course of seven years' service. Its other judges, however, many people tend to regard either with wary tolerance or active distrust. Chosen like other officials by the friction of party politics, and paid salaries insufficient to attract the abler lawyers in a day when corporation law offers the big local prizes, Middletown's judges are often men of little training or local professional standing.[3]

Finally, the reliance upon punishment as a deterrent to infringements of group regulations is being somewhat shaken in the city today. The predicament of this traditional machinery of punitive justice in the face of the changing industrial life of the city appears in such a representative case as the following:

A family of six was haled into the juvenile court, the husband, a machinist of twenty-six, accused of gambling and violating the law against passing bad checks; the wife was a neatly dressed, earnest-looking girl of twenty-three; the oldest of the four children was six and the youngest a baby in the mother's arms. They were newcomers to town, lived in a dilapidated house, and had "had only beans and bread for Christmas dinner." It was a time of unemployment and the husband had been long out of work. He had been catching rabbits in the country,

[3] Speaking of the difficulty of adapting political institutions of the middle of the last century to the more complex city of today, Roscoe Pound says, "Every one could and probably did know the character and qualifications of the few conspicuous lawyers who were candidates for judicial office in the judicial district or of the rising young lawyers who sought election as police magistrates of the small town of 1850. Under the circumstances of that time the greater the number of citizens that voted, the more intelligent the choice was likely to be. Today, when the average citizen of Cleveland can know the lawyers and judges only from what he chances to read in the newspapers or as he chances to meet them in the course of litigation or in social activities, it is often true that the greater the number of citizens who vote, the more unintelligent the choice." (*Criminal Justice in Cleveland.* Cleveland: Cleveland Foundation, 1921, Part VIII, pp. 628-629.)

selling them for $0.25 apiece, and gambling with the money in an effort to make it more. He had given a grocer bad checks for $1.68, $3.24, and $2.10. "Why don't you get a job?" demanded the judge. "None to get," answered the man. The judge seemed stumped and rather inclined to insist that he get a job anyway. "Why did you pass these three bad checks?" he asked, shifting his attack. "I had to get groceries." Again the judge seemed stumped: "I know, but you can't do that, you know." Again shifting his attack to avoid this impasse, the judge turned to the white-faced wife: "Do you know what this means, to have your husband passing bad checks?" Her only reply was the four quietly spoken words, "We have to eat." Stumped squarely at this, the judge shouted, "Here, Mr. Bailiff, call in the sheriff. If that's the way you feel, we'll just lock your husband up." The girl wilted under this, and putting her head down on the table, wailed softly, "Oh-h-h-h-h!" The sheriff entered and stood beside the husband, whereupon the judge, having frightened the couple, a common practice with him, asked, "Do you say you don't approve of your husband's passing bad checks?" "Ye-e-es," came the meek reply from the wife. "Well, then, you people go home and behave, and, Henry, you get you a job." The family trailed out of the court room, the tow-headed baby looking back with wide, uncomprehending eyes.

The "social problem" of "the increase in crime" is being met most commonly by new state laws augmenting the punishment: changing the punishment for robbery, for instance, from two to fourteen years in prison and $1,000 fine to ten to twenty-one years and $5,000 fine; for rape, from two to twenty-one years to five to twenty-one years, and so on. Some evidence of a growing realization that paying a fine or spending a term of years in prison does not necessarily change a person's conduct for the better appears, however, in the use of the new device of the "suspended sentence" and in attempts by the judge of the circuit court to expose an offender to better influences by "sentencing" him to a period of church and Sunday School attendance. A man, with a wife and four children, charged with "desertion" and "contributing to the delinquency of a minor," was, for instance, sentenced to one and one-half to seven and one-half years in prison, but the sentence was suspended on condition that he "abstain from smoking cigarettes and attend church and Sunday School regularly." A forger was given a suspended sentence of two to fourteen years and sen-

tenced to "attend church and Sunday School services regularly."

In addition to use of the suspended sentence, further modification of the assumption that law-breaking is a "voluntary" act on the part of a willful wrong-doer appears in the tendency to include somewhat more of the population in the group whose infringements of taboos are regarded as not "their own fault." Thus, to cite but one instance of this extension of the period of helplessness before circumstances, the "age of consent"—when a girl is supposed to be able to decide for herself as to the sex approaches of a member of the opposite sex not her husband—was raised in 1893 from twelve to fourteen years, and in 1907 from fourteen to sixteen years.

So justice in Middletown gets itself done amid many of the same conflicting currents that condition the rest of the city's public business. As private business looms larger, draining off the best legal talent to serve its ends, the machinery of justice tends to become less independent and imposing and somewhat more an adjunct to the city's dominant interests; one not uncommonly hears the statement from both business men and workers that, by and large, a rich man or a corporation stands a better chance in Middletown courts than a poor man. "Science" in the form of the medical man and intelligence tester is beginning sporadically to displace some of the omniscience of the court, although, except in extreme cases, neither juvenile nor adult offenders receive even a medical examination as a part of the trial procedure. The religious atmosphere still clings strongly to the activity of dispensing justice at certain points, though the ceremonial of administering the oath has lost virtually all of its earlier meaning. Save in the case of the judge of the superior court, neither juries nor judges have the confidence of the city. Meanwhile, in their government, as in training their children and in their religious practices, Middletown people are tending increasingly to delegate their interests, while they busy themselves with more pressing and immediate concerns.

11. SOCIALIZATION

By the process of *socialization,* individuals acquire socially desirable habits and learn to live as members of a social group. *Individuals* develop into self-respecting *persons.* The present selection is not intended to represent the complete process, but rather to illustrate the difficulties of complete socialization for many people in our society. The excerpt, taken from a study of Negro youth in the rural South, is also an example of the use of *life histories* in social psychology.

PERSONALITY PROFILE *

Charles S. Johnson

Sadie Randolph's family is one of the thousands of Negro sharecropper families living along the Yazoo in Bolivar County, Mississippi. She is a placid girl of 18. Her complexion is dark-brown and she has short, straightened hair. In her new gingham dress, which she herself made, she is neat and clean.

The house in which she lives is a four-room frame dwelling in fairly good condition, although about twenty-five years old. Its chief defects are a leaky roof and a broken back door. Beside the house is a small well-kept vegetable and flower garden. In the back yard is a motor truck, worth about $300. There are many chickens, nine hogs, and two cows—a conspicuous affluence by the standards of the Negro community. The family cleared $160 from the cotton crop last year.

Sadie Randolph is interesting because she belongs to one of the numerous sharecropper families that find it necessary to com-

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* From *Growing Up in the Black Belt: Negro Youth in the Rural South,* by Charles S. Johnson. Washington, D.C.: American Council on Education, 1941, Chap. 1, "Personality Profiles," pp. 6-11. Copyright, American Council on Education. Reprinted by permission of the publisher and author.

promise with the conventions in order to achieve a practical economic unit for sharecropping. The fact of irregular family organization is often noted statistically. The effects of such organization on the personality of youth is not so often indicated.

The head of the house is David Freeman, who, although not married to Sadie's mother, is accepted as Sadie's stepfather. He is a pleasant-looking, medium-brown man of about 30 years of age, with short, crisp hair, and an honest, independent, good-humored air. His education ended at about the third grade. Sadie's mother is darker, with unkempt hair, a hard face, and a surly manner. There is also a 10-year-old boy in the household, David Freeman's son by another woman at the time he was living with his first wife. The boy's mother gave the baby to David's first wife because the wife had no children and the mother had too many. An uncle and aunt of Sadie's also live in the home. The uncle is Sadie's father's brother, and the aunt is Sadie's mother's sister. The uncle assists on the farm and is an essential part of the economic unit of the household. The aunt, often ill and the victim of "spells," works when she can.

Sadie's lineage is complicated, but her mother explains it tonelessly and apparently without emotion. When the girl's grandmother married Randolph, her second husband, she already had a grown daughter by her first marriage and Randolph similarly had a grown son. These two became Sadie's parents although they never married because Sadie's mother did not like the man.

The stepfather is sharecropping with a Negro farmer who rents his land from a white man. He says:

> I'd rather work with my own color. They talk to you like you was a man. The white man talks to you like you was a boy. The colored boss don't cuss you out, neither. I make a better showing here than where I was before and get more out of my crop 'cause I'm working for a colored man.

Before he came to the present place he worked on a white man's plantation. It was, he said, "a one-man town, all owned by one white man, and too tough" for him.

Whatever Sadie decides to do as a career, the stepfather does

not want his own son to follow him in farming, because "he would not get enough out of it." He would rather have him be a "carpenter or something mechanical." What is needed on a cotton farm is a large family, but his wife is emphatic about a small family. She says bluntly, "I don't like children much."

DAILY ROUTINE OF A GIRL ON THE FARM

Sadie's daily duties get her up at 4:30 in the morning. Her mother prepares breakfast—usually fried okra, salt pork, tomato gravy, and bread. The ailing aunt washes the dishes. By five o'clock they are all in the field. The blistering heat sends them in about eleven, and dinner is cooked—turnip greens, cornbread, salt pork, and sometimes pie. They lie around and rest until about 1:30, then return to the field until sundown. Supper consists of the left-overs from dinner.

Sadie walks to the local school, located four miles from her home, to attend the five-month school term. The school is an old, two-room, frame structure, with two teachers—the principal and his wife. The principal is also a house painter in his spare time. Sadie is in the eighth grade and likes her school work, such as it is, when she can attend. Her favorite subjects are arithmetic and spelling. English and arithmetic, she thinks, will be most important to her after school because "you always have to talk and to count."

WORRIES ABOUT BEING "SAVED"

She "got religion" when she was 8 years old but saw no "visions" or anything of the sort. "They don't have visions in the Church of Christ," she said. Her main worry is whether she will be "saved." She is afraid of the devil and fire and brimstone, and she wants to go to heaven which, she says with conviction, is filled with milk and honey. The only complete books she has read are church books. She does not dance nor go to the movies because her church forbids it. Her recreation is playing such simple games as "buzz seven," "minister's cat," and "eleven hands," at home or at church parties. However, there are times when she wishes she had never been born, for then she would not have to

worry about school or being saved. The worst sin, she thinks, is having a baby before marriage. Then "I'd miss heaven and go to hell, and I'm working to go to heaven." The next worst sins in the order named are drinking, killing, and stealing.

RESENTMENT TOWARD STEPFATHER

The last time she saw her real father was in 1926, when she was 6 years old. She wants very much to see him again and says that she loves him more than her stepfather, although the latter does more for her than her real father. But she would not like to live with her real father because "he drinks so much and stays drunk." She does not know his present "wife," but she knows that this woman takes care of him when he is drunk.

With a vagrant and consciously irrational vehemence she asserts, "I love my father 'cause if it hadn't been for him I wouldn't of been here," and adds, "I'd rather mamma to be married to him, and then I could have stayed with my father." When she visited her real father in 1926 he wanted to come back home with her, but her mother would not permit it. The resentment in Sadie's tone shows rather obvious jealousy toward her stepfather. She refers to her own father as "Daddy," sometimes "Father," and to her stepfather pointedly as her mother's husband, or her stepfather.

ATTITUDE TOWARD SELF

She is sensitive about color and prefers a light-brown complexion, but adds, "I like my color [dark-brown] but would like to have long hair." Her own hair is short. However, she thinks color is more important than hair, "because you can fix hair and make it look pretty, but you can't change color." She does not like white because "it wrinkles quick." Although she likes her own color, she recognizes that whites have more opportunities and that is the only reason she might like to be white. If she were white she would like to be a bookkeeper. Being what she is, she thinks she will probably sew and cook, or get married and not have to worry about a job.

ATTITUDE TOWARD WHITES

Sadie says "the poor white men are after the colored women on the streets. They ought to be after their own color if they're after anybody." Sadie says:

Whites are all right in their place and ought not to bother colored folks. I am scared of whites when they don't stay in their place. They like the colored women.

She says some whites are good and mentioned particularly a man whose office her mother cleaned. "He wasn't stingy, and he paid good," she said.

The mother says that she did not let Sadie play with white children after she was 8 or 9 years old. Before that age she thinks the white children do not know about color, but after that their parents teach them. Then they run to their parents with tales and there is danger of a fight in which the Negroes will inevitably suffer. They have as neighbors an Italian family. This farmer is a renter and lives across the road from Sadie's home. The stepfather says he is "good friends" with this family and often goes to their house and they come to his. He says that he eats with them "right in their own house." He likes them and "gets along fine" and the two little boys "play fine." But he will not allow his boy to go over to the Italian neighbor's house. It is all right for the Italian boy to come to his house, but not for his boy to go there.

They treat us good so far, but we don't know what is to come. If the boy goes over to the Italian's house and something happens . . . maybe the Italian man might say something he didn't like. I'd know what to do . . . I'd come home, but the boy, he wouldn't know what to do.

AMBITIONS AND OUTLOOK

Sadie's chief ambition is to go to the Saints Industrial School near Lexington. This school is run by the Church of God in Christ and imposes a very rigid discipline on behavior. That is why she wants to go there and also why her mother prefers

it; they have not been able, however, to save enough to cover the expenses of $4 a month. If her mother and stepfather cannot send her to the Industrial School, she hopes they will let her work her way through. This is her driving ambition at present and it overshadows every other interest. She does not plan to get married until late, but when she does she says she would prefer a husband a bit lighter than she is and would like to marry a doctor; she says, "Before I marry a farmer I wouldn't marry at all." After marriage she says she would like to have just one child because "then I could dress her like I want to."

The large number of families in which there are stepparents gives importance to Sadie's experience; her response to this fairly typical cultural situation is a neurotic one. From all present indications she will not be able to realize her ambition to get out of the farming class. This she has recognized to some extent and has taken refuge in religion.

12. INVENTION

Invention and the growth of new ideas is discussed according to three important principles: *continuity, cross-fertilization,* and *diffusion.* This selection shows some ways by which culture patterns develop. It has an important bearing on several other selections in the present volume.

THE GROWTH OF CULTURE *

William F. Ogburn
and
Meyer F. Nimkoff

THE PRINCIPLE OF CONTINUITY

The growth of culture cannot be appreciated without recognizing that every new culture trait is the outgrowth of existing culture traits. Every invention is the result of an evolutionary process. A modern cannon that can throw an explosive a score of miles and hit a target has an inventional history. The steel of which it is made is an improvement over iron. The nitroglycerin is an improvement on powder. The application of mathematics and physics to trajectories is an improvement over aiming at a visible target. Steel-making in turn has a long inventional history, as has also nitroglycerin and the knowledge of the movement of trajectories.[1]

The breech-loading gun is an improvement over the muzzle-

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* From *Sociology,* by William F. Ogburn and Meyer F. Nimkoff. Boston: Houghton Mifflin Company, 1946, Chap. 24, "The Growth of Culture," pp. 778-784. Copyright, William F. Ogburn and Meyer F. Nimkoff. Reprinted by permission of the publisher and authors.

[1] Fiske, B. A., *Invention, The Master Key to Progress.* New York: E. P. Dutton and Company, 1921, Chap. 5.

loading gun. The gun that can fire a number of shots in quick succession is an improvement over the gun that could shoot only one shot, whether loaded from the muzzle or the breech. These developments required centuries. The early cannon of the thirteenth and fourteenth centuries were improvements on missile-throwing machines, without the force of powder, that were used in storming castles of medieval times. Powder was the outgrowth of experiments with saltpeter and was an adaptation from other fields. Powder had been used for a long time in China for "fire works." Missile-throwing techniques were utilized in the ancient world around the Mediterranean Sea. These devices for hurling trace back to the bow and the sling and to the use of the lever. The crossbow was the result of mechanical force used to pull back the string on a bow too powerful to be shot by hand. So it is that modern artillery traces back to the very early beginnings of culture hundreds of thousands of years ago.

It is true that to fabricate modern artillery, a munitions maker does not go through the evolutionary process that led up to the artillery of today. He can learn, no doubt in a comparatively short time, enough to construct a cannon. He can do this because the knowledge exists and has only to be learned. But the development of the knowledge that enables manufacturers to construct such a modern instrument of warfare required a period as long as the history of the superorganic itself. There is no adequate reason to think that modern man, without the benefit of culture, could acquire this knowledge in any quicker time.

This principle of continuity lends significance to the old adage "there is nothing new under the sun." A visitor to Paris sees the Arc de Triomphe, that magnificent and incomparably beautiful arch erected to celebrate the victories of Napoleon, and is moved to comment on the artistic creativeness of the French people. But the French did not create such a monument out of nothing. Further travels to other European cities show that many of them have beautiful arches. The Romans constructed them nearly ten centuries ago. The Greeks, we are told, festooned the gates to their walled cities to celebrate the return of their victorious soldiers. Triumphal arches have a history. Again, Fascism seemed to Americans a strange new thing when it flashed on the political

scene in the nineteen-twenties; but that was only because we were not familiar with Italian history. The roots of Fascism are found in the traditions of the peninsula, just as the gun and the triumphal arch are not without antecedents, but may be traced through a long slow evolution. Nazism is not the creation of Hitler. Its origins can all be found in German traditions. The principle of continuity makes the historical approach a very important one. No social problem is understandable without some acquaintance with its history. There is a lesson also for the future; for the things that are to come will grow out of what we have now.

Invention, then, is a step in evolutionary development. Any inventor who makes a significant improvement does so by virtue of the fact that he is standing on the shoulders of a huge giant, the human race since the beginning. "If I saw farther," said Isaac Newton, " 'twas because I stood on giant shoulders."

THE PRINCIPLE OF CROSS-FERTILIZATION

The process of cross-fertilization is a further development of the idea that inventions evolve out of the known. Since parts of the social heritage, say, *A, B, C, D, E, F,* are not isolated and separate, an element or idea is often taken over from one part, say *E,* to be used in combination with the elements in, say *D,* to produce a new invention in part *D.* In the evolution of weapons of warfare, an idea—gunpowder—from that part of culture called chemistry was taken over into that part of culture known as mechanics, and the cannon for hurling missiles was invented. An idea from chemistry was also taken over to make the match. Fire-making prior to the match was achieved by striking flint and iron and using a splinter about the size of a match stick to take the fire off.[2] Then the splinter was dipped in sulphur to make it light more easily. Eventually, another chemical mixture was put on the tip of the stick that would take fire by rubbing, and the match was achieved. Darwin's theory of biological evolution was the result of a cross-fertilization from Malthus' theory in the field of economics. Malthus' doctrine was that geometric rates of increase of consumers are coupled with only arithmetic rates of

[2] Burns, E. E., *The Story of Great Inventions.* New York: Harper and Brothers, 1910.

increase of the food supply. As a result there is intense suffering and the elimination of the weak. Here is the source of the doctrine of the survival of the fittest, which played so important a part in the theory of evolution. The theory of evolution, then, originated by virtue of the importation of an idea from economics into biology.

Cross-fertilization has long been recognized as a source of new ideas. Unfortunately, students sometimes keep the ideas they learn in sociology classes restricted to that field, and the ideas they learn in biology classes within the confines of that discipline. The departmental divisions in universities and colleges often erect barriers around each discipline which are a hindrance to the free flow of ideas from one subject to another.

DIFFUSION

The new ideas for inventions may come not only from different parts of the same social heritage, but also from different cultures. The transference of culture traits from one area to another or from one part of culture to another part is called diffusion.[3]

In order to get a correct picture of how civilization has come to be what it is, it is important to note that culture is confined to certain areas where groups of people live. Culture grows in small local areas, rather than as one great culture for the earth as a whole. There is a German culture and a French culture. The whole earth may some day become one culture area but that time is far off. The various culture areas are, however, not entirely separate; they are usually more or less in contact with each other. This means that inventions made in one place may be taken elsewhere. At the present time, for example, a large number of the culture areas of the world have the automobile, either by importation or by manufacture within the area. All these cultures did not invent the automobile. It was invented in Germany, and spread from that country to other parts of the world, coming to the United States in 1893.

Few locally invented elements in a culture. In any given area, the number of locally invented elements is only a small fraction

[3] Kroeber, A. L., *Anthropology*, Chap. 8, "Diffusion," pp. 194-215.

of the total culture. This fact is shown in a vivid manner by Linton,[4] who traces the origin of certain culture traits with which an American comes in contact as he starts an ordinary day.

Our solid American citizen awakens in a bed built on a pattern which originated in the Near East but which was modified in Northern Europe before it was transmitted to America. He throws back the covers made from cotton, domesticated in India, or linen, domesticated in the Near East, or wool from sheep, also domesticated in the Near East, or silk, the use of which was discovered in China. All of these materials have been spun and woven by processes invented in the Near East. He slips into his moccasins, invented by the Indians of the Eastern woodlands, and goes to the bathroom, whose fixtures are a mixture of European and American inventions, both of recent date. He takes off his pajamas, a garment invented in India, and washes with soap invented by the ancient Gauls. He then shaves, a masochistic rite which seems to have been derived from either Sumer or ancient Egypt.

Returning to the bedroom, he removes his clothes from a chair of southern European type and proceeds to dress. He puts on garments whose form originally derived from the skin clothing of the nomads of the Asiatic steppes, puts on shoes made from skins tanned by a process invented in ancient Egypt and cut to a pattern derived from the classical civilizations of the Mediterranean, and ties around his neck a strip of bright-colored cloth which is a vestigial survival of the shoulder shawls worn by the seventeenth-century Croatians. Before going out for breakfast he glances through the window, made of glass invented in Egypt, and if it is raining, puts on overshoes made of rubber discovered by the Central American Indians and takes an umbrella, invented in southeastern Asia. Upon his head he puts a hat made of felt, a material invented in the Asiatic steppes.

On his way to breakfast he stops to buy a paper, paying for it with coins, an ancient Lydian invention. At the restaurant a whole new series of borrowed elements confronts him. His plate is made of a form of pottery invented in China. His knife is of steel, an alloy first made in southern India, his fork a medieval Italian invention, and his spoon a derivative of a Roman original. He begins breakfast with an orange, from the eastern Mediterranean, a cantaloupe from Persia, or perhaps a piece of African watermelon. With this he has coffee, an Abyssinian plant, with cream and sugar. Both the domestication of cows and the idea of milking

[4] Linton, R., *The Study of Man.* New York: Appleton-Century-Crofts, Inc., 1936, pp. 326-327.

them originated in the Near East, while sugar was first made in India. After his fruit and first coffee he goes on to waffles, cakes made by a Scandinavian technique from wheat domesticated in Asia Minor. Over these he pours maple syrup, invented by the Indians of the Eastern woodlands. As a side dish he may have the eggs of a species of bird domesticated in Indo-China, or thin strips of the flesh of an animal domesticated in Eastern Asia which have been salted and smoked by a process developed in northern Europe.

When our friend has finished eating, he settles back to smoke, an American Indian habit, consuming a plant domesticated in Brazil in either a pipe, derived from the Indians of Virginia, or a cigarette, derived from Mexico. If he is hardy enough he may even attempt a cigar, transmitted to us from the Antilles by way of Spain. While smoking he reads the news of the day, imprinted in characters invented in Germany. As he absorbs the accounts of foreign troubles he will, if he is a good conservative citizen, thank a Hebrew deity in an Indo-European language that he is 100 per cent American.

Most of the social heritage of colonial America was brought here from England, Spain, and other European countries. Some items of the social heritage, such as the potato, maize, types of cooking, and methods of warfare were contributed by the American Indian, though this fact is not generally known. There have been many additions to the culture since then, some of which were invented here, but most of which were imported from other countries. England and France derived much of their culture from Italy. Italy, in turn, borrowed from the Greeks. It was once thought that Greece created her culture, but now it is known that the Greeks borrowed a great deal from Crete, and that Crete got hers in large part from Egypt. Egypt has been shown to be greatly indebted for her culture to the valley of the Euphrates. And now connections are being made between the Euphrates and India, and between India and China. Clearly there has been a vast amount of borrowing of culture by one region from another.

13. GROUP DIFFERENCES

This is a portion of a chapter on the subject of group differences. The psychologist quoted below gives an excellent introduction to the present selection by saying in an earlier paragraph: "The multiple and complex determination of the individual's behavioral development should in itself make us skeptical about any simple system of characterizing people. Yet it is an all-too-common practice to expect an individual to be dependable, or shiftless, or dull, or excitable, or poor in mechanics, or to ascribe to him dozens of similar characteristics, simply from a knowledge that such a person is a man or a woman, or that he belongs to a particular 'race' or nation." The first half of the selection helps to answer the question, *who* shall be compared? The second half helps to resolve the problem, *how* is the comparison to be made?

MAJOR GROUP DIFFERENCES *

Anne Anastasi

PROBLEMS OF SAMPLING

Sampling Error. In any one investigation, only a sample of the entire population is employed. For example, if the population under consideration is defined as public school children in American cities, data may be gathered on some 5000 or 6000 children in a dozen schools. From these results the investigator generalizes to the entire population. If the sampling was carefully chosen to be representative of the given population, such conclusions will not be far in error. The figures thus obtained, however, will not be identical to those which would have been secured by testing the entire population of American city public school children.

* From *Fields in Psychology*, J. P. Guilford (Editor). New York: D. Van Nostrand Company, Inc., 1950 (2d ed.), Chap. 13, "Major Group Differences," by Anne Anastasi, pp. 375-390. Copyright, D. Van Nostrand Company, Inc. Reprinted by permission of the publisher, editor, and author.

Nor will results from successive samplings of the same population coincide completely. Had a different sampling of 5000 city public school children been employed, slightly different results would have been obtained.

This variation in results from sample to sample within the same population is known as *sampling error.* Statistical measures of reliability furnish a theoretical estimate of the probable limits within which such errors will fall. Reliability means, in this case, the degree of consistency among the results obtained on different samples of the same population. Formulas are available for the computation of the sampling error of any statistical measure. The most common measures of reliability are the "probable error" (PE) and the "standard error" (SE or σ). The total estimated range within which a measure will fall in successive sampling is covered by ± 4 PE, and ± 3 SE.

A hypothetical example will serve to illustrate the application of such measures to group comparisons. Let us suppose that a group of sixth-grade public school boys and girls obtained the following average scores on an intelligence test: Girls, 90; boys, 80; the difference between the two averages being 10 points in favor of the girls. Let us assume further that the PE of this difference is 5. In different samples of sixth-grade public school children we should therefore expect the sex difference to vary from 30 points ($10 + [4 \times 5] = 30$) to -10 points ($10 - [4 \times 5] = -10$). In other words, the relative standing of the male and female groups would be reversed in certain samplings, and the boys' average might be as much as 10 points higher than that of the girls. This is what is meant by an *unreliable difference.* The same conclusion can be reached more directly by dividing the obtained difference by its PE. If the difference is 4 or more times as large as its PE, there will be no reversal of direction and the difference is said to be perfectly reliable. In the present example, it will be noted that the difference is only twice as large as its PE ($10 \div 5 = 2$). This value, called the *critical ratio,* is an index of the degree to which the obtained figures represent a reliable or consistent trend.

The probable error (and the standard error) of an obtained difference depends upon the *size* of the samplings employed as

well as the amount of *variability* within the samplings. It is apparent that the larger the samplings, the more reliably will the results be established. If the samplings were infinitely large, the probable error would be zero, since the entire theoretical population would then have been included. In some of the investigations on group differences, the samples employed have been so small as to yield extremely large probable errors, had the latter been computed. The sex or race differences reported in such studies may have been due entirely to sampling error.

Similarly, wide variability within each group renders the differences between averages less reliable. If all men were of identical height, for example, and all women were likewise equal in height, then sex differences in height could be reliably established by comparing only one representative of each sex. All other samplings would yield the same difference, since variation within each sex would be zero. The greater the variability within either group, the larger will be the probable error of the obtained difference. In the computation of probable errors and standard errors, both the number of cases and the variability of each group are taken into account.

Selective Factors. In any group comparison, selective factors may operate to vitiate the results. Whenever a group is not a random or representative sample of the population from which it is drawn, it is said to be a select group. It is impossible to generalize from the results obtained with such a sampling to the total population. An additional complication arises when two populations are compared, since selection may have operated differently in the two groups. Thus one group may represent a superior sampling of its population, while the other represents a mediocre or inferior sampling of the second population.

Immigrant groups furnish a good example of the differential operation of selective factors. Immigrants coming to the United States from different countries, for example, are usually neither fair samplings of their home populations, nor comparable among themselves. If it could be shown that immigrants from all nations were drawn consistently from, let us say, the lower socio-economic or intellectual levels then such groups would at least be comparable with each other. But it is well known that, through purely

historical reasons, the immigrants coming from certain nations at a given time may represent a relatively inferior sampling of their population, from others a more nearly random or average sampling, and from still others a relatively superior sampling.

It might seem that selective factors would not play such a large part in comparisons between the two sexes. Certain investigations on sex differences have nevertheless proved inconclusive because of the operation of previously unsuspected selective factors. Thus in two investigations on sex differences, the Pressey Group Test of Intelligence was administered to 2544 elementary school children[1] between the ages of 8 and 16 and to 5929 high school seniors[2] ranging in age from 16 to 23. In the elementary school groups, the girls excelled at all ages, although among the 16-year-olds this difference was not reliable. Among the high school seniors, however, the relationship was reversed, the boys surpassing the girls.

This reversal becomes intelligible if we examine the relative number of pupils of each sex in the elementary grades and in the senior year of high school. Throughout the high school period there is a much more rapid elimination of boys than girls. Boys whose academic work is unsatisfactory are more likely to leave school and go to work, whereas girls tend to be kept in school longer. Girls also seem to adjust better to the school routine in general. The less intelligent girls will exert more effort and manage to pass sufficient subjects to stay in school, while boys in the same situation are more likely to rebel against school work. This explanation was borne out by an examination of the scholastic history of those students who had dropped out in the course of their high school work.

Much of the evidence offered in support of the once popular doctrine of sex differences in *variability* is rendered invalid by selective factors. This doctrine proposed that although the average ability of men and women might be equal, the distribution

[1] Pressey, L. C., "Sex Differences Shown by 2544 School Children as a Group Scale of Intelligence, with Special Reference to Variability," *Journal of Applied Psychology*, 1918, Vol. 3, pp. 323-340.

[2] Book, W. F., and Meadows, L. J., "Sex Differences in 5925 High School Seniors in Ten Psychological Tests," *Journal of Applied Psychology*, 1928, Vol. 12, pp. 56-81.

of ability of men covered a wider range than that of women. Similarly, more men than women would be found at the extremes of the distribution, corresponding to feeblemindedness and genius. In support of this contention were cited the admission statistics of institutions for the feebleminded. Surveys conducted in several countries revealed a consistent excess of males among the inmates.

Subsequent investigations[8] revealed, however, that the discrepancy results from social and cultural factors which operate differently in the admission of men and women to institutions. Unless a woman exhibits a pronounced degree of mental defect, she tends to be kept at home, or she may earn her livelihood by turning to such activities as housework, prostitution, or marriage. The boy, on the other hand, is forced into industrial work at a relatively early age, and will soon reveal his mental deficiency in the severe competition which he encounters. Thus, although there is an excess of males in institutions for mental defectives, it seems that there are more feebleminded females outside of institutions. Direct investigation of several thousand cases in New York City showed that the women brought to a psychological clinic for examination were on the average older and more deficient than the men. The difference in IQ was even greater when the cases actually committed were compared.

Overlapping of Distributions. Although one group may excel another in a given trait by a large amount, individuals can be found in the poorer group who will equal or surpass individuals in the better group. Owing to the wide range of individual differences within any one group as contrasted to the relatively small difference between groups, an individual's membership in a given group furnishes little or no information about his standing in any trait or behavioral characteristic. The poorer end of the superior group coincides with the better end of the inferior group, and this overlapping is very large even when the group averages differ markedly.

An example of overlapping will be found in Figure 1. This shows

[8] Hollingworth, L. S., "Differential Action Upon the Sexes of Forces Which Tend to Segregate the Feebleminded," *Journal of Abnormal Psychology*, 1922, Vol. 17, pp. 35-37.

the distribution curves of a group of 189 boys and 206 girls in the third and fourth elementary school grades on a test of arithmetical reasoning. The average score of the boys is 40.39 and that of the girls 35.81. The difference between these averages is nearly 8 times as large as its PE and can therefore be regarded as perfectly

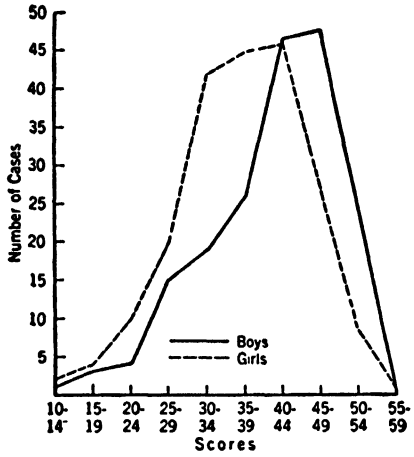


FIGURE 1. DISTRIBUTION OF BOYS AND GIRLS ON A TEST OF ARITHMETICAL REASONING. (Data from Schiller, in "Verbal, Numerical, and Spatial Abilities of Young Children," by permission of *Archives of Psychology,* and adapted from Anastasi, "Differential Psychology," by permission of the Macmillan Co.)

reliable. An examination of the distributions, however, reveals a large amount of overlapping between the two groups. Large proportions of the boys' and girls' scores fall within the same limits. Further evidence of overlapping is to be found in the fact that 38 per cent of the girls obtained scores which were higher than the boys' average, and 24 per cent of the boys scored below the girls' average.

It is therefore apparent that because of overlapping of distributions, the relationships established for the averages of two groups may be entirely reversed when comparisons are made between individuals from the same two groups. This fact was very succinctly put by Samuel Johnson who, when asked which was superior, man or woman, is reported to have replied: "*Which* man, *which* woman?" The individual, and not the group, should be the unit of observation.

Developmental Rate. A further complication in the analysis of group differences arises from a possible difference in developmental rate. In connection with sex differences, for example, it has been clearly established that girls reach maturity earlier than boys. Moreover, at any one age during childhood, girls tend to be farther advanced than boys towards their eventual adult status.[4] A number of writers have proposed that girls might be accelerated in mental as well as physical development. Thus the fact that girls of elementary school age excel on most intelligence tests has frequently been attributed to such a sex difference in developmental rate. If this difference existed, it would be necessary to equate the sexes in regard to developmental stage or physical maturity, rather than chronological age, in order to obtain comparable groups. But such a procedure would introduce an inequality in amount of training and general environmental stimulation. This problem only arises, of course, in the comparison of children, and does not apply to adults. Children, however, have been the most frequent subjects for surveys on group differences, both because of their greater accessibility in large numbers and because they have been exposed to a relatively more homogeneous environment.

It should be noted that mental acceleration of girls has not been directly demonstrated. Its possibility has only been inferred

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[4] For a survey of earlier studies compare *Sex Differences in the Growth of American School Children,* by E. A. Lincoln. Baltimore: Warwick and York, 1927. More recent data can be found in "Physical and Mental Growth of Boys and Girls Ages Six Through Nineteen in Relation to Age of Maximum Growth," by Shuttleworth, F. K., *Monographs of the Society for Research in Child Development,* 1939, Vol. 4, No. 3; and in *Manual of Child Psychology,* by L. Carmichael. New York: John Wiley & Sons, 1946, Chap. 19, "Psychological Sex Differences," by L. M. Terman, and others.

by analogy with physical development. It is doubtful, however, whether physical maturity can have much influence upon intellectual development. The data on the relationship between mental and physical traits are too consistently negative to warrant such an assumption. In emotional and other personality traits it is probable that the onset of puberty and the relative physiological maturity of the individual introduce a disturbing factor into sex comparisons at certain ages. In intellectual development, however, the environmental stimulation to which the individual has been exposed is far more significant than slight differences in physical condition.

In connection with race differences, the suggestion has been made by some writers that the more "primitive" races may mature earlier, mentally as well as physically. Superficially, the comparison of the performance of children at successive ages would seem to support this view. In an investigation on American Negro children, for example, the median Stanford-Binet IQ was found to decline from 100 in the 5-6 year group to 78.4 in the 10-15 year group.[5] According to the theory of the earlier maturing of "primitive" groups, the "intellectual inferiority" of such groups tends to be obscured in early childhood by their more rapid development but becomes apparent as development slows down at the adolescent level. The age decline in IQ, however, admits of other more objective interpretations. The reader may recall in this connection the similar decline which was found in the case of canalboat and gypsy children, as well as children living in isolated rural communities. It should also be noted that at the upper ages the Stanford-Binet becomes increasingly verbal. Performance at the upper age levels would thus be more directly influenced by the intellectual stimulation furnished by the environment. There is some evidence that when tests are employed which are more homogeneous throughout their range, this age decrement is not found.[6]

[5] Arlitt, A. H., "On the Need for Caution in Establishing Race Norms," *Journal of Applied Psychology*, 1921, Vol. 5, pp. 178-193.

[6] Ferguson, G. O., "The Psychology of the Negro," *Archives of Psychology*, 1916, No. 36.

PROBLEMS OF MEASUREMENT

It should be apparent from the preceding section that the choice of subjects for the investigation of group differences presents many difficulties. If we now raise the further question as to *how* these differences are to be measured, we are faced with the task of evaluating current mental tests and other measuring devices. Individuals who differ in their "race" or their sex usually differ in many other respects as well. It is very difficult to *isolate* the factor of race or sex so as to determine its direct influence upon the individual's behavioral development. It becomes necessary, therefore, to try to determine the degree to which these other concomitant variables influence mental-test performance.

General Cultural Background. Such conditions as the customs, traditions, habitual activities, or attitudes among which the individual is reared may affect his mental development—and his mental-test performance—in countless ways. A few examples of their operation will have to suffice. Although reared in the same home, for example, brothers and sisters cannot be assumed to have been exposed to identical psychological environments. Even in the most "enlightened" and "progressive" homes, *sex distinctions* are introduced which cannot fail to affect subsequent development. Boys and girls are usually given different toys and games, and different books to read. Girls are generally considered to be weaker and more frail than boys; they tend to be sheltered more, and are taught to be neater and quieter than their brothers. Even in those few cases in which the parents themselves may not foster these differentiations, the child is sure to come into contact with such attitudes among his playmates or other associates outside the home.

In the field of racial comparisons, the influence of cultural background upon mental-test performance is more clearly apparent. The test often demands specific information which the individual has had little or no opportunity to obtain in his own environment. Thus the use of such objects as bicycles, electric bulbs, postage stamps, and mirrors in picture tests may place individuals in certain cultures at a considerable disadvantage. Certain traditional *attitudes* may also interfere with the subject's

test performance. Thus Porteus[7] reports that he found it difficult to convince Australian aborigines that they were to solve the test problems individually, without assistance from their tribal brothers, because of their custom to settle all important problems in tribal conferences. Klineberg[8] reports that among the Dakota Indians it is considered bad form to answer a question in the presence of someone who does not know the answer, or to give an answer of which one is not absolutely sure.

Another important point to consider in evaluating racial differences in mental-test performance is the significant part played by *speed* in such tests, and the varying emphasis placed upon speed in different cultures. This was vividly demonstrated in an investigation on white, Negro, and Indian boys with the Pintner-Paterson Performance Scale.[9] In accuracy of performance, as measured by the number of errors on each test, the Indians excelled the whites, and the Negroes were either equal to or slightly superior to the whites. All measures of speed, on the other hand, favored the whites. A comparison of groups belonging to the same race but living in a different cultural milieu suggested that these differences in speed were cultural rather than biological. Thus New York City Negroes clearly excelled West Virginia rural Negroes in every comparison. Similarly, the Indians attending a government school conducted by white teachers were consistently faster than those tested on the reservation. The relatively insignificant part which speed plays in the life of the reservation Indian or the rural southern Negro might fully account for these results.

Finally, the relatively intangible but highly effective factor of *social expectancy* should be mentioned. This operates to perpetuate group differences, however they may have been established. What is expected of an individual is often a powerful influence in the determination of what he will do. When such expectation has the force of social tradition behind it and is cor-

[7] Porteus, S. D., *The Psychology of a Primitive People.* New York: Longmans, Green & Company, 1931, p. 308.

[8] Klineberg, O., *Race Differences.* New York: Harper and Brothers, 1935, p. 155.

[9] Klineberg, O., "An Experimental Study of Speed and Other Factors in 'Racial' Differences," *Archives of Psychology,* 1928, No. 93.

roborated at every instant by family attitudes, everyday contacts in work and play, and nearly all other encounters with one's fellow-beings, it is difficult not to succumb to it. As a result, the individual himself becomes convinced that he is "superior" or "inferior," or that he possesses this or that talent, interest, or attitude, according to the dictates of his particular culture.

Education. That the *formal education* of different racial and national groups differs in amount and in kind is too obvious to require much elaboration. Adult immigrants in the United States, such as the foreign-born groups of the army draft tested during the first World War, have usually received much less formal schooling than the average native-born American with whom they are compared. American Indians and American Negroes, although born in this country, receive as a group an education which is far inferior to that of the white population. Apart from poorer equipment, fewer and less adequately trained teachers, and more inaccessible schools, school attendance is much lower among such groups. This results partly from poorer roads and less adequate means of transportation, partly from the demands of a rural community where the official school term is sometimes only six months in duration, and partly from the attitude of parents in a group which is not in complete sympathy with American standards.

Educational opportunities have likewise been dissimilar for the two sexes,[10] although at present the environments of men and women are probably more nearly equated in this respect than in any other. Although America was in advance of most other countries in the education of women, until nearly the middle of the nineteenth century there was no institution of collegiate rank in this country which admitted women. Professional and post-graduate training was not available until a much later date. Even in the elementary and secondary schools, the traditional curriculum for girls was different from that for boys, including much less science and more literature, art, and other "genteel" subjects.

The more general opportunities for intellectual development furnished by the home and general cultural level in which the in-

[10] Goodsell, W., *The Education of Women.* New York: The Macmillan Company, 1923.

dividual is reared also exert a marked influence upon intelligence-test performance. It is apparent that the *socio-economic level* of the homes of such groups as immigrants, Negroes, or Indians is far below the general American average. In one investigation on Negro children and white children of American and Italian parentage, all within a single school district, it was found that over 90 per cent of the Negroes and Italians fell into the "inferior" and "very inferior" categories with reference to father's occupation, in contrast to only 22 per cent of the white children of American parentage.[11] Similarly, in a study on Indian children, the average socio-economic rating of the homes proved to be 13 points, as compared to the white norm of 56 points.[12] In another series of investigations, a close correspondence was found between the social status of various Indian groups, as evaluated in terms of white standards, and the average intelligence-test scores obtained by children from these groups.[13]

Language Handicap. The effect of language handicap upon mental-test performance has proved to be most serious when this handicap is present in a *mild degree.* Individuals with very pronounced linguistic difficulty are usually tested with a non-language or performance scale. If the individual has a moderate understanding of English, however, it is frequently deemed unnecessary to give him a non-verbal test. Although such an individual may know the language sufficiently well to make himself understood and to follow directions in a test, he may lack the facility in the use of English or the range of vocabulary required to compete fairly on a verbal test. This situation is often met in immigrants who have lived in America for many years, or in the children of immigrants. The latter are frequently *bilingual,* speaking their own language at home and English at school.

That such relatively mild language handicaps may have a pronounced effect upon intelligence-test scores has been repeatedly

[11] Arlitt, A. H., "On the Need for Caution in Establishing Race Norms," *Journal of Applied Psychology,* 1921, Vol. 5, pp. 178-193.

[12] Jamieson, E., and Sandiford, P., "The Mental Capacity of Southern Ontario Indians," *Journal of Educational Psychology,* 1928, Vol. 19, pp. 536-551.

[13] Garth, T. R., "A Comparison of the Intelligence of Mexican and Mixed and Full Blood Indian Children," *Psychological Review,* 1923, Vol. 30, pp. 388-401.

demonstrated. In one investigation[14] on children of immigrant groups in America, it was found that among those who spoke a foreign language at home, 75 per cent obtained higher mental ages on performance tests than on the Stanford-Binet. In the English-speaking group, on the other hand, only 52 per cent scored higher on the performance tests, that is, this group as a whole did no better on one test than on the other. In another similar investigation,[15] the intelligence-test scores of 165 third- and fourth-grade school children of foreign parentage were compared with those of 121 children of American parentage. On the Pintner Non-Language Scale, 50 per cent of the "foreign" group reached or exceeded the median of the "American" group; on the National Intelligence Test, which is highly verbal, however, this percentage was only 37. Similar results were obtained in a group of 212 nursery school children, the monolinguals excelling the bilinguals markedly in Stanford-Binet scores, but exhibiting no significant superiority in a performance test.[16]

The data on language handicap are not limited to immigrant groups from European countries. In investigations on American Indians, the influence of language deficiency upon intelligence-test performance has been vividly demonstrated. In an investigation[17] on 717 pupils attending Indian schools in Ontario, Canada, the children were divided into the monolinguals who spoke only English, and the bilinguals who spoke an Indian language at home either all or part of the time. On the Pintner-Paterson Performance Scale, the bilingual children obtained a higher median score than the monolinguals, while the reverse was true on the National Intelligence Test, the Pintner Non-Language, and

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[14] Pintner, R., and Keller, R., "Intelligence Tests for Foreign Children," *Journal of Educational Psychology*, 1922, Vol. 13, pp. 214-222.

[15] Pintner, R., "Comparison of American and Foreign Children with Intelligence Tests," *Journal of Educational Psychology*, 1923, Vol. 14, pp. 292-295.

[16] Darcy, N. T., "The Effect of Bilingualism Upon the Measurement of the Intelligence of Children of Preschool Age," *Journal of Educational Psychology*, 1946, Vol. 37, pp. 21-24. For a survey of much of the literature on the effect of bilingualism on test scores, compare Arsenian, S., "Bilingualism and Mental Development," *Teachers College, Columbia University Contributions to Education*, No. 712.

[17] Jamieson, E., and Sandiford, P., "The Mental Capacity of Southern Ontario Indians," *Journal of Educational Psychology*, 1928, Vol. 19, pp. 536-551.

the Pintner-Cunningham. In the case of the Pintner Non-Language Test, it is possible that the use of paper-and-pencil materials gave a disadvantage to the children from the less highly assimilated homes. Those children who were relatively unfamiliar with such materials would also tend to come more often from the Indian-speaking homes.

Similar results were obtained in a study of 570 American-born Japanese children between the ages of 10 and 15.[18] On the Army Beta, there was no significant difference between Japanese and white children at ages 10 and 11, and a difference in favor of the Japanese group beyond this. On the Stanford-Binet, on the other hand, the median IQ of the Japanese children was 89.5, as compared with 99.5 for white children of the same districts. Moreover, a correlation of .87 was found between the degree of Japanese inferiority on each of the tests in the Stanford-Binet scale and the "verbality" rating of the test based upon the consensus judgment of seven psychologists.

The Criterion of "Intellectual Superiority." In all group comparisons there is a tendency to go beyond the observed differences in behavior and to evaluate the *relative status* of each group in terms of some presumably universal criterion. Linear comparisons are made in terms of better or worse. Thus we frequently find national or racial groups arranged in a rank-order for "intelligence." Such a point of view implies either that one group is consistently poorer than another in all mental traits, or that certain behavioral processes are universally more significant, more valuable, or even more "mental" than others.

In regard to the first of these assumptions, it can easily be shown that groups vary in the relative inferiority or superiority which they manifest in different traits. Comparison of scores on different types of intelligence scales, or on different tests within a single scale, has repeatedly demonstrated the specificity of such group differences. It has frequently been argued, however, that racial or national groups can be arranged in a consistent hierarchy if we consider only the "higher mental processes." Tests of abstract abilities, for example, are considered more diagnostic

[18] Darsie, M. L., "Mental Capacity of American-Born Japanese Children," *Comparative Psychology Monographs*, 1926, Vol. 15, No. 3, pp. 1-89.

of "intelligence" than those dealing with the manipulation of concrete objects or with the perception of spatial relationships. The aptitude for dealing with symbolical materials, especially of a verbal or numerical nature, is regarded as the acme of intellectual attainment. The "primitive" man's skill in responding to very slight sensory cues, his talents in the construction of objects, or the powers of sustained attention and muscular control which he may display in his hunting behavior, are regarded as interesting anthropological curios which have, however, little or no intellectual worth. As a result, such activities have not usually been incorporated in intelligence scales, but have been relegated to a relatively minor position in mental testing.

Upon closer examination, it will become apparent that this conception of intelligence is itself culturally conditioned. By "higher mental processes" is usually meant those aspects or segments of behavior which are at a premium in our society. Intelligence tests would be very different if they had been constructed among American Indians or Australian aborigines rather than in American cities. There are a few instances on record of the application of a test constructed from the point of view of some other culture. Porteus,[19] for example, having been impressed with the remarkable tracking skill of the Australian aborigines, constructed a test with photographs of footprints, the task being to match the two prints made by the same foot. On this test, the Australians did practically as well as a group of 120 white high school students in Hawaii who were tested for comparison, despite the possible advantage given the latter by the use of paper-and-pencil materials.

The criterion employed in validating intelligence tests has nearly always been success in our social system. Scores on the test are correlated with school achievement or perhaps with some more general measure of success in our society. If such correlations are high, it is concluded that the test is a good measure of "intelligence." The age criterion is based upon the same principle. If scores on a given test show a progressive increase with age, it may merely mean that the test is measuring those traits

[19] Porteus, S. D., *The Psychology of a Primitive People*. New York: Longmans, Green & Company, 1931, pp. 399-401.

which our culture fosters in the individual's development. The older the subject, the more opportunity he will have had, in general, to develop such aptitudes.

Thus it would seem that intelligence tests measure only the ability to succeed in our particular culture. Each culture, partly through the physical conditions of its environment and partly through social tradition, "selects" certain activities as the most significant. These it encourages and stimulates; others it neglects or definitely suppresses. The relative standing of different cultural groups in "intelligence" is a function of the traits included under the concept of intelligence or, to state the same point differently, it is a function of the particular culture in which the test was constructed.

PART III

Some Individual Factors of Social Adjustment

14. MOTIVATION

The topic of motivation is so complex that no one selection could cover its many ramifications. However, the present selection gives a simplified description of the ways in which both cats and men adjust themselves to certain circumstances. Even though the theory of learning suggested may not be the most conclusive one, the discussion provides a good introduction to the problem. The error of making up *lists* of motives is also avoided.

MOTIVES *

Edwin R. Guthrie

Men learn to be plumbers, drug addicts, psychologists, golfers, pinochle players, diet cranks, theosophists, fly fishermen, head-hunters, yachtsmen, camera enthusiasts. The variety of things that men learn to do appears a hopeless confusion. But there have always been efforts to classify the behavior that men are prone to learn. Such classifications have been in terms of urges or motives, passions, desires, interests.

The problem of motives arises when it is necessary to explain how behavior becomes directed at certain ends, and this is a problem of learning, not merely a question of placing the end attained under one of the items in our list. How motives can be attacked from this point of view may be illustrated by some experiments which G. P. Horton and I have recently been conducting in our laboratory.

For psychologists whose first interest is human behavior, animal experiments require some justification. We are well satis-

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* From *The Psychology of Human Conflict: The Clash of Motives Within the Individual,* by Edwin R. Guthrie. New York: Harper & Brothers, 1938, Chap. 8, "Motives," pp. 89-104. Copyright, Harper & Brothers. Reprinted by permission of the publisher and author.

fied that they have this justification in that they give us an added understanding of certain elementary learning processes in human beings. These processes are much more obvious in the behavior of our cats because that behavior could be controlled in ways to which human subjects would object. We could be sure of the regular attendance of the cats on the experiment and of the fact that they were fed and ate a fairly standard ration, that they were not confused by questions about the nature of the experiment or by impulses to demonstrate to us that they were unusually bright, or that their actions were not complicated by plans for what they were to do when the session was finished.

The experiment itself was a repetition of some work done many years ago by Thorndike. We changed his apparatus and method in a number of details. Our chief improvement on Thorndike's experiment was in the addition of a camera by which we could make a permanent record of certain critical movements of the cat.

Our apparatus was essentially a large box with a glass front through which the cat could be seen. In the rear was a small opening with a sliding door through which the cat was admitted to the box. In the front glass was another door by which the cat could escape if it managed to push in any direction an eight-inch pole which stood upright on the floor of the box. The cat could tilt this pole by a variety of means, by clawing, by biting, by pushing, by brushing with its tail, by backing into the post. Whenever the pole was tilted the front door opened with a click and a picture was taken of the cat. When the door opened the cat could leave the box and would find a few grams of fish in a small pan.

The cat was usually placed in the box a few hours before its regular once-a-day feeding, so that it was moderately hungry. When a fairly hungry cat is placed in such a box it may do a variety of things. It may walk forward to the glass front, paw and claw at that, sniff at outstanding objects, wander about. Being shut in the box restricts the cat's movements and makes it obviously restless. It is obviously "interested" in escape from the box in the sense that most of its responses are the sort of response that might get it past an obstacle or out of the enclosed space. It will bite and claw at the bottom of the wall, press its nose against

the glass, or on rare occasions jump for the wire netting over the top of the box.

Ultimately most of the cats in some manner or other tilted the post and escaped. The cat was then replaced in the starting box, usually as soon as it had eaten a bite of fish or refused the fish. The process was then repeated until ten or twenty escapes had been made. Some twenty-five cats have now escaped from ten to eighty times each and have been photographed just as the successful movement was made and the door started to open.

The most conspicuous feature of the resulting series of photographs and of the hours of watching was that no matter what the cat's first accidental method had been, this same action tended to remain substantially the method used from that time on for that particular cat. There were many exceptions, and some cats had in the course of twenty trials used five or six different movements which operated the release. But most of these movements would be on some later occasion duplicated in remarkable detail. There was one cat which, after being shut in the box for a considerable period, took the pole in its teeth. The door opened. Thereafter in some thirty-eight trials this cat approached the pole from the same side and took it at the same point in its teeth. One cat, after being a long period in the box and growing very active and restless, backed into the pole. On the next occasion, when it had wandered to the same position from which it had backed, it backed again. Unfortunately its stern this time pointed an inch too far to one side of the pole and the backing movement did not operate the release. The cat stopped, started toward the door (the same series of movements as on the last occasion), but the door did not open. It again wandered around the cage and again, when it was facing the same point on the door, it backed. This backing continued; it was occasionally successful. But there were times when the animal would back thus for as many as forty times without escaping.

On one trial in the box this cat looked up and jumped to the top. This was repeated when the cat next found itself in the same position as that from which it last jumped. On the fifth jump it fell on the post and the door opened. On its next trial it at first

backed numerous times unsuccessfully and then jumped, fell on the post, and the door opened.

One cat regularly escaped by treading on the base of the post with a hind foot; one regularly brushed the post with the base of its tail while it was turning in the box; one regularly lay down and rolled on the post; one advanced to the door, swung so that its rear was just before the post and then pushed back; one either pushed with its "forehead" or rubbed its neck on the post; one rubbed its flank. No two cats used the same means of escape. And most cats used not over two or three different movements in escape. The cat which swung and hunched the post with its stern was put into the box after several months without any experience of the box. There was no delay and within some five seconds it was leaving the box by its stereotyped method.

There is obviously a close analogy with human behavior in this conduct, because human problem solution also consists in doing one thing or another, whatever past associations would indicate, and then, when some action solves the problem, tending strongly to repeat that action when the problem again arises. We form habit solutions for our recurring difficulties in this fashion. One child has found that persistent teasing or crying will get him what he wants; another learns to manage his parents by smiling and ingratiating behavior; another stages a temper tantrum. And it is very often our first solution that fixes our habit.

To explain this requires that we first understand what a problem is. What makes the puzzle box or an unyielding parent a problem? The answer to this is that *problems are persistent stimulus situations of such a nature that they keep the animal or the person disturbed and excited until some act is hit upon which removes the "maintaining stimuli" and allows the excitement to subside.*

Such persistent and disturbing stimuli are sometimes called "drives." In a hungry animal the recurring spasms of the stomach serve to make the animal disturbed and to produce excitement. In a state of excitement stimuli which would not otherwise be responded to can get action. If a cat that has just nursed its kittens is then separated from them, the kittens, if they are not cold, will be quiet for some time. Eventually hunger begins and their

stomachs are the source of volleys of impulses into their central nervous systems which produce excitement. The kittens become active and begin to crawl about. They will keep mewing and traveling indefinitely or until exhausted.

The same behavior could be produced by some artificial and external stimulus. A paper bag fastened to the cat's foot with a rubber band will similarly activate the cat, and it will become disturbed and excited and this state will continue until some one of its movements eventually removes the bag.

We are driven to action by disturbing stimuli. In human beings the number of ways in which we can be disturbed has been enormously increased by training, and we react to stimuli which would not have disturbed children. If we are in the habit of angry resentment of the noise of the airplanes from the nearby field or of late voices in the neighboring apartment, these noises will disturb us until we check them or we leave our quarters, but they may have no such effect on others. Recently a teacher in the local university went out on a boat trip with several companions. During the night he tied an empty coffee can to a string and hung it overboard where it would strike the side of the boat when the boat rocked. The anchorage was calm but passing steamers would give the boat an occasional roll and the can would strike against the side. At each series of thumps the boat owner leaped from his bunk and searched the boat, but the noise had stopped before he reached the deck. The guests were not disturbed because none of them were in the habit of investigating noises of that sort.

Some annoyances like pin pricks, cold, hunger, thirst, we are born to; some we acquire in the course of training. Many populations are little stirred by the presence of vermin that would keep a middle-class American household in a state of confusion until they were exterminated. The entomology department of a state university recently had an emergency call from a woman who had given up her house and moved to new quarters three times because of a small beetle. It inhabits all timber houses in that region of the United States, but not one person in many thousands is aware of its existence. Only by the use of a reading glass was the woman able to find the beetles about the baseboards of her home, but her life was made intolerable. As soon as her furniture had

been arranged in a new house she took her glass and carefully explored the baseboards. When she had finally discovered beetles the house became unlivable.

We may thus even learn to go out of our way to find annoyances. We extend the range of instinctive biological disturbers to include a multitude of situations which, because of habits we have formed, are able to keep us wrought up until we are rid of them or, by fortunate relearning, come to disregard them.

Annoyers may compete with each other. Jail food in many of our cities is furnished on contract and is essentially garbage, and the sight of it evokes extreme distaste. But four days of withholding, and the most squeamish prisoner becomes reconciled and eats ravenously. This method would be perfectly effective for the treatment of those minor food dislikes with which so many persons are afflicted. Here the hunger drive becomes so insistent that it overcomes years of habit. The sheriff's unfortunate boarders are like the cat in the puzzle box. Their restlessness under hunger eventually alters their habits.

The tendency to establish new habits when a "drive" or persistent stimulus continues unabated has its prime reason in the fact that when we are excited we are active, and when we are active we make rapid changes in the stimuli which affect us. Movements change not only the stimuli from muscles and joints, but also the stimuli to our eyes, ears and nose. Excitement increases the chance of new stimulation and *new response.* It results in variety as well as increase of action.

Among the new actions produced by a state of restlessness, a hunger state or a state of pain, one final series of acts is likely to do away with the disturber, the maintaining stimuli, the hunger pangs, the sliver in the finger, the beetle in the baseboard.

And here is a point very apt to be overlooked. The next time that the disturbers are present they will tend to call out, by virtue of their last association, the act that removed them. Other acts associated with them have been dissociated or unconditioned each by the next act. But after successful removal of the disturber, *it is no longer there to be associated with a new act.* The drive remains faithful to the act that removed it because that was its

last association. After that no new associations could be established because the drive is gone.

If we apply this to the cat in the puzzle box, we find some order and reasonableness in the events there. When the cat pushes the post and the door opens, the sight of the open door prompts the cat to leave. But the last act before leaving was to operate the pole release and this act remains an established association with whatever stimulus pattern was acting when the pole was touched.

Replaced in the box, the cat does not walk immediately to the pole and tilt it. It must wait until in its wanderings in the box it is facing the same view as when it escaped before. The last association with that view was the successful movement.

The reader who is interested not at all in cats may be by this time very impatient. Talk of cats may have annoyed him to the point of laying down the book, or it may have failed to compete with better occupations. But this discussion was not wasted even if cats are of no interest, because the way in which these cats escaped from the box, their fixation of one of their first more or less "accidental" methods, is duplicated in human behavior.

When a man is in a state of continued anxiety, when some inner conflict keeps him active and discontented and when under these circumstances he has, with the pressure of companions, taken in a sufficient amount of alcohol to relax his tensions and bring him peace, he is in a fair way to fix this as his mode of escape from worry just as the cat has fixed whatever act it was that let it out of the box. The reason that drink tends under these circumstances to become a habit is that it brings relief, forgetfulness. And this makes so radical a change in his stimulus situation that no forgetting can occur. The next time he is in a state of jitters, the obvious association will be alcohol. No new associations are present because the jitters have not been present and *without being present cannot be associated with any new response.*

To the person who thinks in terms of pleasure and pain the habit of getting drunk remains a perpetual mystery. Why shouldn't the next morning's nausea teach him a lesson? The answer is that the next morning is so different from the state

of jitters in which he began to drink that there is no strong association. To "teach him a lesson" would require that the association between jitters and drinking be replaced by associating jitters with some other response. This can not be done the next morning.

Morphine acts in much the same way. No matter what the drive or annoyance, no matter what the persistent source of excitement, whether pain or a bad conscience or a conflict of interests, morphine acts as a consummation. It relieves, not by removing the persistent stimuli, but by acting directly on the response mechanism. With restlessness gone, the morphine-taker is in the same state as an animal that has found food or any other consummation of a drive. The morphine relaxes, and the next time the state of excitement recurs, the obvious association is morphine. This was the last association with the excited state. But our interest in drug addiction must be postponed. Here it is serving only as an illustration of how habit tends to be adjusted so as to remove disturbances and annoyances.

Unfortunately the case of our cats offers no simple picture of drive. Hunger was not necessary to the behavior, and cats that had had their fill of sardines continued to escape from the box with whatever particular tricks they had used earlier in the series. All we can say is that on being placed in the strange box they were made restless until they had escaped to the familiar room where their whole manner changed. Mewing ceased. They moved about to one object after another, but with dignity and ease. There was none of the occasional vigorous clawing seen while they were confined.

In much behavior the disturbing stimuli are simple and clear. This is true of thirst, which depends on dryness in the mouth and throat; of hunger, which depends on stomach spasms. It is true of handcuffs or a jail cell where a man's freedom of movement is hampered and excitement follows, or, if all action is blocked, depression and gloom. Part of the restlessness of sex is evidently local tensions in sex organs which have the same disturbing effect that hunger has.

About hunger, sex, and other innate forms of drive whose

effectiveness is originally determined by the original structure of the animal there may be organized many associated disturbers. When an animal made restless by hunger has hit upon food and eaten, the stimuli associated with eating can to some extent substitute for physiological hunger. If we have been in the habit of throwing bits of food to a hungry dog, we can induce him to go on eating long after hunger is assuaged. This secondary drive dependent on association is called appetite by some writers and distinguished from real hunger. Woodworth first made quite clear that any established habit may operate to guide later learning because it acts as a drive.

The interference with any action system under way may produce excitement. We tend to learn some new adjustment which will preserve the habit as it had been. Just as a hungry animal will associate with hunger the movement series that lead to its relief, so a person whose routine is threatened becomes restless, varies his behavior; and if some action permits him to continue his first habit, that action tends to become a part of the habit.

The father of the family who returns from work to sit in a particular chair with the evening paper is disturbed if the chair is occupied. If in his new agitation he succeeds in freeing the chair and taking it himself, his agitation disappears. Not only the father but the whole family finally adjust to his habit.

I have called on a household where the family dog behaved strangely when I had sat down. He paced about the room, returned to me time and time again. When it was explained that I was in the dog's chair and I rose, somewhat hairy from it, the dog promptly jumped up and settled down.

Let us try to put in very general and abstract terms the direction of learning and habit adjustment. The events are somewhat as follows:

1. Intense or prolonged stimuli disturb the organism and result in excitement and heightened activity.

2. The animal responds to these and other stimuli encountered with whatever responses have been previously learned.

3. Every series of movements tends to be fixed as a habit and to be repeated if once started.

4. Excitement brings increased activity and this brings stimuli in new orders. Responses tend to become more varied.

5. Each response as it occurs is associated with the drive but loses this association to the next response.

6. Eventually a response (consummatory response) removes the drive. For this in turn the drive becomes an associative cue.

Learning has now been accomplished. When next in this trouble the animal will repeat the final act. It should be noticed that the final act may be a series that requires some time to run through, provided only that it has been integrated as a serial response.

15. ATTITUDES

In a sense, all problems in social psychology involve an understanding of *attitudes.* It is thus of the utmost importance that an adequate definition be set forth, and also that some criteria be set up for the "singling out" of attitudes. Both of these objectives are accomplished in the following passage.

THE PSYCHOLOGY OF "ATTITUDES" *

Muzafer Sherif
and
Hadley Cantril

A CHARACTERIZATION OF ATTITUDES

Attitudes are among those components of the psychological make-up of the individual which determine that he shall react not in a passive or neutral way, but in a selective and characteristic way especially in relation to certain specific stimulus situations. Attitudes are not, of course, the only psychological components or states that determine that an individual will react to the environment in a selective or characteristic way. When the individual is hungry, thirsty, or sexually aroused or in some other emotional state, or has been recently stimulated by a functional change in the receptor organ or in the organism at large, he reacts in selective or characteristic ways to the environment. Attitudes, then, are *among* the various psychological factors which determine the individual's selective reaction to his environment. In our opinion, Woodworth has

* From "The Psychology of 'Attitudes,' " by Muzafer Sherif and Hadley Cantril, *Psychological Review,* 1945, Vol. 52, pp. 300-304. Reprinted by permission of the publisher and authors.

rendered psychology a great service by accentuating the fact of the selective reaction of the organism at the very beginning of the fourth edition of his general *Psychology.*

In all the representative definitions or characterizations of attitudes, one feature is common to them all: that an attitude, whatever else it may be, denotes a functional state of readiness which determines the organism to react in a characteristic way to certain stimuli or stimulus situations. Allport gives his own definition in which this functional state of readiness is essential. "An attitude is a mental and neural state of readiness, organized through experience, exerting a directive and dynamic influence upon the individual's response to all objects and situations with which it is related." [1]

CRITERIA OF ATTITUDES

Whatever other features attitudes may have (and the features of attitudes do vary according to the degree of complexity), it is certain that all attitudes have a state of readiness in common. However, every state of readiness of the organism is not an attitude. There are numerous states of readiness which cannot be called attitudes. For example, a child of two or three is hardly ever neutral or passive to his environment. He is apt to be extremely partial one way or another to the things or persons surrounding him. He is constantly after all sorts of satisfaction. All these momentary tendencies imply states of readiness. But in spite of all this, we can hardly say that a child of three is full of attitudes. In fact he has very few (if any) established or stable attitudes. He may have developed some attitudes toward certain persons like his mother or certain objects such as types of food. But a child at this age will even react in a very negative way to his mother if she proves to be an obstacle in his effort to gain some satisfaction at the moment. We need not elaborate here other cases of readiness which cannot properly be labelled as attitudes.

We must conclude therefore that cases of readiness are not exhausted by all cases of attitudes. The state of readiness of the organism is a more general term. Attitudes constitute specific

[1] Allport, G. W., "Attitudes," Chapter 17 in *A Handbook of Social Psychology* (Edited by C. Murchison). Worcester: Clark University Press, 1935.

cases of readiness. Therefore, we must have some concrete criteria which single out cases of readiness as attitudes. It seems to us that the following five criteria are found in cases of readiness which are labelled as attitudes.

1. *Attitudes always imply a subject-object relationship.* Attitudes are always related to definite stimuli or stimulus situations. These may be *objects* such as home, automobile, souvenir, some particular eating place; *persons* such as one's own body, mother, father, brother, some friend, rival, teacher, sweetheart, wife; or *groups* of people such as classmates, playmates, Negroes, the community; *institutions* such as the school, college, church, club; or socially established and standardized *concepts, values,* or *norms* such as the flag, the Constitution, democracy. These subject-object relationships are not innate, are not biologically given. The items or objects toward which the subject-object relationship is developed are always first on the stimulus side for the individual. Only after contact with these outside stimuli, does any relationship develop between them and the individual.

2. This means that *attitudes are formed* and formed in relation to objects, persons, and values which may or may not have motivational appeal at first. Almost any food may satisfy hunger, but we may develop a special liking for a special food, even for a special restaurant, and even a special table in that restaurant. When these particular likes or dislikes are more or less fixated, we have formed attitudes in relation to these particular objects. Almost any average member of the opposite sex will satisfy sexual need, but when it is fixated, with all its affective overtones, it becomes an attitude—an attitude toward a particular person. George Bernard Shaw has aptly defined a lover as a man who exaggerates the difference between one woman and another.

Since attitudes are not innate states of readiness, since they are formed in relation to particular objects, persons, institutions, and values or norms, the individual has first to come into contact with them. And coming into contact is a perceptual situation. This means that the primary stage in the formation of attitudes is a perceptual stage. The presence of a perceptual stage is of the utmost psychological importance.

The perceptual stage in the formation of attitudes is especially important in cases of attitudes which do not have a motivational basis.[2] As the accumulating investigations in the field of attitudes show, many social attitudes are formed through verbal judgments of adults. Indeed the most directive and important social attitudes which determine status, social distance, and the like seem to be formed through verbalized short-cut dictums or value judgments and through situations which outwardly do not have any *momentary* motivational appearance.

3. *Attitudes have affective properties of varying degrees.* Established attitudes are charged with affective or value properties in varying degrees. The affective property of attitudes may be due to motivational (instinctual) origins such as hunger and sex (as exemplified in cases of attitudes toward a certain food, a certain restaurant, a sweetheart or wife) or may be due to non-motivational sources (non-instinctual).

The affective property of attitudes with motivational origins is self-explanatory. The affective property of attitudes with non-motivational sources is due to the fact that these attitudes are formed in relation to social values or norms which in themselves are standardized affective fixations. They are usually verbalized, short-cut value judgments such as "the home is a sacred institution." Value judgments are always given in adjectival form. And all judgments given in terms of adjectives certainly have affective properties. The social values presented in short-cut dictums, or in other ways accompanied by praise or blame, naturally are affectively charged. The individual is forced to respect and uphold the values of the family, school, church, or other institutions he is a member or would-be member of. If he does not respect and glory in his flag, he is compelled to. The very fact of membership and participation in group activity or ceremony makes certain standardized values or practices sacred, justifiable, right, honorable, or dutiful in the individual's eyes. Consequently, the attitudes an individual forms in relation to such activities or practices become affectively charged.

4. *Attitudes are more or less enduring states of readiness.*

[2] We are using the term 'motivation' here to denote only drives, needs, or instincts, which have a definite origin in the organism of the individual.

There are states of readiness which are more or less momentary, depending on the state of the organism and the situation at the time. For example, we may be very hungry and snatch a loaf of bread. After eating enough and becoming satisfied the loaf may then be pushed aside. At the time of sexual tension, a person toward whom there is no established attitude but who can satisfy the sexual need may be passionately seized, but after the need is satisfied so the tension is resolved, one may never look at the person again. In these cases the state of readiness dissolves as the satiation point is reached, at least for the time being. But not so with attitudes. They are more or less enduring states of readiness. Thus a wounded soldier tries to show his respect to his superior officer who has really shared the hardships with him. A very much preferred food may be the subject of praise after the point of satiation has been reached. A sweetheart still has the sentimental halo in the eyes of her lover even after sexual satisfaction. A dear friend is still liked even during moments of minor friction. Some people in India actually starve to death rather than eat meat which is 'forbidden' by the very rigid norms established and accepted by Hindus. These examples are sufficient to illustrate the fact that attitudes, once formed, are more or less enduring states of readiness, quite independent, within limits, of the momentary states of the organism.

We should be very clear on one point, however, so as to avoid misunderstanding. We have said that attitudes are more or less enduring states of readiness to stimuli, objects, persons, groups, values or norms, in relation to which they are formed and which determine the individual to react in a characteristic way in relation to them. But attitudes are not absolute, fixed states of readiness. Since they are formed as a consequence of contact with objects, values or norms to which they are related, they may change, disintegrate. For example, good friends may become deadly enemies, a religious person may become an atheist, a conservative may become radical as a result of contact with new facts and events.

5. *Attitudes range in the number and variety of stimuli to which they are referred.* Since attitudes develop as a consequence of experience and since attitudes involve a cognitive com-

ponent, the extent or range of stimuli to which an individual will relate an attitude will vary according to the nature of the source of the attitude and according to the relationship the individual makes between an attitude and the stimulus situations he confronts. Although certain attitudes—especially some of those created in laboratory situations or those of children—may only be evoked by the situation under which they originally developed, the more usual process is that an attitude, once established, will be related by the individual to a variety of objects or situations that have not necessarily been active in its original establishment.

The wide range exhibited by some attitudes is possible because of the fact that the stimulus situation toward which the attitude has developed is itself extensive, that is to say, possible of representation or expression in many different specific contexts. When we noted as our first characteristic of attitude that it always implied a subject-object relationship, we pointed out that we could label institutions, concepts, social values, or norms as 'objects' in this sense. Social attitudes toward such stimulus situations are, we have said, often derived from the verbal judgments of others. For example, once an individual has accepted the value-judgment of his group that 'Negroes are inferior' and should occupy a lower status in society, he can and does easily relate his acquired attitude to innumerable specific situations.

This study demonstrates the *practical use* of attidude measurement. The answers given by samples of American and German youth, at the end of World War II, revealed differences that were for the most part consistent with other known information about American and German behavior during the war. The recognition of differences in values of this sort were important in educational programs in post-war Germany. For a precise explanation of attitudes, see Selection 15, *Attitudes,* pages 133-138.

A COMPARISON OF SOCIAL ATTITUDES AMONG AMERICAN AND GERMAN YOUTH *

Donald V. McGranahan

The psychological study of nations is handicapped by the lack of any systematic frame of reference. To determine the extent to which an individual is neurotic or submissive or aggressive, we can compare his behavior with the norm of his group, by means of standardized tests and observational methods, and note the degree of deviation. There are as yet, however, no international norms in psychology by which to judge the attitudes and traits of character of the people of an entire nation. Nor are there good prospects for such norms in the near future. Under these circumstances, comparable data from at least one's own country can provide a valuable point of reference. Without some empirical guide of this type, the psychologist who studies foreign character is apt to fall easy victim to the

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* From "A Comparison of Social Attitudes Among American and German Youth," by Donald V. McGranahan, *The Journal of Abnormal and Social Psychology,* 1946, Vol. 41, pp. 245-256. Reprinted by permission of the publisher and author.

emotional forces that pervade this field, his interpretations of his research data serving only to confirm his prejudices and preconceived ideas.

The following study is to be considered a limited experiment in this field of comparative national psychology. It represents an attempt to obtain comparable data on certain broad moral and social aspects of personality among German and American youth, without dwelling on the more obvious political differences.

METHODS AND PROCEDURES

The data were obtained through anonymous questionnaires, a procedure that has been found useful in getting German youth to overcome their anxiety about expressing personal opinions. Even so, it must be realized that certain of the differences found would probably be greater if the German tests were not given under the circumstances of U.S. occupation, since German youth have a strong propensity to conform to what they consider to be the official creed of their new rulers. In the case of all German questions and nearly all American questions used, the form was headed by the statement: "We are interested to learn what young people your age are thinking. No one of you will be asked for your name. You have an opportunity to express your opinion freely and without restraint." The only background information requested was age, sex, religion, and father's occupation. Brief instructions were given on how to fill out the form.

In a number of questions, a conflict of values was set up. We can assume that both American and German youth will approve of patriotism, obedience, justice to individuals, and the like. It is in the relative status of such values that the chief differences presumably lie.

In the United States, the questionnaire was given in November, 1945, to 1600 high-school students between the ages of 14 and 18 in the following places: Malden, Mass.; Lowell, Mass.; Concord, Mass.; Brooklyn, N. Y.; Toledo, Ohio; and Oak Park, a suburb of Chicago. The data for each city were separately analyzed. In addition, a stratified sample was obtained by selecting 200 cases at random so as to fulfill the following requirements: Jewish—7 per cent, Catholic—28 per cent, Protestant *et al.*—65

per cent; boys—50 per cent, girls—50 per cent; upper economic level—20 per cent, middle economic level—50 per cent, lower economic level—30 per cent (roughly judged by father's occupation). The youth were also equally divided with respect to lower and higher age groups within the range. This sample, considered to be fairly representative of urban and suburban youth in eastern and middle western U.S.A., will be used in most comparisons with the German youth, although certain other data will also be called in.

The German sample that plays the largest role in the study was a group of 191 youth, aged 14-18, from the town of Bad Homburg. Their names were taken at random from the food-rationing cards, and they were summoned through the Burgomeister to take the test in late November, 1945. Bad Homburg is a fairly well-to-do town just outside Frankfurt, once a favorite resort place. The youth indicated that their fathers were mostly skilled artisans, merchants and tradesmen, and "civil servants." Since Bad Homburg probably corresponds more closely to Oak Park, a well-to-do suburb of Chicago, than to any of the other U.S. towns or cities, the Oak Park data (163 cases) will also be used for comparison. The Bad Homburg sample contained 94 boys and 97 girls; 106 Protestants ("evangelisch"), 78 Catholics, and 7 miscellaneous (1 Jew). The age distribution was slightly weighted in the 16- and 17-year groups, and weak in 18-year-olds. Official Nazi records indicate that, in terms of party membership, Bad Homburg was a normal town. In attitude questions that have been asked both in Bad Homburg and in other German communities, the distribution of answers has been remarkably uniform. For example, in the question as to whether Germany needs a strong new "Fuehrer" in order to recover, 74 per cent of the boys and 90 per cent of the girls agreed in Bad Homburg, as compared with 73 per cent of the boys and 88 per cent of the girls in Offenbach, a considerably more industrial suburb of Frankfurt on the other side of town. However, it is obvious that Bad Homburg youth cannot be considered representative of youth in all areas and all types of community in Germany today.

The Bad Homburg youth were broken down into three groups for further comparison: a "Nazi" group, an "anti-Nazi" group,

and a middle group. This was done by dividing the youth on the basis of answers to two questions that have been tested and found useful in differentiating *political* Nazis from *political* anti-Nazis: "Do you believe that National Socialism was a bad idea, or a good idea badly carried out?" "Was Hitler a bad person, or a good person who had bad advisers?" The anti-Nazis were defined as those who chose the first alternative in both questions, or took one first alternative and did not answer the other question. The Nazis were defined as those who favored the second alternatives. The middle group consisted of those who checked the two questions inconsistently. It must be realized that this procedure, which brought forth 55 anti-Nazis, 81 Nazis, and 55 middle cases, is a purely arbitrary way of chopping up a continuum. By more rigorous or less rigorous criteria, the size of the categories could be changed. German youth today do not divide easily into Nazis and anti-Nazis, but are in great majority confused, holding both pro-Nazi and anti-Nazi views, in one or another proportion. The pure type who whole-heartedly defends or whole-heartedly rejects all of National Socialism is rare.

The anti-Nazi group, so defined, contained 27 boys, 28 girls; 23 Protestants, 30 Catholics. The Nazi group contained 36 boys, 45 girls; 53 Protestants, 26 Catholics. The tendency for boys and Catholics to be somewhat more anti-Nazi than girls and Protestants has been found in other attitude studies in German towns.

Samples of German youth from Friedberg and Offenbach have also been used to a slight extent in this report. Studies of the attitudes of these groups have already been reported.[1] For lack of available data, Friedberg and Offenbach youth have not been divided into Nazis and anti-Nazis.

Among other difficulties of procedure, the matter of translation presented a considerable problem. Bilingual experts, it has been found, rarely agree on the exact translation from English into German of attitude questions. The more basic difficulty lies in the fact that so frequently there is no exact German equivalent of the English meaning ("fair play," "bully," "tolerance," etc.).

[1] McGranahan, D. V., and Janowitz, M., "Studies of German Youth," *The Journal of Abnormal and Social Psychology*, 1946, Vol. 41, pp. 3-14.

Even where there appears to be a simple German equivalent, as in "crime"—"Verbrechen," it may be argued that the German phrase has a context of meaning, a connotation derived from German life, that sets it off from the English phrase. Since it is well known that an apparently small difference of meaning may have a considerable effect on the results of an opinion poll or attitude test, one may ask whether it is theoretically feasible and possible to make a comparative attitude study by means of a translated questionnaire. The difficulties should be acknowledged, but they are not prohibitory. Culturally conditioned differences in meaning hold for objects and acts, as well as words, and are involved in all comparative psychological analysis. It is felt that if words can be found in German and English that are simple, direct, and conventional references, denoting the same type of objective fact or situation, then inevitable differences in connotative meaning should not be too great a cause for concern. Judging from written-in comments, most of the difficulties in wording in this study arose from ambiguities that appeared equally in the English and the German form—a result of the fact that it was not possible to do careful pre-testing of the majority of the questions.

THE STATE AND THE INDIVIDUAL

According to Gertrude Stein, the most important thing to teach Germans is disobedience. More prosaically stated, the German is noted for his unquestioning obedience to authority, his failure to exercise individual responsibility and act on the basis of independent moral judgment. In questions where individualistic action is opposed to the authority and dignity of the state, German youth differ in a way consistent with this view, although a number of the more sophisticated ones were undoubtedly cognizant of the "American" answer.

German philosophy was succinctly expressed by several boys who wrote in the comment, "Befehl ist Befehl," in answer to the first question. In both questions, the anti-Nazis are closer to the American norm than the Nazis. Note, however, that in these results, as well as in the results of other questions in this study,

"Fascist" and "democratic" attitudes appear by no means perfectly correlated with Fascist and democratic political loyalties. One may ponder the fact that such a sizeable element of American youth, as well as many German anti-Nazis, are disposed toward

QUESTION 1

"Do You Think the American (German) Soldier Who Refused, during the War, to Obey an Order to Shoot an Innocent Prisoner Was Justified?"

("Wenn im Kriege ein deutscher Soldat den Befehl bekam, einen unschuldigen Gefangenen zu erschiessen, war er gerechtfertigt, die Ausfuehrung dieses Befehls zu verweigern?")

(Percentages)

	Yes	No	N.A.*
U.S. Sample	68	29	3
Oak Park	84	14	2
Bad Homburg Sample	50	44	6
Bad Homburg anti-Nazis	56	35	9
Bad Homburg Nazis	46	50	4

* "N.A." means No Answer.

throwing a person in jail for the sin of making an unjust criticism of the government.

QUESTION 2

"Should People Who Unjustly Criticize the Government of a Country Be Thrown in Jail?"

("Sollen Leute, die die Regierung eines Landes ungerecht kritisieren, ins Gefaengnis gesteckt werden?")

(Percentages)

	Yes	No	N.A.
U.S. Sample	22	77	1
Oak Park	21	78	1
Bad Homburg Sample	36	57	7
Bad Homburg anti-Nazis	24	67	9
Bad Homburg Nazis	46	53	1

The following data suggest that the American-German difference in attitude toward authority is not peculiar to matters of state authority, but applies to the simplest types of social relation.

QUESTION 3

"WHICH OF THESE BOYS IN YOUR OPINION IS THE WORSE? (*a*) THE BOY WHO TYRANNIZES AND BEATS UP SMALLER CHILDREN. (*b*) THE BOY WHO DISOBEYS HIS SUPERIORS"

("Welcher von den zwei Jungen ist Ihrer Meinung nach der Schlimmere? (*a*) Der Junge, der kleinere Kinder tyrannisiert und verpruegelt. (*b*) Der Junge, der seinen Vorgesetzten nicht gehorcht.")

(Percentages)

	(*a*)	(*b*)	N.A. OR "EQUAL"
U.S. Sample	68	29	3
Oak Park	85	13	2
Bad Homburg Sample	41	30	29
Bad Homburg anti-Nazis	49	22	29
Bad Homburg Nazis	30	42	28

A large number of German youth found it impossible to make a decision in this question and answered "equal." [2]

With submissiveness to state authority usually goes the attitude that the state is wise beyond individuals, understands what is "good for the masses," and should accordingly exercise strict control over the press and other media of information. (Captured directives from the German Propaganda Ministry have revealed that the Nazis carried propaganda control to a more severe degree than had even been imagined.) While Germans today have had good reason to question the ultimate wisdom of the state and the value of intellectual regimentation, the youth are still hesitant about granting newspapers independence and democratic freedom of expression. They also feel that the common man is stupid and incapable of thinking for himself.

[2] It should be noted that in this question, the Oak Park high-school students chose the first alternative 17 per cent more often than the "U.S. Sample." In several other questions, also, the Oak Park children, and to a somewhat lesser extent the Malden high-school children, differ from the Germans considerably more than do the children in the overall sample. The children in the poorer high schools in Lowell, Brooklyn, and Toledo tend to diverge from the U.S. sample in the direction of the Germans. The economic and educational backgrounds of the parents may be a partial reason for these differences, and also the fact that the poorer groups contain a larger proportion of immigrant stock which may carry the influence of continental tradition, particularly in matters of personal and family relations.

QUESTION 4

"In Your Opinion Should Newspapers Write (*a*) What They Wish, or (*b*) Only What Is for the Good of the People?"

("Duerfen Ihrer Ansicht nach die Zeitungen schreiben (*a*) was sie wollen, oder (*b*) nur was zum Wohl des Volkes ist?")

(Percentages)

	(*a*)	(*b*)	N.A.
U.S. Sample	65	33	2
Oak Park	81	17	2
Bad Homburg Sample	51	43	6
Bad Homburg anti-Nazis	64	29	7
Bad Homburg Nazis	35	63	2

QUESTION 5

"The Average Man Is Stupid and Easily Misled by Propaganda"

("Der Durchschnittsmensch ist dumm und leicht von Propaganda irregefuehrt.")

(Percentages)

	Agree	Disagree	N.A.
U.S. Sample	54	45	1
Offenbach Sample (N = 256)	86	11	3

As indicated by comments in Question 4, a number of American youth, as well as some anti-Nazis, favored the second alternative because they could not allow that anti-democratic newspapers should have the democratic privilege to publish what they wish.

In Question 5, Americans occasionally remarked that the common man was easily misled by propaganda, but not stupid, a distinction the Germans did not make. Average German young people appear to have a remarkably uniform contempt for the mental capacity of the average person. Such lack of faith in their fellow countrymen is doubtless one of the reasons why many Germans have misgivings about the possibilities of democracy in their country, and feel that Germany needs a strong new Fuehrer. The many anti-Nazis who take such a position say that this time they want a "good Fuehrer."

The Hitler regime gained notoriety for its arbitrary and brutal treatment of individuals. Foreign observers express the view that Germans in general have a sadistic tendency and personally approve of such action by the state. Adult anti-Nazis, on the other hand, attribute sadism only to the Nazi leadership, and maintain that the average German is a humane, considerate person who does not approve of brutality, although he may not take action against it because of his habits of obedience.[3] Two questions were included in an attempt to deal with this issue.

QUESTION 6

"Do You Think It Right to Make One Person Suffer in a Medical Experiment If the Results Will Benefit the Whole Nation?"

("Denken Sie, dass es richtig ist, einen Menschen den Leiden eines medizinischen Versuchs auszusetzen, wenn die Ergebnisse der ganzen Nation helfen?")

(Percentages)

	Yes	No	N.A.
U.S. Sample	60	38	2
Oak Park	59	40	1
Bad Homburg Sample	49	42	9
Bad Homburg anti-Nazis	27	60	13
Bad Homburg Nazis	59	37	4

QUESTION 7

"Do You Believe That a Criminal Who Refuses to Give the Names of His Accomplices Should Be Beaten Until He Confesses?"

("Glauben Sie, dass ein Verbrecher, der sich weigert, die Namen seiner Komplizen anzugeben, geschlagen werden soll, bis er sie angibt?")

(Percentages)

	Yes	No	N.A.
U.S. Sample	8	87	5
Oak Park	6	94	0
Bad Homburg Sample	15	78	7
Bad Homburg anti-Nazis	24	69	7
Bad Homburg Nazis	11	89	0

[3] These observations are based on a study made by the author on a group of 30 selected and confirmed adult anti-Nazis. Questioned on the average German's "worst characteristic," they agreed almost unanimously that it was his extreme obedience and "susceptibility to influence." Qualities of brutality,

The data do not indicate any significant difference in "humanitarian" feelings between the Germans and the Americans on these questions. The largest differences are actually between the German Nazis and anti-Nazis, with the Nazis in both cases being closer to the American figures. However, certain complications unfortunately entered into these questions to give the results a dubious value. In Question 6, a number of youth, both German and American, commented that the medical experimentation was justified only if the subject voluntarily submitted himself to it. The question was thus ambiguous in both languages, some subjects interpreting it in the sense of heroic self-sacrifice, and others considering it to refer to cold-blooded practices such as those carried out in German concentration camps against the victim's will (the ambiguity centered about the word "make"). In Question 7, the complication lay in the fact that in Germany today the word "criminal" is being most widely used to refer to "Nazi criminals," with whom the more Nazi-minded youth might be expected to have considerable sympathy.[4] Another factor in German answers to Question 7, indicated by spontaneous comment, was the belief that confessing accomplices violated the code of "Kameraderie."

ATTITUDES TOWARD FAMILY AUTHORITY

According to a plausible genetic view, German submissiveness to authority in general is derived in good part from childhood training in family life under an authoritarian, dictatorial father. The following data suggest large differences in German and American attitudes regarding family authority.

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cruelty, over-bearingness and the like were associated only with the Nazi leaders, and special groups like the SS. The German's obedience and susceptibility to influence were used to explain, (*a*) why he fell victim to a brutal Fascist regime in the past, and (*b*) why he could not be democratic in the future.

[4] It should be noted that in Question 3, which sets up a conflict between obedience to authority and humanitarian, fair-play attitudes, and which does not involve the complications apparent in Questions 6 and 7, there is a clear trend on the part of the Germans, and specifically of the Nazi youth, to favor obedience considerably more than the Americans do.

QUESTION 8

"Do You Think a Boy Is Justified in Running Away from Home If His Father Is Cruel and Brutal?"

("Denken Sie, dass ein Knabe Recht hat, seinem Heim zu entfliehen, weil sein Vater grausam und brutal ist?")

(Percentages)

	Yes	No	N.A.
U.S. Sample	68	30	2
Oak Park	80	19	1
Bad Homburg Sample	45	50	5
Bad Homburg anti-Nazis	27	67	6
Bad Homburg Nazis	51	48	1

QUESTION 9

"Do Older Brothers Have the Right to Give Orders to Younger Brothers and Obtain Obedience with Force?"

("Haben aeltere Brueder das Recht, den juengeren zu befehlen und den Gehorsam mit Gewalt zu erzwingen?")

(Percentages)

	Yes	No	N.A.
U.S. Sample	9	90	1
Oak Park	8	90	2
Bad Homburg Sample	23	72	5
Bad Homburg anti-Nazis	22	76	2
Bad Homburg Nazis	25	74	1

QUESTION 10

"Do You Believe That the Older American (German) Generation Understands the Present-Day Problems of American (German) Youth?"

("Denken Sie, dass die aeltere deutsche Generation die jetzigen Probleme der deutschen Jugend versteht?")

(Percentages)

	Yes	No	N.A.
U.S. Sample	31	67	2
Friedberg Sample (N = 135)	53	34	13

The Nazi youth are much closer to the American pattern than the anti-Nazis on the issue of running away from home (Question 8), although the overall American-German differences are clear. There is evidence from other sources that older Germans are less pro-Nazi than younger ones, and that Naziism among German youth implied a certain amount of conflict between state (party) authority and family authority. Becoming a Nazi meant, if not open rebellion, at least a certain independence of attitude toward the family, because the youth transferred his primary loyalty—and obedience—to the state. The majority of young anti-Nazis, on the other hand, in all probability derived their anti-Naziism from their families, who succeeded in maintaining authority over the children, in opposition to state authority.

The fact that a favorable attitude toward family authority appears positively associated with anti-Naziism among the German youth does not exclude the likely possibility that many adult Germans rejected National Socialism for the very reason that they had unusually liberal, non-authoritarian backgrounds, and found the extreme authoritarianism of the Nazis repugnant. Various other factors presumably contributed to adult anti-Naziism, including personal grudges, old-line political party affiliations, and labor union sympathies.

HEROES OF AMERICAN AND GERMAN YOUTH

The type of man a youth chooses to admire provides a clue to his values. The German and American youth were asked to indicate whom they considered to be "the greatest man in the history of the world." (The German data in this case are from Friedberg and Offenbach; the American data are from a group of 986 high-school students from the east coast, midwest and west coast, polled in September, 1945.) If we contrast the ten most frequently mentioned names in both groups, comprising more than 90 per cent of the total references in each case, significant differences emerge.

All the individuals in the above German list are symbols of great political or military power, rulers of states or armies or both. Of the first American ten, four men are distinguished for contributions to history that did not involve the wielding of great military or political power (Christ, Columbus, Edison, Franklin).

In their current subservience to American authority, the German youth have curiously rated Eisenhower and Truman higher than have the American youth. (In a similar test done on a small group of German children in the French zone by French officials, Eisenhower and Truman did not appear, and Roosevelt dropped in popularity, leaving Bismarck and Frederick the Great to head the list. No Frenchman figured high.)

In terms of total votes, 26 per cent of the Americans chose non-

QUESTION 11

"WHO IS THE GREATEST MAN IN WORLD HISTORY?"
("Wer ist Ihrer Meinung nach der groesste Mann in der Weltgeschichte?")

First Ten Choices

AMERICAN YOUTH (N = 986)		GERMAN YOUTH (N = 391)	
NAME	NO. OF REFERENCES	NAME	NO. OF REFERENCES
F. D. Roosevelt	336	Roosevelt	63
Lincoln	227	Bismarck	50
Christ	157	Frederick the Great	49
Washington	98	Hitler	19
Columbus	24	Eisenhower	14
MacArthur	23	Stalin	14
Edison	23	Charlemagne	8
Caesar	18	Truman	8
Ben. Franklin	12	Caesar	6
Eisenhower	11	Alex. the Great	3
		Napoleon	3

political and non-military figures, as opposed to only 3 per cent of the Germans. The less-frequently mentioned individuals in the American list were: Mme. Curie, G. W. Carver, Pasteur, Truman, Churchill, Napoleon, Adam, Theodore Roosevelt, Jefferson, Henry Ford, "atomic bomb discoverer," Mark Twain, Plato, Shakespeare, Al Smith, J. D. Rockefeller, Stonewall Jackson, Louis XII. In the German list, the additional names were: Christ, Columbus, Galileo, Bach, Churchill, "Founder of the 2nd Reich," Goethe, "the Great Elector," Heinrich VI, Karl V, Leo XII, Otto the Great, "the Pope," Theodoric, General Steuben. About half the names mentioned by Americans, and one fourth the German

names, were writers, scientists, religious figures, business men, inventors, explorers, etc.

German admiration for power and authority, evidenced above, is presumably an important psychological element in the well-known German tendency toward political and social organizations in which, as in the feudal system, each individual has a superior toward whom he is submissive, and inferiors over whom he can wield power. In psychoanalytic terms, the German seeks to be a father and a son, but not a brother.

IDEAS OF CRIME

As a means of testing relative moral values, the American and German youth were asked what they thought was the "worst crime" a boy could commit. The American answers were first broken down into categories, and the categories then applied to the German data. It was not possible to have the same person classify both sets of data, so that certain discrepancies in classification may well have crept in, especially with the categories of "dishonesty" and "cruelty," although in general the answers fell easily into the categories indicated. However, approximately one-fourth of the German youth did not venture to answer the question. For this reason the number of useful German cases in the breakdowns is quite small, and the percentages should be regarded only as rough indications of rank order.

Inspection of the data reveals that, for the American youth, the worst type of crime is crime of violence against another person—murder, rape, and assault. For the German, it is crime against the state, together with what might be called "crime of character"—dishonesty, dishonor, cowardice. "Rape," frequently mentioned by American youth, was listed by no German as the major crime. (The vaguely sexual word, "immorality"—"Sittlichkeitsvergehen," used by several Americans and Germans, has been classified under "Miscellaneous.") "Cowardice," on the other hand, appears to be in no sense a serious crime for the Americans, as it is for the Germans. A number of Germans felt that the worst thing a boy could do was to "besmirch his honor" ("seine Ehre beschmutzen" "seine Ritterlichkeit in den Schmutz zu treten"), or "lose his character," while the American children, in the cate-

gory of "dishonesty and dishonor," spoke more of the simple and overt sins of cheating, lying, and stealing. The German conception of cruelty and injustice was more legalistic than the American ("condemning an innocent person," etc.), but, unlike the Americans, the Germans did not think in terms of "torture" as such. Several of the German references falling under the category of "assault" expressed admonition against "shooting at an American." A few of the non-Nazi youth said that the worst sin was "supporting the Nazis," "getting worked up by a false regime into war," "being a war volunteer." It should be noted that a large difference exists between the Nazi and anti-Nazi attitudes toward treason. The fact that, contrary to what one might expect, the Germans did not rank "disobedience" higher than the Americans may be explained by their emphasis on treason, which is an extreme form of disobedience toward the state. It is interesting to note that the one Jewish boy in the sample, while indicating strongly anti-Nazi views in a political sense, selected "Fahnenflucht" as the worst crime.

IDEAS OF NATIONAL SUPERIORITY

The superiority of Germans and all things German was a favorite Nazi idea, promoted by all the devices of propaganda. Although the majority of German youth no longer profess loyalty to the cause and leadership of National Socialism and have witnessed a compelling demonstration of power on the part of other

QUESTION 12

"In Your Opinion Are the Americans (Germans) as a People Better Than: ("Sind Ihrer Meinung nach die Deutschen als Volk besser" als:)

(Percentages)

	U.S. Sample			Friedberg and Offenbach		
	Yes	No	N.A.	Yes	No	N.A.
"The Italians?"	43	56	1	70	20	10
"The Russians?"	37	63	0	64	25	11
"The Poles?"	38	52	0	71	18	11
"The French?"	40	60	0	57	29	14
"The Germans?"	41	59	0			
"The Americans?"				27	52	21

peoples, feelings of German superiority linger on, apparently confined now to moral and cultural pre-eminence. (From the time when the tide of battle changed, Germans have clung to the supposition that their spiritual superiority was overcome only by the brute force of materiel.)

The German youth clearly display a greater degree of nationality prejudice, with the understandable exception that they do not venture to express superiority over the Americans. It should be recognized, of course, that the American youth are not exponents of the democratic theory by an overwhelming majority. Question 12 was not given at Bad Homburg and data are not available to break down the German replies into Nazi and anti-Nazi. However, another question was given, the results of which indicate that Nazi youth differ markedly from the anti-Nazis on matters of nationality prejudice.

QUESTION 13

"Do You Consider It Right for a German Man to Marry a Pole?"
("Halten Sie es fuer richtig, dass ein Deutscher eine Polin heiratet?")

(Percentages)

	Yes	No	N.A.
Bad Homburg Sample	34	63	3
Bad Homburg anti-Nazis	53	45	2
Bad Homburg Nazis	20	80	0

SEX DIFFERENCES

It has already been observed that, in attitude studies in Germany, girls have been found to be consistently more Nazi in their orientation than boys. A larger proportion of girls appear in the "Nazi" category of the Bad Homburg sample, and sex breakdowns on the various questions for which data are available indicate that, with few exceptions, the girls are more distinctly "German" in their answers than the boys; differences average around 10 per cent. Small sex differences also appear in the American answers to the questions that have been discussed, ranging between 5 and 10 per cent for approximately half the questions.

Here there is also a clear trend: the girls are more "American," farther from the Germans, than the boys. Thus, the American girls and the German girls stand at the opposite extremes on such questions as whether the child who tyrannizes is worse than the child who disobeys and whether a soldier should refuse a command to shoot an innocent prisoner; while the American boys and German boys stand closer together in their attitudes.

Further evidence is required to confirm this apparent pattern of sex differences. Further investigation in other western countries is also needed to test the hypothesis indicated—that women characteristically express and preserve typical national values more than do men.

17. PERCEPTION

Many people think of perception, remembering, and other psychological processes as matters of *individual* psychology. The present selection illustrates the importance of *social* factors in perception; while Selection 33, *Remembering,* pages 315-326, deals with some *social* factors in remembering. The study reported below was made in order to discover the consequences for perceptual organization when the construction of a stable and meaningful environment is thwarted. Disruption of perceptual behavior resulted. The experiment illustrates certain effects of frustration—compare Selection 25, *Frustration,* pages 244-256. It should also be considered in conjunction with Selection 34, *Social Norms (Frames of Reference),* pages 327-338.

PERCEPTION UNDER STRESS *

Leo Postman
and
Jerome S. Bruner

Like all goal-seeking activity, perceptual behavior is sometimes blocked by obstacles—one fails to perceive, for one reason or another, what was necessary or important in a situation and thereby fails to adjust.

A man, frustrated in his efforts to 'find' the traditional and elusive collar button under the bureau, may too readily see specks of dust or paper as the sought-after object. He may, moreover, persist too fixedly in seeing the specks as collar buttons to the point where he must touch each one to be sure. Or, as frustration mounts, his capacity for examining or selecting clues deteriorates

* From "Perception under Stress," by Leo Postman and Jerome S. Bruner, *Psychological Review,* 1948, Vol. 55, pp. 314-322. Reprinted by permission of the publisher and authors.

to that level at which his wife intercedes with the usual, "Why, there it is right under your nose, Dick."

Such changes in perceptual behavior may well be subsumed under the heading of *primitivation*. Inadequate selection, unrealistic accentuation, and erratic fixation characterize perceptual reactions which fall short of optimum adaptation to the environment. Measured with the yardstick of behavioral utility, they represent a more *primitive* level of function than is usually observed in the absence of frustration. Our example, drawn from casual observation, is scarcely exhaustive. The aim of the research reported in the pages that follow is to achieve a more systematic understanding of what follows perceptual frustration and in what manner.

THE EXPERIMENT

Five control and five experimental subjects took part in the experiment. The stimulus materials for all subjects consisted of eighteen three-word sentences, presented one at a time in a modified Dodge tachistoscope. Subjects were instructed to report everything they saw or thought they saw.

The method of presentation used was a modification of the method of limits. Each sentence was first presented once at .03 second below threshold, then once at .02 below, twice at .01 below, twice at threshold, twice at .01 above, and once at .01 second intervals beyond that until all three words were correctly recognized.[1] As subjects learned, their threshold exposure level occasionally had to be revised downward by .01-.03 second. This was done when two words were perceived correctly on the first trial at .03 second below their previously established threshold. A full record was kept of each response, correct or incorrect, given by the subject at each exposure.

The procedure on the first nine sentences (Initial Series) was the same for the Experimental and Control Groups: subjects were

[1] In a preliminary test the subject's threshold was determined by increasing exposure time from a starting level of .05 second in steps of .01 second until the subject saw one of the three words in a test sentence correctly. The exposure level thus obtained was taken as a rough measure of threshold upon which the procedure in later trials were based.

simply required to continue their judgments until they had recognized each sentence in turn. At the end of these trials, Experimental subjects were placed in a perceptually frustrating situation. Each Experimental subject was told that he was to be shown in the tachistoscope 'something' which he was to describe to the experimenters as fully as possible. Instructions were given in a serious tone of voice by the two experimenters, the authors. A highly complex picture, reproduction of a crowded painting in black and white, was then presented to the subject at low illumination and at a speed of .01 second.[2] The initial length of exposure and the illumination were at a level at which the subject was unable to make out anything save the vaguest contours and shadings. Upon reporting that he was unable to see very much at all, the subject was told by one of the experimenters in rather icy tones that it was of the utmost importance that he pay very close attention to instructions if the study was to be effectively done. He was told to try again and informed that his performance was substandard. Since the subject understood that the experiment dealt with visual acuity, he could have no inkling (and none did, according to their reports) that the experimenters were interested in anything other than eliciting his closer attention. On successive presentations of the picture, the subject invariably began to make more and more guesses. These would be greeted with such remarks as, "Are you sure you are reporting frankly what you see? You needn't be embarrassed to tell us everything that is there." During ten to twelve exposures of the picture the subject was constantly badgered as to whether he "hadn't seen something more." On occasion, the experimenters told the subjects that the interval of exposure was to be lengthened. Generally the interval was not increased, but sometimes, if the subject was not seeing enough to make the task provocative, the interval was increased slightly. At one point during the frustration period, the experimenters would ask whether they could look more closely at the subject's eyes. This they would do with a certain amount of technical double-talk to each other about, for example, "the aque-

[2] The picture, reproduced in the dimensions 4½" x 6", is the 'Tenement Scene' by the American artist, Billings. It depicts a complex cross-section of tenement life in three panels, each representing a busy and crowded scene.

ous and vitreous looking clear enough." The subject was repeatedly told that he was apparently not doing as well as he should be doing on the basis of his record during the Initial Series. Various questions were asked about his state of mind: whether he was feeling rested, whether he had experienced any recent emotional upset, whether he had been having "incomplete dreams in which he found himself chasing things and not catching up with them." The treatment was admittedly harsh, but it was effective. Subjects grew tense, were obviously trying too hard, began swearing under their breath or out loud and were quite strikingly frustrated. Perception of the picture became for them the way out of an unpleasant and embarrassing situation. Looked at socially, here were our subjects—some of them Harvard graduate students or advanced undergraduates or the wives of Harvard graduate students, but none of them sceptical students of psychology—failing in a task assigned them by two Harvard faculty members who were insistent about their performance beyond the point of rudeness. That they were feeling frustrated and thwarted was clear not only from their overt behavior but from the testimony given after the experiment was over and its purpose explained to the subjects.

The Control subjects received a totally different and much more pleasant treatment at the end of their Initial Series. They were shown the same picture exposed to the Experimental subjects, but for a period of 30 seconds. During and after this exposure they were asked to report in fullest detail what they had seen in the picture. Following this, the subjects were shown the picture again at two very obviously different levels of illumination. They were told to bear these illumination differences in mind since they would be asked again to distinguish between them. This interpolated series was used to equate the Experimental and Control subjects on all but one variable—frustration. Again, the situation created was one of testing vision.

The Test Series was alike in all but one crucial respect for the Experimental and Control groups. Each received nine more three-word sentences for recognition. For members of the Control group five exposures of the picture were interspersed at random among the ten sentence presentations. These subjects were asked upon

exposure of the picture whether it was at high or low illumination. Few mistakes were made and whether the subject was correct or not, he was told that he had made the right judgment. The Experimental subjects received five presentations of the picture at .01 second interspersed among the sentences, again with the

TABLE 1

SUMMARY OF EXPERIMENTAL DESIGN

SERIES	EXPERIMENTAL GROUP	CONTROL GROUP
Initial Series	9 three-word sentences: threshold determination	9 three-word sentences: threshold determination
Interpolation Period	Frustration in perception of picture	Full exposure of picture
Test Series	9 three-word sentences: threshold determination. 5 interspersed exposures of picture with frustration of perception.	9 three-word sentences: threshold determination. 5 interspersed exposures of picture with successful illumination judgments.

TABLE 2

STIMULUS SENTENCES

Initial Series:	Warn bold liars (Preliminary threshold determination sentence)
	Church shuts early
	Books grow dull
	Heroes also died
	Time has healed
	Figures tell fact
	Money buys hate
	Truth serves fancy
	Beauty will perish
	Banks desire cash
Test Series:	Stop foul crime
	Praise hardy deeds
	Tests show much
	Armies lack hope
	Help was sacred
	Science must halt
	Power pays much
	Peace hardly lasts
	Swords rust slowly

urgent instruction to tell everything they had seen. Their reports were greeted with sighs, groans, or expressions of puzzlement by the experimenters. "We don't understand why you can't do better with the picture," was the theme around which the experimenters' reactions were built during these picture presentations. In the case of sentences, no comments, favorable or otherwise, were offered by the experimenters either during the Initial or Test Series. The design of the experiment is briefly summarized in Table 1, the sentences used in testing in Table 2.

THE RESULTS

The critical test of our hypothesis consists in the comparison of the perceptul behavior of the Experimental group and the Control group during the Test Series. The Experimental group has suffered perceptual frustration prior to the Test Series and continues to undergo frustration intermittently during this series. The Control group, on the other hand, has been unthwarted throughout. What kind of changes can be expected in our subjects' thresholds; to what extent are there alterations in the frequency and quality of hypotheses preceding correct recognition of the sentences?

Threshold changes: Three threshold measures were obtained: (a) the exposure time required for the correct recognition of all three words in a stimulus sentence—the *sentence threshold;* (b) the exposure time required for recognition of two of the three words—the *two-word threshold;* and (c) the time required for recognition of one of the three words—the *one-word threshold.*

When sentence thresholds in the Initial and Test Series are compared, we find that the Control group's threshold has decreased in magnitude as a function of learning, while the threshold of the Experimental group remains virtually constant.[3] *As*

[3] The average thresholds of the two groups for whole stimulus sentences in Initial and Test Series are presented in Table 3. It is clear that the thresholds throughout the experiment depend upon the visual acuity of the individual subjects. To make fair estimate of the effect of experimental treatment, it is necessary to compare the *distributions of differences* between Initial and Test Series for the two groups. When the correlation between Initial Series and Test Series is thus taken into consideration, the mean difference between the two groups yields a t-value of 2.77, with a P slightly above .02.

far as sentence thresholds are concerned, then, frustration prevents experimental subjects from improving as much as they might have with practice.

At what level of perceptual performance do the effects of frustration manifest themselves? Do they affect only perception of whole sentences or is the process of building up sentences word by word also hindered? Analysis of the two-word threshold reveals again that the Control group improves considerably from Initial to Test Series while the Experimental group remains virtually at a standstill (Table 3). *The effects of frustration, then, are manifest in the building up of the perception as well as in its final*

TABLE 3

AVERAGE EXPOSURE TIMES (IN SECONDS) REQUIRED FOR CORRECT RECOGNITION OF 1, 2, AND 3 STIMULUS WORDS

	EXPERIMENTAL GROUP		CONTROL GROUP	
	INITIAL SERIES	TEST SERIES	INITIAL SERIES	TEST SERIES
One word correct	.115	.112	.106	.092
Two words correct	.132	.133	.122	.104
Three words correct	.154	.152	.136	.116

phase. Although not highly significant, this difference satisfies reasonable criteria of statistical reliability, t being 1.82 and P, .10.

How far-reaching were the effects of frustration on the perceptual behavior of our subjects can be seen from the fact that the *one-word thresholds* of the two groups also diverge in the Test Series. Again we find the members of the Control group showing an improvement and the performance of the Experimental subjects practically unchanged (Table 3). The data here are suggestive but fall short of statistical significance ($t = 1.31$, $P =$ .20-.30). *Frustration, then, affects not only the ability to perceive a complex stimulus in its entirety but the capacity to structure less complex components as well.*

The measurement of sheer threshold times reveals only one aspect of the manifold changes resulting from frustration. Nor do the differences in threshold exposure time provide the most strik-

ing consequence of perceptual frustration. It is through analysis of the subjects' pre-recognition behavior—the nature and pattern of the hypotheses which precede full recognition of the sentences —that the full impact of frustration can best be gauged.

Deterioration of hypothesis control: For optimal perceptual adjustment in a shifting, ambiguous, or otherwise difficult perceptual situation (such as our experiment) a nicely balanced flow of hypotheses would seem to be essential, one which is neither restrictively slow nor disruptively fast. Hypotheses need to be continually tested in action and accepted or rejected neither too early nor too late but, rather, according to their success or failure in the creation of adequate meaning. We might well predict that frustration would interfere with a nicely balanced hypothesis flow, causing either a restrictive slow-down or disruptive speed-up. In our experimental situation, such a deterioration of hypothesis behavior can be measured in terms of the relative frequency and patterning of a subject's hypotheses from one stimulus exposure to the next. On any one exposure, the subject could see, correctly or incorrectly, *all* of the three stimulus words in a sentence, *two* of them, *one* of them, or none of them at all. By *seeing* a word we mean not merely sensing that some letters were spread out in a line on the stimulus card. To see a word means to see it well enough to have an hypothesis as to what it is. Recall that subjects were instructed to report "everything you see or think you see." We refer to a correct or incorrect perception of three words as a *three-word hypothesis,* to the perception of two of them as a *two-word hypothesis,* and of one of them as a *one-word hypothesis.* Where the subject saw no words we refer to his behavior as a *blank.* For all exposures of all words, the frequency of one-, two-, and three-word hypotheses were recorded as well as the incidence of blanks.

The prediction that hypothesis patterns change as a result of frustration can be verified by a comparison of the relative frequency of hypotheses falling in the four categories during the Initial and Test Series. This comparison was carried out by means of a contingency test for the differential association of hypothesis categories with the two series. The test clearly shows that the distribution of hypotheses undergoes no change what-

soever from Initial to Test Series in the case of the Control group (Table 4). The odds are more than 99 in 100 that the minuscule differences between the two series could have been obtained by chance. The experimental group, on the other hand, presents a strikingly different picture. A very highly reliable change in the relative frequency of the different kinds of hypotheses follows upon frustration. The chief characteristic of this change is in the direction of greater incidence of full sentence (three-word) hy-

TABLE 4

CONTINGENCY TEST FOR DIFFERENTIAL ASSOCIATION OF HYPOTHESIS CATEGORIES WITH INITIAL AND TEST SERIES

Numbers in parentheses represent theoretical frequencies; the others are obtained frequencies

	EXPERIMENTAL GROUP			CONTROL GROUP		
	INITIAL SERIES	TEST SERIES	TOTAL	INITIAL SERIES	TEST SERIES	TOTAL
3-word hypotheses	67 (89.5)	124 (101.5)	191	113 (112.3)	109 (109.7)	222
2-word hypotheses	83 (71.7)	70 (81.3)	153	61 (62.2)	62 (60.8)	123
1-word hypotheses	166 (156.5)	168 (177.5)	334	64 (62.7)	60 (61.3)	124
Blanks	34 (32.3)	35 (36.7)	69	27 (27.8)	28 (27.2)	55
	350	397	747	265	259	524
	$\chi^2 = 16.22$ $P < .01$			$\chi^2 = .07$ $P > .99$		

potheses. Under the pressure to prove oneself in the face of repeated failure, hypotheses become reckless. The subject tries to see full sentences prematurely. This increase in prematurely complete attempts at recognition is not, as the threshold measures show, accompanied by any corresponding increase in correct perceptions. On many occasions, these three-word hypotheses made neither grammatical nor any other kind of sense, *e.g., Th. . shoo rough* for *Tests show much* or *What money deeds* for *Praise hardy deeds.*

We have here an important difference between performance under stress and performance under normal conditions. Under normal conditions, the final recognition is usually preceded by a period of systematic exploration, and the first three-word hypothesis is, more often than not, fairly close to fact. Under stress, much of the systematic exploration is short-circuited, and responses are triggered off as soon as the subject has a minimum of perceptual material to work with. Once having formed a perception on the basis of a premature hypothesis, the subject must then 'un-perceive' it—an act accomplished only with considerable difficulty.[4]

Our interpretation of the increase in three-word responses as an expression of premature hypothesis formulation also helps explain the decrease in two-word hypotheses following frustration (Table 4). Such two-word hypotheses represent a crucial exploratory step before final recognition, a step which the frustrated subject fails to take. The relative frequency of one-word hypotheses and blanks, on the other hand, is not seriously affected. The subject could not, to be sure, use one-word hypotheses for the successful full-sentence recognitions he wanted to make in order to overcome his failure on the picture. Such one-word hypotheses and blanks are, moreover, simpler perceptual acts and, therefore, less liable to disruption under stress. Frustration, unless it be pushed to an experimentally prohibitive extreme, is not likely to affect one's capacity to distinguish the presence from the absence of a stimulus. An illustration from everyday life clarifies the point. There are few perceptual experiences more frustrating than a crucial but poorly received long-distance telephone message. In such a situation perceptual organization may become primitivized or disrupted and frustration may leave us even less capable of hearing what is being said. One of the first things to suffer, perhaps, is the capacity to perceive and understand complex word groupings and their connotative nuances. The last thing to be affected is the ability to catch single words and to discriminate speech from random noise.

[4] Ellson, D. G., "Experimental Extinction of an Hallucination Produced by Sensory Conditioning," *Journal of Experimental Psychology*, 1941, Vol. 28, pp. 350-361.

Frustration and the content of hypotheses: Frustration should also affect the content of hypotheses. Frustration theory predicts more aggressive and escape responses during and after stress. Such was indeed the case. A careful inspection of all records showed the following distribution of these aggression and escape words reported as seen by our subjects.[5]

	Initial Series		Test Series	
	Aggression Words	Escape Words	Aggression Words	Escape Words
Experimental Group	2	0	17	6
Control Group	1	0	1	0

It goes without saying that a simple explanation of the perception of aggression and escape words in terms of their resemblance to the structure of the stimulus words does not suffice since both Experimental group and Control group were exposed to the same stimulus materials. Many of these responses, moreover, bore no resemblance whatever to the structure of the stimuli.

Some examples of aggressive and escape responses given by the experimental subjects during the Test Series are instructive: *Keep silent* for *swords rust* (withdrawal or escape reaction), *burst* for *rust, perish* for *praise, foolish hard doing* for *praise hardy deeds, treat . . . rough* for *tests . . . much, screamed* for *sacred,* and *hurt* for *rust.*

Perception as goal-directed behavior. The changes in the behavior of our Experimental subjects during the Test Series—failure to benefit from practice, increase in premature and reckless hypotheses, and the intrusion of aggression and escape hypotheses in the absence of appropriate stimuli—have all the hallmarks of reactions to thwarted goal striving. They are, moreover, changes which are highly congruent with each other, leading to a primitivation or disruption of function in the main spheres of perceptual behavior. The ability to *select* percepts from a complex

[5] While only two judges analyzed the records, most of the aggression or escape words were quite unequivocal, and a more elaborate method of checking the reliability of our classification was thought unnecessary.

stimulus field suffers: thresholds remain high and the line of demarcation between sense and nonsense is blurred. The degree of subjective *accentuation* becomes maladaptive in its emphasis on aggressive and escape interpretations of the stimuli. Finally, there is premature and unwarranted *fixation* of hypotheses as interpretations of the stimuli are produced recklessly without sufficient exploration and test. These are the main dimensions of perceptual primitivation under stress.

18. PERSONALITY TRAITS

Any serious discussion of personality traits must involve a consideration of *psychoanalytic* concepts. Terms such as compensation, rationalization, identification, regression, and projection are increasing in use; but the number of *objective* investigations of these concepts is quite limited. One of the most interesting experimental studies of the concept of *projection* is presented here. The question of insight into one's own personality traits is also considered.

EXPERIMENTAL STUDIES OF PROJECTION: I. ATTRIBUTION OF TRAITS *

Robert R. Sears

Projection has been defined by Healy, Bronner, and Bowers[1] as "a defensive process under sway of the pleasure principle whereby the Ego thrusts forth on the external world unconscious wishes and ideas which, if allowed to penetrate into consciousness, would be painful to the Ego." Withdrawn from its metapsychological setting, the dynamic mental process thus described may be translated into these terms: A wish, attitude, or habit-hierarchy which is not compatible with other attitudes or habits of an individual may be *attributed* by that individual to other persons rather than to himself providing he lacks insight into the fact that he himself possesses the trait in question. This process of attributing is unconscious; i.e., the sub-

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* From "Experimental Studies of Projection: I. Attribution of Traits," by Robert R. Sears, *The Journal of Social Psychology*, 1936, Vol. 7, pp. 151-163. Reprinted by permission of the publisher and author.

[1] Healy, W., Bronner, A., and Bowers, A. M., *The Structure and Meaning of Psychoanalysis*, p. 230. New York: Alfred A. Knopf, Inc., 1930.

ject does not give any verbal evidence that he knows his perception is false.

The widespread use of projection as an explanatory principle in both normal and abnormal behavior (e.g., in the psychoanalytic theories of paranoia and phobic anxiety) warrants some attempt to evaluate the concept critically with a view to determining its exact nature and the conditions under which it operates. The present investigation has attempted to isolate a specific situation involving projection and to analyse the process quantitatively and in terms of other variables co-operative.

The hypothesis may be advanced that any *persistently motivated* habit or attitude may be projected if it is sufficiently *reprehensible* to be refused recognition by its possessor.

The habits and attitudes subsumed under the trait names of *stinginess, obstinacy,* and *disorderliness* should have these two characteristics since they form the triad of traits which, according to psychoanalytic theory, are intimately connected with an incompletely extinguished anal-erotism.[2] As such they should be, first, persistently active even though recognition of their existence may be wanting, and second, reprehensible or opprobrious. No experimental validation of the first assumption was made, but the offensiveness of the three traits was checked on a verbal level by the following device.

A group of 36 men from one of the writer's classes rated 31 obnoxious non-sexual character traits on a seven-point scale, place 1 being labelled "neutral" and place 7 "very offensive." Stinginess obtained an average rating of 4.50 (10th in rank); obstinacy averaged 4.03 (12th in rank); disorderliness averaged 4.28 (11th in rank). Bashfulness, used as a control trait in the projection experiment, averaged 1.97 (23d in rank). The instructions were as follows:

> Below are listed a number of character traits, or general reaction patterns, which characterize to a greater or less degree the behavior of many people. Some are offensive and some are about neutral, i.e., they neither irritate us nor are we glad to perceive them. After each trait are 7 spaces.

[2] Orderliness rather than disorderliness is, of course, the third anal-erotic trait, but the reprehensible antonym has been used for the sake of consistency.

The first space indicates neutrality and the seventh indicates extreme offensiveness. The intervening spaces indicate various degress between these two extremes. Place a cross in the appropriate space after each trait to indicate how neutral or offensive that trait is to you when you see it in other people.

METHOD

In order to test for the operation of projection as here redefined, the measurement of three variables was required:[8] first, the degree to which each individual demonstrated a given trait, i.e., a "true" measure of his stinginess or other trait; second, the amount of that trait he attributed to his associates; and third, the presence or absence of insight with respect to his possession of the trait.

Subjects. The cooperation of three fraternities was secured through members who were registered in the writer's classes. House A had 37 members, all of whom had lived together at least seven months; House B had 38 but as in the case of House C, which had 22 members, the experiment was carried out in the fall and some of the members had lived in the house only two months.

Rating Scales. Four seven-point graphic rating scales, one each for *stinginess, obstinacy, disorderliness* and *bashfulness,* were distributed two at a time at two house-meetings a week apart. The *bashfulness* scale was not used with House A but was included for the other two houses as a check on the assumption that a trait need be highly repellent in order to be projected; as noted above, bashfulness was rated by a separate group as much less obnoxious than the other three traits. For each fraternity the names of the members were placed on one mimeographed sheet in alphabetical order and the subjects were instructed to rate each person in turn, including the rater himself, from the top down. Each name was followed by 7 equal squares labelled at the top of the sheet, from left to right, as follows:

Stinginess: 1. generous, perhaps an easy mark; 2. rather easy-going; 3. sensible about use of possessions; 4. cautious but not a tight-wad; 5.

[8] No attempt was made in the present study to investigate the nature of projection in terms of consciousness or unconsciousness.

fairly careful of his rights as an owner; 6. pretty tight about most things; 7. very stingy. *Obstinacy:* 1. easy to persuade, suggestible; 2. agreeable to others' plans; 3. often willing; 4. a trifle hesitant; 5. usually has a "better" plan; 6. anxious to have own way; 7. very obstinate. *Disorderliness:* 1. painfully neat, perfect order; 2. finicky about details; 3. fairly tidy; 4. about average; 5. careless; 6. pretty messy, untidy; 7. no attempt at order. *Bashfulness:* 1. always conspicuous, good mixer; 2. very self-possessed; 3. meets people easily; 4. slightly reserved, not timid; 5. dislikes meeting strangers; 6. self-conscious, timid; 7. painfully bashful.

On the first occasion detailed instructions concerning the best methods of rating were given, with proper cautions against "skewed distribution" and "halo effect." The concept of *units of conduct* as opposed to that of *character trait* was discussed and the subjects were urged to base their judgments on specific incidents as much as possible. No special instructions were given for the other ratings. To test the hypothesis that a trait must be considered reprehensible in order that projection might occur, the rating scale for the 31 character traits was presented to the members of Houses B and C with these instructions:

Here are a number of character traits. Pay special attention to those that we have used for ratings in this experiment. You will see that the column on the left, number 1, is labelled "neutral," and number 7, on the right, is labelled "very offensive." Check the column for each trait which will most accurately describe how offensive it would be to you to be considered as possessing that trait. In other words, tell how much you would dislike being called "ambitious," "affectionate," etc. If you would rather *like* to be considered as having some of the traits just leave all spaces following those particular traits blank. Do this very carefully and try to be strictly honest about it. Be especially careful about those we have used in this experiment. Be sure to put your name on the back of the paper.

Experimental Conditions. Each man took his scales to his own room and made the ratings by himself. The writer collected the finished products downstairs and, in the case of House A, asked each man to write on the back of one of his sheets the names of the five men he liked best in the house and the five he liked least. Perhaps one of the best indications that the judg-

ments were made honestly was the fact that, although assurance had been given that all ratings would be absolutely confidential, nearly half the men asked for reassurance when the papers were handed to the writer.

Measures of the three essential variables were secured from the obtained data as follows: *first,* the degree to which each individual demonstrated a given trait was determined by averaging the combined ratings assigned to him on that trait by the other members of his house; *second,* the amount of a given trait attributed to others was obtained by averaging the ratings a given individual assigned to the other members of his living group on that trait; and *third,* the factor of insight was measured only in terms of presence or absence. A subject was said to possess insight if he rated himself in the same half of the distribution as others rated him, and to lack insight if he rated himself in the other half. Thus, a subject placed above the average for the group by his associates' ratings on him was said to possess insight if he rated himself above the average he assigned to the group in his own ratings; he lacked insight, however, if he placed himself below the average rating he assigned to the group. Likewise, a subject placed below average by his associates possessed insight if he placed himself below the average rating he gave others, but lacked insight if he placed himself above the average he gave others. This is, of course, a very rough gradation but in view of the coarseness and probable lack of reliability of the self-ratings it was deemed useless to use any finer measure.

Scores for the first (combined ratings) and second (average rating attributed to others) variables were converted to standard scores in order that the three houses might be combined on each trait into one large group. The subjects were then divided into four subgroups as follows: A—those above average in a trait but without insight; B—those above average, with insight; C—those below average but without insight; D—those below average, with insight.

RESULTS

1. *Reliability of Measuring Instruments.* The half-and-half reliabilities as corrected by the Spearman-Brown formula are

given in Table 1 for the first and second variables. No measurement was possible of the reliability of the third variable (insight). The average of the reliability coefficients for the combined ratings was +.89 and for the average rating attributed to others +.65.

2. *Projection and the Lack of Insight.* If projection were operating in every subject, without relation to insight, a high

TABLE 1

HALF-AND-HALF RELIABILITIES, AS CORRECTED BY THE SPEARMAN-BROWN FORMULA, OF THE MEASURES OF THE FIRST AND SECOND VARIABLES IN HOUSES A, B, AND C

	First Variable			Second Variable		
Trait	A	B	C	A	B	C
Stinginess	.85	.81	.88	.49	.91	.72
Obstinacy	.93	.86	.87	.67	.52	.75
Disorderliness	.96	.96	.81	.50	.70	.72
Bashfulness		.95	.94		.72	.50

positive correlation would be expected between "true" stinginess, obstinacy, disorderliness, or bashfulness (first variable), and the mean size of the attributed ratings on the respective traits (second variable). Such calculations were made for all four traits and the obtained coefficients are given in Table 2. They are of negligible size for two traits and negative to a moderate degree on the other two. But these correlations do not serve as a valid test for

TABLE 2

COEFFICIENTS OF CORRELATION BETWEEN THE FIRST AND SECOND VARIABLES ON ALL FOUR TRAITS IN THE GROUP AS A WHOLE AND IN THE INSIGHTFUL AND NON-INSIGHTFUL SUBGROUPS TAKEN SEPARATELY

	Group					
	Whole		Insightful		Non-Insightful	
Trait	N	*r*	N	*r*	N	*r*
Stinginess	97	−.03	65	−.08	32	+.09
Obstinacy	97	+.01	63	−.15	34	+.34
Disorderliness	97	−.35	66	−.46	31	+.13
Bashfulness	60	−.32	39	−.34	21	−.22
Average		−.17		−.26		+.08

the operation of the process since the factor of insight is not considered.

The critical comparison for the projection hypothesis lies between the means of the attributed ratings of Group A (e.g., stingier than average but without insight) and Group B (stingier

TABLE 3

MEAN RATINGS ASSIGNED TO OTHERS (SECOND VARIABLE) ON ALL FOUR TRAITS BY EACH OF THE FOUR GROUPS DESCRIBED IN THE TEXT

Values given are Standard Scores. The mean ratings in distastefulness assigned by the group as a whole to each of the traits are also given; these values are raw scores from a seven-point scale.

	Degree of Distaste-	Group A		Group B		Group C		Group D	
Trait	fulness	*n*	M	*n*	M	*n*	M	*n*	M
Stinginess	5.34 ± .16	20	+.23 ± .14	22	+.02 ± .12	12	−.29 ± .17	43	−.01 ± .09
Obstinacy	4.33 ± .19	22	+.37 ± .13	21	−.29 ± .15	12	−.49 ± .24	42	+.06 ± .11
Disorderliness	5.00 ± .17	11	+.16 ± .22	30	−.55 ± .12	20	−.01 ± .12	36	+.42 ± .07
Bashfulness	3.68 ± .20	7	−.20 ± .19	20	−.41 ± .13	14	+.06 ± .13	19	+.41 ± .17

than average but with insight). According to the hypothesis the non-insightful group should attribute a greater degree of stinginess to others than should the insightful group. In Table 3 are given the mean ratings assigned to others by each of the four groups on all four character traits. In each case the mean attributed rating is greater for A than for B. In Table 4 are shown the

TABLE 4

DIFFERENCES AND RELIABILITIES OF DIFFERENCES OF MEAN ATTRIBUTED RATINGS (SECOND VARIABLE) BETWEEN GROUPS A AND B AND BETWEEN GROUPS C AND D

	A—B		D—C	
		Diff.		Diff.
Trait	Diff.	P.E.	Diff.	P.E.
Stinginess	.21 ± .18	1.1	.28 ± .19	1.4
Obstinacy	.66 ± .20	3.3	.55 ± .26	2.1
Disorderliness	.71 ± .25	2.8	.43 ± .14	3.1
Bashfulness	.21 ± .28	.7	.35 ± .21	1.7

differences, their probable errors, and the critical ratios of the differences.

A similar relationship holds true between Groups C and D; those who were more generous than average but were without insight attributed greater generosity to others, on the average, than did those who were more generous than the average but recognized the fact. This relationship likewise holds true for all four traits. The sizes of the differences between A and B and between C and D are not large but in all cases are in the same direction.

It would perhaps be more desirable to state this relationship in the form of a partial correlation coefficient, the correlation being between the first and second variables with the third (insight) partialed out. This is not possible with the present data, however, since the measure of insight depends on the relation between the self-rating and the first variable.

If the total group is split into two subgroups on the basis of presence or absence of insight, however, a statement can be made in correlational terms of the relation between the first and second variables. In Table 2 are shown these values for all four traits. The relationship is consistently negative in the insightful group and positive in the three largest non-insightful groups. These signs are, of course, consistent with the directions of difference between the four groups as described above.

In summary, these results satisfy the expectations of what should occur in this experimental situation if the projection mechanism were operating. To put it briefly with stinginess as an example: those who were more stingy than average but had no insight rated other people higher in stinginess, on the average, than did those who were equally stingy but recognized their own characteristics in that respect. The same may be said for those who fell on the generosity side of the distribution. Thus the non-insightful groups gave more extreme ratings than did the insightful groups. They were more biased in their judgments and this bias was in the same direction from the mean as they were themselves with respect to their possession of a given trait.

Without belaboring the question of whether the lack of insight was a result of repression in the Freudian sense, or whether it

was a conscious or unconscious process, it can be said that the *effects* of projection have appeared in this situation in a way that was predictable from the present redefinition of that process.

3. *Characteristics of Projected Traits.* The hypothesis was presented above that those habits or attitudes which were persistently motivated and were considered reprehensible by the subjects would be most susceptible to projection. No technique was available for measuring the persistence of the motivation behind the habit-patterns studied; this characteristic must remain, for the present, hypothetical. Some measure was obtained, however, of the distastefulness of or the reprehensibility attached to each trait by each subject in Houses B and C. In Table 3 are given the means of the combined "offensiveness-ratings" of all subjects on each of the four traits. The traits maintained the same relative positions with regard to distastefulness as were found in the independent group of 36 men referred to above. The absolute values were slightly higher for the first three traits and markedly higher for bashfulness, a result perhaps of difference in instructions in the two instances. This obtained rating invalidated the use of bashfulness as a non-reprehensible control.

In order to compare the obnoxiousness attached to the traits by those who possessed them to more than average extent but had no insight (Group A) with that attached to them by those who possessed them to equal extent but had insight (B), the average of the ratings assigned to all four traits by both groups was determined. For Group A it was $4.97 \pm .24$ and for Group B $4.39 \pm .17$. The difference is $.58 \pm .29$, the critical ratio being 2.0. Similar comparisons for Groups C and D show the former to have a mean of $4.53 \pm .23$ and the latter $4.88 \pm .14$; the difference is $.35 \pm .27$ with a critical ratio of 1.3.

These differences are small and exceedingly unreliable, although the direction of difference, at least between A and B, is that to be expected from the hypothesis as presented. Those subjects who were without insight into their possession of the traits demonstrated a greater distaste for the idea of being accused of possessing them than did those subjects who had insight. The difference between C and D is difficult of interpretation without

similar ratings on generosity and the other antonyms of the trait-names used.

In spite of the direction of difference between A and B the hypothesis that a trait must be considered reprehensible in order to be projected cannot be sustained on other grounds. The low ratings on stinginess may be considered as high ratings on generosity. Each reprehensible trait has a socially acceptable opposite which is simply a trait-name, attached to the opposite end of the distribution, and the process of projection occurred, apparently with equal strength, at both ends of the distribution, i.e., with both the reprehensible traits and their socially acceptable opposites (Table 4). That subjects who had reprehensible traits without insight (Group A) rated those traits as more distasteful than did subjects who had insight (B) is not evidence that reprehensibility from the subject's standpoint is an essential characteristic of a projectable trait. This relationship suggests, only, the concurrent operation of other dynamic processes as yet uninvestigated.

4. *The Tendency of a Subject to Lack Insight on More than One Trait.* In Table 5 is shown for each fraternity the number of subjects who lacked insight, i.e., who belonged either to the A

TABLE 5

NUMBER OF SUBJECTS IN EACH FRATERNITY WHO LACKED INSIGHT ON VARIOUS NUMBERS OF TRAITS FROM ALL TO NONE

FRATERNITY	NUMBER OF TRAITS ON WHICH INSIGHT WAS LACKING				
	4	*3*	*2*	*1*	
A		4	8	13	12
B	0	3	7	17	11
C	0	4	3	8	3

or to the C groups, on varying numbers of traits. In House A only 4 subjects lacked insight on all three traits, 8 lacked insight on two, 13 on one, and 12 had insight for all three traits. Since the size of the insightful and non-insightful groups varied unsystematically with each trait in each house, no theoretical distribution-by-chance can be given for comparison, but the table shows no marked grouping of subjects at the four-traits end of the distribu-

tion. It may safely be concluded that the tendency to lack insight is largely specific to any given trait and is not a general personality trait which shows its influence in judgments made on all traits.

DISCUSSION

The consistently negative correlations found in the insightful groups between amount of trait possessed and amount attributed to others suggests the presence of a dynamic process which operates in the opposite direction from projection. For example, a stingy subject does not, as in projection, attribute stinginess to others; quite on the contrary, he attributes generosity. Others' personalities are perceived in contrast to the individual's own. This process occurs in the presence of insight rather than its absence, as is the case with projection, and in order conveniently to differentiate it from projection it is suggested that it be called *contrast-formation.*

The conclusions as itemized below are based on averages and correlations which necessarily fail to consider the individual case. The low reliabilities of nearly all differences indicate the presence of not infrequent individual exceptions to the general tendencies exhibited by the group as a whole. How much these low reliabilities are dependent on lack of reliability of the measuring instruments (unsystematic factors) and how much on systematically operating mental processes which have not been measured it is impossible to say. "Insight" and "reprehensibility," considered as influencing factors, have been measured in the present study; the former was found to be definitely influential and the latter influential to some degree but not in the way suggested by the original hypothesis. The demonstration of this unclear relationship and the significant effect of a lack of insight should serve as a warning against over-simplified "tests" of psychoanalytic hypotheses.[4] Many of these hypotheses are exceedingly complex, involving the interaction of several factors for which too frequently the experimental psychologist has no adequate method of measurement. The lack of clear and concise definitions in the

[4] Hypotheses to the experimental psychologist; demonstrated principles to many psychoanalysts.

psychoanalytic literature is doubtless a result of this complexity but it is to be hoped that analysis of clinical and theoretical literature will allow experimentalists to derive definitions and descriptions for use as provisional laboratory hypotheses.

CONCLUSIONS

1. Those subjects who lacked insight into the amount of a given trait they themselves possessed tended, on the average, to attribute a greater amount of that trait to other people than did those subjects who possessed an equal amount of the trait but had insight. This fact is in accord with the principle of projection as redefined above.

2. Subjects lacking insight into their own possession of a trait assigned more extreme ratings to others on that trait than did subjects possessing insight. This difference was in the same direction from the mean as was the subject's own deviation in that trait.

3. Projection was not operative in influencing the judgments of all subjects on any given trait; its occurrence was apparently confined to those who lacked insight.

4. In the group of subjects who possessed insight a negative correlation was found between amount of trait possessed and amount attributed to others. This suggests the operation of a dynamic process, tentatively entitled *contrast-formation,* which has an effect opposite that of projection on judgments about others' personalities.

5. Judgments about other people with respect to both acceptable and unacceptable (reprehensible) traits showed the influence of projection and contrast-formation.

6. Those subjects who lacked insight into their own possession of reprehensible traits considered the reprehensibility of those traits greater than did those subjects who had insight.

7. There was no evidence that lack of insight was a general tendency influencing a given subject's judgments on all traits; it seemed to be specific to one trait rather than to be a general "personality trait" in itself.

19. PERSONALITY ASSESSMENT

This is a short description of the program adopted by the OSS (Office of Strategic Services) during World War II for *selecting* and *placing* candidates in positions for which they were best qualified. A complete summary and critical analysis of the same program has been published in book form, *Assessment of Men* (Rinehart & Company, 1948). The methods employed deserve careful consideration by clinical and social psychologists.

ASSESSMENT OF OSS PERSONNEL *

Henry A. Murray
and
Donald W. MacKinnon

The task of the assessment board of the Office of Strategic Services was that of judging the suitability of each candidate for a proposed assignment overseas, and of placing him in one of five categories: *not recommended; doubtful; recommended with qualifications; recommended; highly recommended.* During the early months of the program the candidate's personality was assessed solely in relation to the mission selected for him by the recruiting and branch officers. Later, after it was discovered that many men, on arrival in the overseas theater of operations, were assigned jobs for which they had not been assessed, an additional practice was instituted: that of assessing a candidate's fitness in relation to nine large job

* From "Assessment of OSS Personnel," by Henry A. Murray and Donald W. MacKinnon, *Journal of Consulting Psychology*, 1946, Vol. 10, pp. 76-80. Copyright, 1946, The American Psychological Association, Inc. Reprinted by permission of the publisher and authors.

categories as well as in relation to the particular job proposed for him.

As a servicing agency the chief aim of the assessment board was to discriminate unfitness, and so, in this respect, its role could be compared to that of the conventional screening unit, were it not for two significant differences: first, the OSS board had to appraise the relative usefulness of men and women who fell, for the most part, in the middle and upper ranges of the distribution curve of general effectiveness or of one or another special ability, people who had already been selected because of the skill they had manifested in some field of activity; and, second, these men and women had to be assessed in respect to a number of additional personality qualifications—social relations, leadership, discretion (disposition and ability to withhold confidential information), and so forth. The usual screening devices, based on elementalistic principles, though efficient in distinguishing people who, because of one or another marked defect or handicap, are incapable of functioning effectively, are not so successful in discriminating degrees of effectiveness among those whose test scores fall above the usual level of acceptability. Furthermore, none of the conventional screening devices are designed to test social qualifications—good will, tact, teamwork, freedom from disturbing prejudices, freedom from annoying traits, and so forth.

Also, besides eliminating the candidates who did not measure up to the relatively high OSS standard of overall acceptability, the assessment board was expected to predict the performance level of each candidate in fulfilling a designated role in a designated area of operations (e.g., branch chief in Cairo, leader of native resistance groups in Burma, etc.) and, in addition, to write a personality sketch of the candidate, which would assist his superior officer, or supervisor, in dealing with him, or in deciding to which specific place, specific group, and specific function he should be assigned.

To accomplish all this it was considered necessary to set up a program of assessment according to organismic (gestalt) principles, that is to say, to design a variety of tasks-in-situations which would test a man's effectiveness in performing functions of the same type and at the same integrative level, and under somewhat

similar conditions, as those he would be required to perform in the field. For OSS personnel this meant, among other things, that a candidate would have to be confronted by a succession of *varied novel* assignments—requiring quick planning, coordination of muscles with or without instruments and/or the coordination of ideas and words—many of which assignments would have to be executed in collaboration with other people. Make-believe, yet to a degree, realistic test situations conform to organismic principles in so far as they call for functional operations, or *proceedings*, of personality at a relatively high level of differentiation and integration, the level that must be sustained if one is to act appropriately and efficiently in everyday life, especially in a policy-making, administrative or executive capacity.

The assessment board also complied with organismic principles in so far as they attempted in each case to synthesize significant observations of behavior into partial formulations of the personality of the candidate, and from these formulations to deduce the behavior that could be expected of him in this or that situation in the theater. In other words, the task of assessment, as an intellectual proceeding, was a matter of diagnosis (inferring general tendencies and traits and their interrelations from a number of specific signs), and prognosis (on the basis of what is known about these tendencies, traits and relations, to predict future patterns of behavior) and finally, with the latter in mind, to decide on the suitability of the candidate. This differs from the elementalistic mode of appraisal which consists of a series of objective measurements of relatively simple processes or isolated traits, which leads to a final decision based on a list of scores weighted in connection with known correlations between scores and levels of performance (as determined in previous studies of similar groups). The elementalistic method does not call for a diagnosis of the personality.

The bulk of OSS assessment in the United States was done at Station S which was located on a hundred-acre farm, fifteen miles from Washington, and at Station W in Washington, D.C. The former had a three-and-a-half-day program, the latter a one-day program of procedures. This paper is limited to an account of

the conditions that prevailed and the techniques that were employed at Station S.

There a senior staff of about 7 psychologists, psychiatrists, and sociologists, and a junior staff of about 8 graduate students of psychology lived intimately with groups of approximately 18 candidates, who, in the course of their three and a half days in the Area, were entertained and tested and assessed in a variety of ways.

Regardless of military rank or civilian status, all candidates arrived at S in army fatigues and during the period of their stay hid their identities from each other by means of fictitious names and stories of their lives.

The final evaluation of each candidate and the judgment of his suitability for his proposed assignment came from a number of sources and procedures:

1. Casual observations. These were made constantly, since staff and candidates lived together in one house, ate in the same hall, relaxed in a common living room, and played games together both in- and out-of-doors.

2. Standardized tests of abstract intelligence, of mechanical comprehension, etc. These were paper-and-pencil tests of both group and individual type.

3. Projective tests, such as Sentence Completion, Thematic Apperception Test, Rapid Projection Test, the Rorschach, and so forth, used primarily to uncover repressed tendencies which might affect a candidate's motivation or emotional stability.

4. Personal history interviews with each candidate lasting at least an hour and a half, in preparation for which the interviewer examined a Personal History Form filled out by the candidate, his standard test scores, and his performance on the projective tests, and in the course of which the interviewer sought insight into the structure and dynamics of the candidate's personality and his motivational, emotional, and intellectual fitness for his assignment.

5. Group situational tests in which 4 to 7 candidates were faced with the task of solving a problem, either indoors or outdoors, in some cases with a group leader assigned and in other situations

with no leader designated. Group situations of this sort were first introduced by the British W.O.S.B.'s (War Officer Selection Boards) in their testing of officer candidates.

In Leaderless Group Situations the development of group structure could be observed as well as the contribution of each man to it, his practical intelligence, his leadership, his energy and initiative, his social relations, and in outdoor situations, his physical ability. Typical leaderless group situations at S were:

a) Wall Test. A group of 6 men were brought to one of two parallel walls, 8 feet apart and 10 feet high, and told that their task was to get themselves and a "king-size bazooka" (actually a heavy 8-foot log) over the two walls and down on the far side without getting down between the walls.

b) Discussion Test. A group of six men, sitting around a table, were asked to discuss for half an hour the question, "What are the major postwar problems which the United States will face after the war?" and at the end of that time, to choose one of their group to present their conclusions to the staff.

In Assigned Leadership Problems, each member of the group was, in turn, assigned to lead his group in solving some problem, for example, crossing a mined road, searching an agent's room in enemy-occupied territory, and so forth, situational tests in which fact and fancy were fused.

6. Individual Situational Tests in which a candidate met a situation alone, such, for example, as:

a) Construction Test. The candidate was shown a glorified tinker-toy with which he was instructed to build a 5-foot cube with 7-foot diagonals in ten minutes with the aid of 2 helpers whom he was to direct. The "helpers" were members of the junior staff who soon turned the situation into a test of the candidate's frustration-tolerance by becoming increasingly lazy, recalcitrant, and insulting. No candidate ever completed this task, and there were those who became either markedly upset or enraged by the humiliations they suffered.

b) Stress Interview. The candidate was told to assume that he had just been caught going through a secret file in a government building in Washington, and, after ten minutes in which to think up an innocent and plausible explanation for his presence there,

he reported to a basement room where, under the glare of a spotlight, he was given a grilling cross-examination on the details of his story in an attempt to confuse and disquiet him as much as possible.

7. An obstacle course to test the candidate's physical ability, especially his daring and agility.

8. Tests of observing and reporting, for example, the terrain at S, personal effects left in a room, a map, contents of a brief case, etc.

9. Test of propaganda skills, for example, a script for a spot radio broadcast and a pamphlet to disturb Japanese workers in Manchuria.

10. Psychodrama. Situations tailor-made for each candidate to reveal his ability to cope with difficult social situations *vis-a-vis* another candidate.

11. Debate. Toward the end of the program a convivial evening party was held with hard liquor for both candidates and staff with a more or less informal discussion or debate by the candidates on a timely topic, such as, "What are we fighting for?" "What should the Allies do with Germany after the war?" etc. The party which lasted usually long past midnight often revealed aspects of the candidates' personalities not seen in soberer states.

12. Sociometric questionnaire given candidates on the last day which revealed their opinions of the colleagues, those whom they would choose as their leaders, those whom they would accept socially and those whom they would reject, those who were most dogmatic, most inconspicuous, most irritating, etc.

13. Judgment of others. As a test of their ability to size up others each candidate was asked to write a personality sketch for each of the five men in the group whom he had come to know best during his stay at S.

Material from all these sources, interpreted in the light of the picture of the man obtained in the personal history interview, and, in turn, correcting that picture, was utilized in writing the Evaluation Note on the candidate which constituted the main part of the S Final Report. In this note of six to seven hundred words an attempt was made to convey in nontechnical terms the main features of the character structure of the candidate.

A second part of the Final Report consisted of ratings on a six-point scale (very inferior; inferior; low average; high average; superior; very superior) of ten variables of personality, the first seven of which were considered important for all candidates, the last three of which were necessary for certain types of assignment. These variables were:

1. *Motivation for Assignment:* the degree to which a man felt impelled to contribute to the war effort; his interest in the proposed assignment.
2. *Energy and Zest:* average level of purposive activity and initiative.
3. *Practical Intelligence:* skill in dealing with things, with people and with ideas.
4. *Emotional Stability:* governance of emotions under stress; absence of anxiety, anger and depression; absence of neurotic symptoms.
5. *Social Relations:* ability to get along with all kinds of people; cooperativeness; absence of annoying traits.
6. *Leadership Ability:* ability to organize groups and evoke cooperation and respect.
7. *Security:* ability to keep secrets and maintain cover.
8. *Physical Ability:* agility, daring, ruggedness.
9. *Observation and Reporting:* ability to observe and remember significant facts; to evaluate information; to report accurately and concisely.
10. *Propaganda Skills:* ability to devise and execute subversive measures for disintegrating the morale of the enemy.

In order the more adequately to observe candidates and to rate them on the variables of personality relevant for their assignments each class of 18 was divided into 3 subgroups of 6 men, to which a team of 2 senior and 1 junior staff members was assigned. It was the responsibility of this staff team to interview their 6 candidates and to rate them in various situations and tests, and to prepare the Final Report on each of them. This provided that the ratings of all personality variables of each candidate rated in a situation was the result of at least 3 independent ratings combined with final ratings in substaff conferences in which the per-

formance of each candidate and its meaning were discussed at some length.

Since there were, in all, 35 procedures, and since each procedure provided an opportunity to rate 1 to 4 variables, there were anywhere from 2 to 10 scores for every candidate on each of the 10 variables by the end of the three and a half days of assessment. These ratings for each candidate were represented by colored pins placed on a huge scoreboard at one end of the staff room. For every rating above average a red pin was inserted, and for every rating below average a blue one, thus yielding an easily grasped picture of each man's performance in all procedures at S at the time his case was discussed by the entire staff at its final meeting on the afternoon and evening of the last day of a class.

At this staff meeting it was the custom to have the first part of the Evaluation Note on a candidate read by the senior staff member who had interviewed him and who was responsible for his overall evaluation, and to have the second part, which described the candidate's behavior in the situations at S, read by the junior staff member who had been responsible for this part of the note. Other staff members contributed their impressions of the candidate in question, and proposed changes of or additions to the note. When the final form of the Evaluation Note had been agreed to by the staff as a whole, the final ratings of the variables for this candidate were made and a decision reached as to his suitability for his proposed assignment. The Final Reports made up of these three parts—the job fitness rating, the ratings of the 10 personality variables, and the Evaluation Note—were in this way prepared for each candidate, typed, and already delivered in Washington before the candidates reported there the next morning.

About 5,500 men and women went through the Assessment Centers in this country. Of these, about 20 per cent were not recommended for overseas duty, and another 20 per cent were not sent overseas for other reasons. Of those who did go overseas, about 1,200 were followed up in the different theaters—ETO, METO, IBTO, and CTO—where they were appraised by those who had supervised their work, as well as by 3 or 4 of their associates.

The analysis of this appraisal has not been completed. At the present time a report can be made only on the first 300 cases. On this basis, 6 out of every 100 men passed by the assessment staff proved to be unsatisfactory in the theater for one reason or another. Some of these unsatisfactory persons had been given assignments in the field other than those for which they had been assessed. Some others had failed to measure up to the high OSS standard because they lacked the necessary degree of some very specialized skill, the determination of which did not fall within the province of the assessment program. Only one of the 300 cases failed because of a neuropsychiatric condition.

20. LANGUAGE

There is an enormous literature on language, including theories of its development, analysis of its kinds, and studies of its significance. Articles and books on *semantics* have become increasingly popular. The present selection deals with the relations of language to certain social processes. Particularly it shows the relationship of language, as communication, to the *opinion process.* In this connection, also see Selection 2, *Communication and Objectivity,* pages 13-30. The material below deals with slogans; name calling; change in reference terms; and emotions, words, and opinion.

LANGUAGE AND PUBLIC OPINION *

William Albig

SLOGANS

The effective slogan has a few well-known, simple characteristics of structure. An advertising man writes, "The slogan should be simple to understand, easy to remember, and pleasant to repeat. Since the success of a slogan depends largely on its repetition, the qualities of brevity, aptness, and original approach are imperative. Seven short words would seem the maximum to use in a slogan, six just few enough to be within the margin of safety, and less than that even more desirable." [1] "Back to Normalcy" was an almost perfect political slogan, as it appeared to mean almost all things to all men and was inherently meaningless. Lumley describes the most effective slo-

* From *Public Opinion,* by William Albig. New York: McGraw-Hill Book Company, Inc., 1939, Chap. 5, "Language and Public Opinion," pp. 82-89. Copyright, McGraw-Hill Book Company, Inc. Reprinted by permission of the publisher and author.

[1] Kleppner, O., *Advertising Procedure,* 1934, p. 112.

gans as brief; rhythmical; alliterative; repetitive; affirmative; appealing to curiosity, the sentiments, class and authority; punning; appearing to summarize a profound idea.[2] Select your own illustrations of slogans that have some of these characteristics. There is certainly plenty of material in the language of contemporary politics and business. The effective slogan becomes a stimulus situation to arouse known attitudes.

The political and religious fields are the ancient stamping ground of the slogans. Their use in advertising, by causes, movements and various organizations, is a recent development appearing during the last fifty years. In the political field, slogans have been especially associated with popular mass movements. Those related to the prevailing attitudes such as the famous "Liberty, Equality and Fraternity" are strong, effective and persistent. Those applied from above which do not tap such attitudes are transient and relatively ineffective. Certain slogans are officially adopted by nations, parties, groups and organizations. "In God We Trust" is printed on American money. During the depression a waggish banker suggested that there should be stamped on the other side, "I hope that my Redeemer liveth." National objectives may be stated, as in "Make the World Safe for Democracy." Group declarations are incorporated in slogans, as in the case of the Japanese feminists who rally around the phrase "The Sun Is Female." Crisis and conflict situations are the breeding ground of slogans. All the wars and group conflicts of recent centuries have called forth many phrases. Emotional campaigns necessitate catchwords.

Many slogans are associated with particular personalities. General Pershing is credited with "Lafayette, we are here," Marshall Petain with "They shall not pass," and the Kaiser was the object of the phrase "The War Lord." William Jennings Bryan was long known by "You shall not press down upon the brow of labor this crown of thorns; you shall not crucify mankind upon a cross of gold." Vanderbilt never outlived "The public be damned." Personality stereotyping is sometimes accomplished in phrases.

There is a fashion element in the coining of phrases. In the early nineties a Kodak company and a hook-and-eye company ad-

[2] Lumley, F. E., *Means of Social Control*, 1925, Chap. 7.

vertised with "You Press a Button; We Do the Rest" and "See That Hump," respectively. These were given wide publicity and were paraphrased and parodied on the stage, in the newspaper and in conversation.[8] For the next decade, advertising largely consisted of slogan making. This word jugglery often was crude, inept and ineffective. But many advertising men of that day appeared to believe that if they could only discover the proper phrase success was assured. Today, hundreds of phrases are retained in the advertising of various products, but such slogans have become a relatively minor part of advertising technique. Popular contests in the coining of slogans are primarily used today to preoccupy thousands of people with the advertised product rather than for the discovery of a telling phrase. When the playing with words is popular, sheer verbal exuberance leads to crude excess. The groceterias, morticians, shellubrications, and the like, are characteristic of the more flamboyant phases of American business life. Slogan making by the publicity men spread from commercial advertising to the campaigns of athletic groups, education, religious organizations, communities, reform groups and civic clubs.

The mind of modern man is stimulated by an increasing variety of impressions. Condensation of appeals is inevitable, as is evidenced by forms of stereotyping, newspaper headlines, and the like. Slogans are peculiarly adapted to this need. They may distort, but they satisfy. Social psychology is not adequately developed to provide very exact answers as to their effectiveness. If the phrase happens to be adapted to existing attitudes, it is successful. But the special pleader cannot manipulate at will. Advertising men are frequently too sanguine as to the effect of slogans. But catchwords are persistent and inevitable.

NAME CALLING

Among the simpler peoples, the relationships between language forms and the objects they designate are often mystically conceived. The name is thought of as an intrinsic part of that which it designates. Therefore, primitives' magical conceptions frequently lead them to the use or avoidance of names as a way of manipulat-

[8] Presbrey, F., *The History and Development of Advertising*, 1929, p. 369.

ing that which is named. You may kill or injure a person by the proper spells or incantations in which you incorporate his name. Likewise, you may influence the spirits or objects in nature by naming them. The language of magical reference and the tabooed language forms of various preliterates provide a baffling and intricate problem for the ethnologist. When primitive peoples indulge in derisive name calling and in opprobrious epithets in face-to-face ridicule, there is an especially potent invasion of personality. One is not only socially depreciated but also magically attacked. Hence, many primitive peoples find name calling and ridicule an effective method of social control. Formal name-calling ceremonies were a widespread method of conflict among North American Indians and Eskimos.[4]

Children's language, the verbalizations of the mentally aberrant and the naming by opprobrious epithets indulged in by large publics, evidence something of the same tendencies. Honorific and humilific terms exist in every language. There are more of the latter. Both types are widely used in social conflict, not only to designate those referred to, but also to laud or depreciate them. When the conflict develops between large popular groups, the process is inevitable. Of course, there may be more or less of it. Like other elements in a changing culture, there are fashions in name calling. The practice waxes and wanes, depending upon the rise and imitation of expert name callers and upon changes in the social structure that present new tensions and conflict groups. A Theodore Roosevelt greatly increases name calling for a political generation. Protestantism provided ever new sects to hurl opprobrious epithets at one another, since they had diverse interpretations of the ways of the gentle Christ.

As increasingly divergent definitions of religious, economic and political phenomena have developed during the past four centuries; as special interest groups of many kinds have arisen; as populations have become more mobile and have come in contact with more diverse types of people; as the attention areas of modern man have widened, providing him with more things to be prejudiced against, the practice of name calling has increased. Name calling is rife wherever there are major divisions in society

[4] Thomas, W. I., *Primitive Behavior*, pp. 544 *ff.*, 1937

between which conflict intermittently occurs. Names are hurled back and forth between political groups, between churches, economic groups in conflict, town and country, between the sexes, at the physically different, at foreigners and, indeed, wherever conflict is occurring between the standards and ideas of two or more groups. Political functioning in American democracy has persistently been conducted amidst more or less name calling, taunts and crude buffoonery. J. G. Blaine's railroad deals were referred to when crowds chanted, "Blaine, Blaine, J. C. Blaine, The continental liar from the state of Maine. Burn this letter." Cleveland's supposed illegitimate son gave rise to the campaign jingle, "Ma, Ma, where's my pa? Gone to the White House. Ha, ha, ha!" In Chicago's brawling primaries of the Thompson period, the candidates outdid one another in hurling back and forth such names as "chimpanzee," "nut," "baboon," "looney," and the like. Senator Brookhart was an able name hurler. In his last senatorial campaign such terms as "cockroach," "bologna fiddler," "pay-roll racketeer," "bunk shooters," and "hee-haw Chautauqua weight lifter" were coined. The late Senator Huey Long and Father Coughlin were experts.

In the struggles between Protestant denominations during the last half of the nineteenth century, a choice variety of names were created and mutually exchanged. These names are not so much in evidence now, which is perhaps an indication that the rank and file of their memberships are not now so much interested in the fine points of doctrinal difference. The conflict has shifted to religionists versus nonreligionists. The late Billy Sunday convulsed large audiences with his vivid name calling. He once said, "Our country is filled with a socialistic, I.W.W., Communistic, radical, lawless anti-American, antichurch, anti-God, antimarriage gang, and they are laying the eggs of rebellion and unrest in labor and capital and home; and we have some of them in our universities. I could take you through the universities and pick out a lot of black-hearted, Communistic fellows who are teaching that to the boys and sending them out to undermine America." [5]

Changing relationships increase or decrease name calling. One does not hear or read of the variety of names directed at the "city

[5] Quoted by Huse, H. R., *Illiteracy of the Literate*, 1933, p. 175.

slicker" by the country folk or toward the "rube," "hayseed" or any of the other names thrown countryward by the city dweller of thirty years ago, probably because the more obvious and discernible differences of dress, speech and manners have diminished.

Prof. Lumley has characterized the meaning of this name-calling practice as a "protest against social change and thus as a means of social control." [6] It is a warning to innovators, but usually not a socially conscious process. Name calling may be most profitably described in terms of its influence on popular opinion in conflict situations. The Puritans were referred to by the Cavaliers as "Roundheads," because most of them had their hair cut short. Such names designate and depreciate the outsider and by implication elevate the name caller. In the community, groups call names at foreigners or at alien cultural or racial groups. "Bohunk," "wop," "dago," "chink," "greaser," "nigger" are all belittling names. They denote the outsider, the stranger, the alien person who must be battered down. This name calling is a form of fighting; it is a protest against invasion and an attempt to assign an inferior position to the stranger. Other types of opprobrious epithets perform a similar function. The names usually apply to the most obvious differences, such things as personal appearance, manners, food preferences, variant religious exercises, speech, and the like.

CHANGE IN REFERENCE TERMS

The meanings of words may be gradually changed by folk practice or through redefinitions by language experts. In English, "to haul" means to move by force and violence, but, in America, the meaning is "to transport"; "to heft" in English means "to lift up," but, in America, the meaning gradually came to be "to weigh by lifting." [7] In other cases the word is the same and its objective definition is the same, but popular responses to it have changed. Recently, a young woman of New York was being beautified by a French hairdresser who was a recent immigrant. He noticed a blue pin that she was wearing and inquired its meaning. "That," explained the young woman, "means that I am a Daugh-

[6] Lumley, F. E., *Means of Social Control*, 1925, p. 300.
[7] Mencken, H. L., *The American Language*, 1936, pp. 121-124.

ter of the American Revolution." "Oh, this is most terrible," said the Frenchman, throwing up his hands in horror. "I always thought Mademoiselle such a nice, sweet girl, and now you tell me you are a revolutionist." In still other cases, the word is changed to another, while the objective reality remains the same. Popular speech of the Victorian period changed "legs" into "limbs," a wine cooler into a "sarcophagus," "breast" into "bosom," and a young girl was informed that "only animals sweat, men perspire but young ladies merely glow." In many cases, changes in language forms reflect changing popular values and opinions. Many euphemistic terms result from popular aversion to certain words. Hence, the references to the "deceased" and the "departed" and to "misconduct" and girls "in trouble," the variety of terms for "drunken" and scores of other softened words.[8]

On the other hand, language changes may be brought about by individuals and groups who manipulate language in the interests of a cause, a viewpoint or some other special bias. When a Chicago paper refers to the unemployment insurance bill, it persistently headlines it as the "idleness" insurance bill. When the break in sterling took the English pound to its lowest level, newspaper readers were not told that sterling was down but that "gold leaps up again." Groups change language in their own interests. "The concrete realities of politics are individual human beings, living together in national groups. Politicians—and to some extent we are all politicians—substitute abstractions for these concrete realities, and having done this, proceed to invest each abstraction with an appearance of concreteness by personifying it." [9] When a military writer likes to speak of "sabers" and "rifles" instead of "cavalrymen" or "foot soldiers," he has abstracted in this fashion. In a recent Associated Press report, one reads, "The Japanese troops accepted the challenge. Japanese reinforcements are being rushed in consideration of casualties expected." Troops have been personified in the idea that they as individuals had accepted a "challenge" and, on the other hand, have been tragically abstracted when referred to as "casualties." The astute political leader sub-

[8] Huse, H. R., *Illiteracy of the Literate*, 1933, pp. 32 *ff.*, for further illustrations of euphemistic terms.

[9] Huxley, A., *The Olive Tree*, 1937, p. 96.

stitutes new words for those which have become unpopular. Le-Bon noted that "when crowds have come, as the result of political upheavals or changes of belief, to acquire a profound antipathy for the images evoked by certain words, the first duty of the true statesman is to change the words without, of course, laying hands on the things themselves." [10]

EMOTIONS, WORDS, AND OPINION

It is reported that a professor of economics recently delivered to a popular audience a scholarly address on economic problems and foreign affairs. Respectful applause followed the lecture. But when the following speaker said, "Prof. *X* has given us a learned address, but I think he missed the essential point—what the world wants is more brotherly love," the applause was deafening.[11] The second speaker had mentioned an emotionally tinged word.

That, as members of large publics, we are conditioned to respond with various emotions to certain words is an obvious fact. An American electorate, congregation, audience, reader of class periodicals or advertising public is, at times, the victim of a leadership manipulating emotionally tinged words. Emotional responses play a large part in the popular-opinion process. Leaders and special pleaders, advertising men and publicity experts use various appeals to the emotions. In the art of propaganda, the attempt is made to use catchwords that will arouse emotion and thwart reflection. However emotion may be described in psychological terms, the individual is aware of behavior during disturbed states of bodily and mental functions that differs from behavior in the absence of such disturbance. One of the uses of language is to stimulate such disturbances and the resulting behavior. Fear, anger, resentment, insecurity, avid self-seeking and many other emotional elements are related to certain words. Only the intellectually mature person, and he only under exceptionally favorable conditions of training and of the immediate situation, may partly escape from this bondage to words. His escape is only intermittent.

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[10] LeBon, G., *The Crowd*, 1896, p. 121.

[11] Garrett, J., "America Laughs at Herself," *The New Statesman and Nation*, Sept. 29, 1934, p. 394.

Appeals to traditional emotional attitudes may be made when the simplest logical analysis would indicate a quite different state of affairs. In the battle against votes for women, especially in England, women were appealed to as "ministering angels," "gentler natures" and "civilizing influences." In the name of "noble maternity," they were asked to abjure political functioning.

Among masses of people, emotional attitudes are related to particular words by training, inculcation, formal and informal education. In earliest language experience there are words rich in emotional, rather than conceptual, connotation. "Bugaboo, hobgoblin, bugbear, hoo-doo, have no clear conceptual content, but they do stand for something to be feared. And in maturity we have a long list of terms whose real significance is as much emotional as it is conceptual. Such, for example, are the terms mother, home, country, traitor, and the like." [12] In the American community there are emotional responses to such words and phrases as "honesty," "kindness," "booster," "knocker," "success," "average man," "practical," "snob," "common sense," "steady," "progress," "radical," "conservative," "atheist," "community spirit," "the happy child," "red-blooded," "the American way," "expert" and scores of other terms.[13] Lists of words with obvious emotional connotations may be developed for different cultures, ages, groups and classes, and the like. Prof. Friedrich notes a greater emotional response to the words and phrases of nation and country among rural dwellers than among urban proletarians.[14] In a recent study a series of sixteen statements on social issues was presented to 742 subjects, who were asked to indicate "yes" or "no" to each of them. Some time later, these statements were presented once more, having been divided into equal groups of two statements each, with each group headed by the comment that the statements in it were typical of conservatism, fascism, patriotism, pacifism, liberalism, radicalism, socialism or communism. The subjects once more indicated "yes" or "no" to each statement. No reliable shifts in re-

[12] Britain, H. H., "The Function of Emotions," *Psychological Review*, 33:37.
[13] Lynd, R., and Lynd, H. M., *Middletown in Transition*, 1937, pp. 403-419.
[14] Friedrich, C. J., "The Agrarian Basis of Emotional Nationalism," *Public Opinion Quarterly*, Vol. 1, pp. 50-61.

sponse were noted for conservatism, patriotism, pacifism, liberalism or socialism. But opposition to fascism was indicated by shifts of from -11.8 to -70.0 per cent in the various groups, radicalism brought about a negative change of -32.1 per cent, and communism caused -19.0 to -62.2 per cent of the subjects to change their answers.[15]

[15] Menefee, S. C., "The Effect of Stereotyped Words on Political Judgments," *American Sociological Review,* 1:614-621.

21. FOLKLORE

The materials below are excerpted from a longer discussion of *medical folklore* in a small community. Although the description is limited to "medical" matters, it is illustrative of the kinds of folklore and superstitions that exist on a great many subjects. The community is the same one described in Selection 6, *Age Factors,* pages 63-68.

THE FOLKLORE OF A SMALL TOWN *

Carl Withers

Although the assigned topic indicates a wider scope, I shall attempt to discuss only the medical folklore of a small midwestern community which I have pseudonymously described elsewhere, in more general anthropological terms.[1] A book-length treatment of its folklore, including the more usual folkloristic categories, is in preparation.

The community will, in this present paper, be called Smalltown. The population of Smalltown is slightly under three hundred, and it is the local trading center for about two hundred farms which lie on a small prairie surrounding the village, and in the nearby hills.

Old men and women now[2] in their seventies say that, when they were children, "the woods were full of witches." Most witches were women; a few were men, though the word, when applied to a man, usually meant only a "water witch" or dowser, who with a forked stick could locate underground "streams" of water. A

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* From "The Folklore of a Small Town," by Carl Withers, *Transitions of the New York Academy of Sciences,* 1946, Vol. 8, pp. 234-251. Reprinted by permission of the publisher and author.

[1] West, James, *Plainville, U.S.A.* New York: Columbia University Press, 1945.

[2] "Now" means 1939-1940, when field work was done.

few witches had power to harm with ill-luck, sickness, even death. Most were benign, however, serving as "granny women" (midwives), sick-bed nurses, and respected repositories of the lore of home remedies. Women who practiced these arts were not necessarily witches, but most granny women were. Midwifery was a semi-specialized profession.

A granny woman was in particular demand, not only if she had practical command of childbed techniques (some of these were magical: for example, she should know enough to burn cobs under the bed when parturition was difficult), but also if she knew spells to ease pain, could stop blood from flowing by murmuring a Bible verse or magic rhyme, could remove warts with spit or string or words, and knew charms or devices to catch reluctant lovers or to repel undesired ones.

Most of what are locally called "the old-home remedies" are passing into disuse, but enough were reported to fill many pages. Here are a few, together with the names of the ailments for which they were, or are, given. Colds are commonly viewed as "something you just have to wear out," yet there are many old remedies for them. One is to eat honey, because it is made out of wild flowers; another, a tea brewed of field balsam, and sweetened. For coughs, drink hot tea made by boiling mullen leaves and hoarhound, or by boiling shredded hickory bark. ("Hickory tea," in another connection, is a "remedy" applied directly with a hickory switch to the backside of a small boy.) For a sore throat, swallow a teaspoonful of sugar saturated with turpentine or kerosene, or blow dry sulphur into the throat through a paper funnel. A preventive gargle for colds is one quart of boiled rainwater containing a teaspoonful of salt, soda, and carbolic acid; this should be used every morning. Another gargle is vinegar, liberally sprinkled with pepper and salt. Some "old-style" farmers and town people swallow skunk oil for colds, though they know that most of their neighbors laugh at this remedy. Skunk oil is also taken internally for "croup," dropped into the ear to stop earache, rubbed on the chest for a chest cold, and applied externally to any part of the body beneath which there is a pain or "information" (inflammation).

A farm boy in high school mentioned with ridicule all of the

following remedies and said they were "still in use": putting a spider web on a wound to stop bleeding; applying salt to a cut to heal it; smoking coffee for toothache; a quid of tobacco on an aching tooth; a tobacco quid on a baby's stomach to cure "worms"; pumpkin seed tea for "stomach worms"; salt and vinegar poultices on the back for kidney trouble; gunpowder and cream ointment for ringworm; canning acid and pine tar salve for eczema; nicotine from a pipe for eczema; golden seal for sores in the mouth; applications of cow dung tied in a white flour sack to mump-swollen testes to draw out the swelling (cow dung is also sometimes used as a face bleach); application of a mixture of coal tar, turpentine, and camphor to the right side to cure appendicitis; and carrying a buckeye or a lump of sulphur in the pocket to cure or prevent rheumatism. In a forthcoming book called *Ozark Superstitions,* Vance Randolph mentions a respected Ozark physician who carries a buckeye for rheumatism, on the basis that it *can't* do any harm and *might* help. Patent medicine is, for the most part, a commercial development from the recognized medical profession, but, since its main use has always been to by-pass doctors and their fees, it is best treated in connection with home remedies. The main difference, in local eyes, is that home-prepared remedies are made from materials that *"we* know," while patent medicines are prepared from formulae that "city doctors and manufacturers know."

Patent medicine came into great favor at least forty to fifty years ago, although this seems also to have been the period of greatest rivalry between all methods of curing; through witches (specialists in both magical formulae and home remedies); through a far wider parental knowledge of home remedies than at present; through patent medicines of various kinds; and through regular physicians. There were over a dozen physicians in the county in 1900. In 1940, there were only three, only one of them active. Whether sickness has diminished during the same period, I do not know. Some oldsters say, "There wasn't no sickness around when I was a child." Others say, "In them days ever'body was *down* half the time." Medical records were wholly lacking until recent years and are still inadequate. Malaria does seem to have been very prevalent until recent years, and typhoid fever

a scourge every summer. Undoubtedly, there were also more frequent epidemics of such diseases as whooping cough, measles, mumps, scarlet fever, smallpox, and diphtheria.

When children or adults become ill, home diagnosis and home treatment are generally tried first. Home diagnosis of the child, the husband, or of herself, is usually done by the wife, though some men are also "good in sickness," which means good in diagnosis, treatment, and "care."

An old country proverb goes: "When home remedies fail, try a doctor." There is one aged physician in the community, whose techniques are presumably similar to those of other rural practitioners of his generation—perhaps better, since his son, with whom he is on extremely intimate terms, is a respected physician in the regional metropolis, a city of 60,000, sixty-five miles away. There is also a young osteopath in another town in the county. There seems to be no great local recognition of the differences between the two types of skill and training. People select between the two on the basis of past experience, the comparative age and "modernity" of the two men, and out of a whole welter of hearsay and comparisons of cases of "kill" and of "cure."

Other general practitioners are consulted in nearby county seat towns, but since home call rates are based on mileage, they are too expensive for ordinary home calls. Beyond the immediate area is the regional metropolis, where people go to consult specialists, for hospitalization, for major operations, and for some minor ones. Emergency cases, for example, of acute appendicitis, or what is diagnosed as such, are rushed there in the local undertaker's ambulance.

There are also a few "radio doctors" and "mail order doctors" who advertise in the press, whom some people patronize. The local jeweler and tinker has "got more good" from one of these, with whom he is in correspondence, than from all the "regular doctors." He claims to have spent, in earlier years, thousands of dollars with physicians, whom he calls "butchers and thieves." His mail order doctor denounces all drugs, and prescribes foods, particularly melons, prunes, bran, and mineral oil as medicines. For the notorious "goat gland doctor" Brinkley, whose broadcasts from Kansas were terminated by law, there was about as much

sympathy as condemnation, and some people still listened to him broadcast from Mexico. A cancer hospital in the state, which "cures without operations," carries on local propaganda, and it is well thought of. Some people "swear by" chiropractors, though there is no chiropractor nearby.

Beyond all these regional services is the world of "big city doctors," which everybody has heard of, though none has patronized. People have heard of doctors who "charge you $100, just to see if your tongue is coated." Some have read of psychiatrists and other "mind doctors."

People, in general, think there is not much to be done about dental decay. Either you have good teeth or you don't. Many think that, if you start dental repairs, the dental work itself, particularly cleaning, which, they say, takes off all the enamel, stimulates further decay. They point out that this is to the dentist's financial advantage. Some oldsters says that people used to have better teeth than folks have nowadays, attributing this fact to tobacco chewing, clay pipe smoking, the prevalence of home-grown foods, and many other factors. Some modern ideas are coming in that brushing the teeth prevents decay; that oranges prevent decay; that milk prevents decay.

It is told that, in the old days, a good many old people grew a complete third set of teeth, long after their permanent teeth were gone. At least ten long-since-dead oldtimers are supposed to have done so. A related story is that many old people in the past, after years of fading eyesight, received their "second sight," and for the rest of their lives were able to read their newspapers and Bible (if they knew how to read) or bead their rifles on a squirrel, as in their days of youth.

Native attitudes toward recognized physicians and standard medical procedures are a curious hodgepodge of old and new, of suspicious resentment and dependence. Part of this resentment reflects an attitude of suspicion toward science and all its works, including evolution. Part of it comes, of course, from the fact that medicine suggests disease, pain, and ultimate death—subjects which are not very pleasant to think about. People utter proverbial generalizations, like "Doctors don't know anything!" or "With doctors, it's all guesswork." Many natives speak of doctors

as callous butchers or, like lawyers, as interested in prolonging a case for what they can get out of it. The financial motives of most doctors are considered questionable, and sometimes very strange rationalizations are offered. I heard one man deny the existence of "rabbit fever." He had skinned and dressed rabbits all his life without catching anything, and he said all the talk about rabbit fever resulted from a league between the doctors and meat-dealers, to prevent people from eating meat which costs nothing. The highest tribute to a doctor is to say, "I have *faith* in him." The word "faith" here carries a kind of overtone of the sacred, as in the phrases, "faith in God" or "faith in Salvation."

Vaccines and serums of all kinds are viewed with suspicion. Few children are immunized against smallpox, and any movement to introduce compulsory immunization of school children is cried down. Many people say, "The vaccination is worse—and kills more people—than the disease." Others view vaccination as valueless, because its theory, as the theory is locally understood, seems foolish and unreasonable. "To stick dead bugs into you to keep live ones from working on you—now you *know* that's silly!"

The urban prestige value of operations has only begun to penetrate Smalltown. A few women are said to "want operations" and to boast of them; and, oddly, people seem rather proud of tonsilectomies for their children. However, in general, surgery is viewed with great fear and horror, and as often useless. Appendectomies, in particular, are thought of as a surgical 'racket.' There are stories of people threatened by a doctor with death, unless they submitted to an appendectomy, but who just took a physic, got well, and stayed well. Others went through the operation only to have the symptoms recur later. In a new operation, the appendix was found intact. The widespread story is told (with local application) that, in one case, a pair of scissors and a wad of gauze were found sewn in beside it. People seem pleased to narrate and to believe such stories.

Hospitals, though beginning to be patronized fairly extensively, are often spoken of as places "where more people come out dead than come out alive."

Explanations of health or disease run a very wide gamut. Malaria, once universal, is now practically non-existent, but people

still talk about it. What caused it? And what caused it to disappear? Most people accept the fact that infected mosquitoes transmit malaria; but, since there are still mosquitoes, it is hard to understand why malaria slackened, unless it took a greater *number* of bites than people get nowadays to catch malaria. It is said that everybody took a lot of quinine during a good many years, but the *mosquitoes* didn't take any quinine! Some people cling to the early theory that dampness, not mosquitoes, caused the malaria of early days. There were more trees in the river bottoms, and the air was damper. Besides, it *rained* more then, because the soil (now 52 per cent eroded!) produced better crops than it will grow today. Others say that a mosquito may cause malaria, but so may a chigger, a tick, or any other insect that bites. Some people say that mosquitoes must have caused typhoid, once prevalent (people say) every summer. The argument runs: Mosquitoes caused the malaria; typhoid and malaria disappeared at about the same time; therefore, mosquitoes caused the typhoid. Indeed, it is difficult to convince people of any completely credible connection between typhoid and lack of sanitation, because some families drink water out of green-scummed springs, or out of improperly walled and covered wells, and remain ostensibly hale and hearty. The hotel well stands twenty-five feet from the hotel privy, and slightly downhill from it. I asked the aged proprietor if he had ever had his water tested. "Yes," he said, "a man came through here from the capital and tested it, and he said it was ninety-nine per cent pure. He said that, by rights, I ought to concrete it down about six feet from the top, but I didn't think that was necessary for just that one per cent. *I* never got sick and I never knowed nobody to get sick from drinkin' this water."

The whole problem of reform in sanitation presents many difficulties. People, in general, believe in protection against "germs," though some view germs as "just a superstition of city folks." Separate towels at home, or separate drinking cups at school, are hard to accept, because it is unsociable not to share a towel, and insulting not to want to drink after somebody else.

The problem with all folklore is what to make of it. There has been endless collection of old remedies, superstitions, beliefs, legends, riddles, rhymes, proverbs, games, folksongs. Aside from

the labors of a number of part-time workers in the field of primitive folklore, the concentration of effort has been on accumulating texts and variants, and on establishing distributions of themes and items. This antiquarian pursuit no longer seems very fruitful or illuminating. Better techniques should be devised to explain the use and meaning of folklore in the social life of the group from which it is collected.

There is, perhaps, one very useful method of dealing with the kind of material presented in this paper. The mixture of ancient and modern fact and fancy which I have called the medical folklore of Smalltown resembles every other aspect of the community life, as I have described it elsewhere. Smalltown is an oldtime hillbilly farming community, in the throes of adjustment to urban influence entering by every device of modern communication: radio, newspapers and magazines, travel, and direct governmental intervention through numerous agencies and facilities. Under the impact of the new, old attitudes are being abandoned, or reinterpreted, or, as a form of protest, reinforced. This hodgepodge of medical lore well illustrates the nature of the conflict, and of the resultant disorientation. The conflict is, in the main, along class lines and between the generations. Though class is locally denied, there is an upper class of more modern "prairie" farmers and a lower class of "hill" farmers.

New remedies, new foods, new rationalizations regarding medical care and food, disturb the old pattern of "felt security," as the young people, the "better class" people, the new federal employees (the reformers!) condemn, ridicule, and try by a frontal attack to change the ancient way of life. Some people accept the new willingly, but a sense of inferiority and loss comes over most people when they feel disrespect directed toward what they were taught by tradition. Some attack the new with venom and all their skills of rationalization. The whole social structure suffers; the young lose respect for the old; the old condemn the young; family and neighborhood solidarity weaken. The old system of treating the ill involved much cooperation on a neighborly pattern: exchanging remedies, sitting up with the sick, sending food, prayer meetings, etc. The new method weakens the drama of sickness—and even of death.

22. *RUMOR*

Below is quoted the major portion of a chapter from a book dealing with the *psychology of rumor.* This gives some indication of how rumors start and of what happens to them. The attempt is made to reduce the rumor problem to some fundamental principles. Because of the emphasis on the psychology of *projection,* see also Selection 18, *Personality Traits,* pages 168-179.

WHY RUMORS CIRCULATE *

Gordon W. Allport
and
Leo Postman

There are two basic conditions for rumor: first, the theme of the story must have some *importance* to speaker and listener; second, the true facts must be shrouded in some kind of *ambiguity.* This ambiguity may be induced by the absence or sketchiness of news, by the conflicting nature of the news, by distrust of the news, or by some emotional tensions that make the individual unable or unwilling to accept the facts set forth in the news.

To be sure, in rumor there is often some residual particle of news, a "kernel of truth," but in the course of transmission it has become so overlaid with fanciful elaboration that it is no longer separable or detectable. In the rumored story it is almost always impossible to tell precisely what the underlying facts are, or indeed whether there are any at all.

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* From *The Psychology of Rumor,* by Gordon W. Allport and Leo Postman. New York: Henry Holt and Company, 1947, Chap. 2, "Why Rumors Circulate," pp. 33-48. Copyright, Henry Holt and Company. Reprinted by permission of the publisher and authors.

THE BASIC LAW OF RUMOR

The two essential conditions of importance and ambiguity seem to be related to rumor transmission in a roughly quantitative manner. A formula for the intensity of rumor might be written as follows:

$$R \sim i \times a$$

In words this formula means that the amount of rumor in circulation will vary with the importance of the subject to the individuals concerned *times* the ambiguity of the evidence pertaining to the topic at issue. The relation between importance and ambiguity is not additive but multiplicative, for if either importance or ambiguity is zero, there is *no* rumor. For instance, an American citizen is not likely to spread rumors concerning the market price for camels in Afghanistan because the subject has no importance for him, ambiguous though it certainly is. He is not disposed to spread gossip concerning the doings of the people in Swaziland, because he doesn't care about them. Ambiguity alone does not launch or sustain rumor.

Nor does importance. Although an automoblie accident in which I lose my leg is of calamitous significance to me, I am not susceptible to rumors concerning the extent of my injury because I know the facts. If I receive a legacy and know the amount involved, I am resistant to rumors that exaggerate its amount. Officers in the higher echelons of the army were less susceptible to rumor than was G.I. Joe, not because coming events were less important to them, but because, as a rule, the plans and strategies were better known to them. Where there is no ambiguity, there can be no rumor.

In wartime, as we have said, the conditions for rumor are optimal. Military events are of the greatest importance. Yet military secrecy, together with the natural confusion of a nation on the march, and the unpredictable moves of the enemy, help create profound ambiguity in precisely those matters that are of greatest concern to us.

The law we have presented is highly dependable. There are certain conditions, however, under which its operation will be

weakened. If a population is under close surveillance, say by the Gestapo, and if heavy penalties are placed on rumor spreading, people may to a greater or less degree restrain themselves.

Again, since rumor moves only among like-minded individuals, in a population that is exceedingly heterogeneous with little communication between component groups, rumor may avoid crossing social barriers and therefore have restricted circulation.

For yet another reason, the law may not operate. It sometimes happens that as soon as a man understands what makes him behave in a certain way, he proceeds to behave differently. It seems almost as though in the process of realizing that he behaves like an automaton, man is freed from the necessity of being one. Thus some students of psychology, having discovered why they have this or that objectionable mannerism, have forthwith given it up. Or, people who set out to observe whether the course of a particular emotion corresponds to a psychologist's prediction find that the emotion neither feels nor acts naturally. And so it is that a person who is "rumor wise," who understands that he is likely under conditions of importance and ambiguity to believe and spread rumors, is for that very reason less likely to do so!

It would not be correct to conclude that self-knowledge, or insight, automatically cures all our evil habits or confers a sudden and unlimited freedom of the will upon us. And yet it is a fact, too little observed by psychologists, that knowledge of the operation of a law frequently alters, and sometimes negates, the law in question.

In this fact—that people who are rumor conscious are less likely to be victimized—we find a justification for all the educational work done during the war by psychologists, magazine writers, radio speakers, and rumor-clinic editors. Here too lies an argument for including a basic study of rumor in programs of social studies in the schools and colleges. Young people who know the law of rumor may be able to safeguard themselves in many types of situations where evidence is insecure. Pains should be taken, however, that caution and healthy skepticism do not degenerate into uncritical negativism. One who is too suspicious of rumor may develop a distrust of even the best authenticated reports.

MOTIVES IN RUMOR MONGERING

When we say that rumor does not circulate unless the topic has importance for the individual who hears and spreads the story, we are calling attention to the *motivational factor* in rumor. Any human need may provide the motive power to rumor. Sex interest accounts for much of gossip and most of scandal; anxiety is the power behind the macabre and threatening tales we so often hear; hope and desire underlie pipe-dream rumors; hate sustains accusatory tales and slander.

In August, 1945, a rumor spread to the effect that Russia declared war on Japan only because Russia received in exchange the secret of the atomic bomb. Those who believed and spread this tale were people who disliked the Russians and, perhaps to only a slightly less extent, disliked the Administration in Washington. Gnawing hatred motivated the rumor. But instead of saying candidly, "I hate Russia," or "I hate the Democrats," the rumor spreader seized upon a story that would *relieve, justify,* and *explain* his underlying emotional tension.

It is important to note here the complex purpose that rumor serves. By permitting one to slap at the thing one hates it *relieves* a primary emotional urge. But at the same time—in the same breath—it serves to *justify* one in feeling as he does about the situation, and to *explain* to himself and to others why he feels that way. Thus rumor rationalizes while it relieves. "Why shouldn't I dislike Russia? It came to our aid only at the cost of an enormous bribe. . . ." "Why shouldn't I feel panicky? Our fleet was wiped out at Pearl Harbor. . . ." "Why shouldn't I distrust the Jews? They are so clannish. . . ." "Why shouldn't I feel superior to my neighbor? I don't indulge in his irregularities of living. . . ."

But to justify our emotional urges and render them reasonable is not the only kind of rationalization. Quite apart from the pressure of particular emotions, we continually seek to extract *meaning* from our environment. There is, so to speak, intellectual pressure along with the emotional. To find a plausible reason for a confused situation is itself a motive; and this pursuit of a "good closure" (even without the personal factor) helps account for the

vitality of many rumors.[1] We want to know the why, how, and wherefore of the world that surrounds us. Our minds protest against chaos. From childhood we are asking why. This "effort after meaning" is broader than our impulsive tendency to rationalize and justify our immediate emotional state. Curiosity rumors result. A stranger whose business is unknown to the small town where he takes up residence will breed many legends designed to explain to curious minds why he has come to town. An odd-looking excavation in a city inspires fanciful explanations of its purpose. The atomic bomb, but slightly understood by the public, engenders much effort after meaning.

To sum up, rumors often assuage immediate emotional tension by providing a verbal outlet that gives relief; they often protect and justify the existence of these emotions which, if faced directly, might be unacceptable to their possessor; they sometimes provide a broader interpretation of various puzzling features of the environment, and so play a prominent part in the intellectual drive to render the surrounding world intelligible.

This threefold dynamic is seldom, if ever, understood by the rumor spreader. He does not know why a certain rumor seems intensely interesting to him and urgently to merit widespread repetition. And he is unaware of the extent to which he is reflecting himself in the stories he spreads, for the does not understand the mechanism of projection.

PROJECTION

When a person's emotional state is reflected, unknown to himself, in his interpretation of his environment, we speak of *projection*. He is failing to employ exclusively impartial and objective evidence in his explanations of the reality surrounding him.

In dreams everyone projects. Only after we awaken do we recognize that our private wishes, fears, or revengeful desires have been responsible for what came to pass in our dream imaginations. The child asleep dreams of finding mountains of candy; the inferior youth asleep triumphs on the athletic field; the apprehensive mother dreams of the death of her child.

[1] We experience a good closure when we find satisfying explanations and when our view of a situation is clear and stable.

Daydreams too are projective. Relaxed on a couch, we let our mind picture events that actualize our hopes, desires, fears. We find ourselves in fantasy successful, satisfied, or sometimes defeated and ruined, all according to our temperament or the type of emotion that is for the time being steering the associational train of thought.

Rumor is akin to the daydream at second hand. If the story we hear gives a fancied interpretation of reality that conforms to our secret lives, we tend to believe and transmit it.

In the following example Karl Menninger (1930) shows how an unrecognized element of wish can simultaneously both drive and channel a gossipy yarn:[2]

MRS. ADAMS to MRS. BECK: "Where is Mrs. King today? Is she ill?"

MRS. BECK to MRS. CLARK: "Mrs. Adams wonders if Mrs. King may not be ill."

MRS. CLARK (who does not like Mrs. King) to MRS. DAVIS (who does): "I hear Mrs. King is ill. Not seriously, I hope?"

MRS. DAVIS to MRS. ELLIS: "Mrs. Clark is saying that Mrs. King is seriously sick. I must go right over and see her."

MRS. ELLIS to MRS. FRENCH: "I guess Mrs. King is pretty sick. Mrs. Davis has just been called over."

MRS. FRENCH to MRS. GREGG: "They say Mrs. King isn't expected to live. The relatives have been called to her bedside."

MRS. GREGG to MRS. HUDSON: "What's the latest news about Mrs. King? Is she dead?"

MRS. HUDSON to MRS. INGHAM: "What time did Mrs. King die?"

MRS. INGHAM to MRS. JONES: "Are you going to Mrs. King's funeral? I hear she died yesterday."

MRS. JONES to MRS. KING: "I just learned of your death and funeral. Now who started that?"

MRS. KING: "There are several who would be glad if it were true!"

As a slightly more complex instance of projection, let us take a rumor from World War II. The majority of all recorded rumors in this war were hostility rumors, containing accusations of malfeasance against some special American group: the Jews, the

[2] Reprinted from page 282 of *The Human Mind* by permission of Alfred A. Knopf, Inc., publisher.

OPA, the Negroes, the Catholics, the Administration, the Army, the Navy, the Red Cross—or against our allies, principally Britain and Russia. Though the logic is more involved, it seems likely that the dynamics of projection also sped these rumors on their way.

Suppose a housewife said over the back fence (and many of them did):

> I hear that out at Camp X they have so much meat that they throw whole sides of fresh beef into the garbage.

Just what might this woman's motivation be?

In the first place the meat shortage was a matter of *importance* to her and her household. Further, the evidence in this case was *ambiguous;* she was not in a position to know the facts of the matter. What is more, she was genuinely inconvenienced by the meat shortage, being frustrated in the planning and preparation for her meals. When she feels frustrated, she knows there is usually a cause. Hence in her "effort after meaning" she endeavored to find the culpable source. Of course, she might have blamed the Axis or Hitler; but these villains were not only remote but their misdeeds were on so grand and abstract a scale that she could scarcely picture their relation to her immediate, concrete annoyance. Besides, if there were better management, wouldn't there be meat enough for all? Perhaps she has known some irresponsible and greedy army officers, or perhaps she doesn't like the way the Army has treated her Johnny. At any rate, a tangible, near-by, plausible villain emerges, and the Army is accused of causing the meat shortage. She thus explains it herself and fixes the blame. Such a process has been called *complementary* projection.[8] Complementary projection is not ascribing one's own emotions to other people, but rather finding in the supposed conduct of others a "reasonable" *explanation* of one's feelings. (It is in this manner, to cite an extreme case of complementary projection, that the paranoiac, filled with suspicion and hate, accuses others of plotting against him.)

[8] H. A. Murray *et al., Explorations in Personality.* Oxford: Oxford University Press, 1938.

But we may not yet have the entire explanation for the woman's chatter. Suppose she has failed to save the kitchen fats (as the government asked her to), suppose she has cheated a bit by withholding ration coupons while buying meat, or bought a bit on the black market. Being at heart a decent and patriotic citizen she cannot avoid pangs of conscience. Or can she? (Most people keep their consciences as quiet as they can, and in order to do so, fall, at least occasionally, into the trap of *direct* projection.)

Direct (not complementary) projection of our own guilt is one of nature's weird provisions for avoiding the uncomfortable pangs of conscience. Emerson pointed it out when he wrote, "What we call sin in others we call 'experiment' in ourselves." Others sin; not we. (Or if we do, how small a sin it is compared with the wickedness of others.) Now our lady, quite unknown to herself, might well have been quieting her own conscience, in effect saying: "Why should I feel guilty? What do my petty evasions of food regulations amount to? Just look, the Army wastes whole sides of beef. By contrast my guilt is negligible." [4]

There is also some experimental evidence concerning the importance of guilt evasion in rumor belief. Allport and Lepkin[5] found a tendency among people who believed certain rumors relating to waste and special privilege in the OPA to be people who admitted chiseling on their ration allowances and at the same time *denied feeling any guilt or shame for having done so.* Conversely, among people who admitted cheating and confessed to *feeling shame,* there was less belief in the rumors concerning the malpractice of others. In short, when we believe the worst about others, we are managing to escape a guilty conscience in ourselves. If we take the blame ourselves we are less rumor prone.

Confirmation of the same principle is found in the experiments

[4] It is, of course, very difficult to prove that people who tell accusatory rumors, are themselves guilty of the very crime which they ascribe to others. It is, however, a matter of common observation that people seem singularly self-righteous when they are criticizing other people for faults which we know they themselves possess.

[5] Allport, F. H., and Lepkin, M., "Wartime Rumors of Waste and Special Privilege: Why Some People Believe Them," *The Journal of Abnormal and Social Psychology,* 1945, Vol. 40, pp. 3-36.

of Frenkel-Brunswik and Sanford.[6] These investigators discovered that among a group of outspokenly anti-Semitic college women there was a tendency to avoid assuming blame and responsibility for their own shortcomings. Conversely, in a group of students who were notably free from anti-Semitic bias there was a marked tendency for them to be "intropunitive," that is, to take blame upon themselves for their misfortunes and failures. People who refuse to face their faults find scapegoats; those who know their own weaknesses, do not seem to need scapegoats.

A GENERALIZATION OF THE RUMOR FORMULA

We may summarize our discussion thus far in the following way:

Rumor is set in motion and continues to travel in a homogeneous social medium by virtue of the strong interests of the individuals involved in the transmission. The powerful influence of these interests requires the rumor to serve largely as a rationalizing agent: explaining, justifying, and providing meaning for the emotional interest at work. At times the relationship between the interest and the rumor is so intimate that we may describe the rumor simply as a projection of an altogether subjective emotional condition.

Having thus established the close connection between rumor and subjective emotional conditions, let us glance again at our formula:

$$R \sim i \times a$$

This mode of analysis closely resembles McGregor's[7] approach to the factor of wishful thinking in the making of predictions. In the latter's experiment people were asked (it was in the year 1936) whether they thought Hitler would be in power a year from

[6] Frenkel-Brunswik, E., and Sanford, R. N., "Some Personality Factors in Anti-Semitism," *The Journal of Psychology*, 1945, Vol. 20, pp. 271-291.

[7] McGregor, D., "The Major Determinants of the Prediction of Social Events," *The Journal of Abnormal and Social Psychology*, 1938, Vol. 33, pp. 179-204.

that date. About 95 per cent thought he would be. They were also asked whether their personal attitude toward Hitler was favorable. Most hated him. The point is that the dislike people felt did *not* affect their predictions *because there was little ambiguity in the situation.* Hitler's hold on Germany at that time was firm. On the other hand, the subjects were asked to predict the likelihood of King Edward VIII of England's announcing plans for marriage within the year, and were asked whether they thought he *should* marry. Of those subjects who were opposed to the King's marriage, 32 per cent predicted in the affirmative, whereas of those who favored the King's marriage 80 per cent predicted "yes." At the time of the experiment the news about the King's marital plans was highly ambiguous and contradictory. *Unguided by objective evidence, most people will make their prediction in accordance with their subjective preference.*

McGregor writes, ". . . the influence of subjective factors upon prediction is limited by the degree of ambiguity of the stimulus situation, but also [by] the *importance* for the predictor of the issues involved. If either importance or ambiguity is zero, the influence of subjective factors upon prediction would presumably be zero. In the former case there would be no wishes to influence prediction, and the predictor would simply record . . . the ambiguity of the existent stimulus situation. If ambiguity were zero, on the other hand, the stimulus situation would be completely coercive. Even an intense wish would be inoperative."

McGregor's work leads us to the conclusion that rumor is following a more generalized law of social psychology which may be stated as follows:

Subjective emotional distortion in the perception and interpretation of the environment can occur only in proportion to the combined effects of importance and ambiguity.

Projection and wishful thinking are not unlimited tendencies. They operate only when the conditions permit. Men will fortify their desire with belief, will rationalize, project, and spread false

rumors, *only in proportion to the ambiguity of the subject and its private importance.*[8]

Thus rumor, as one of the less rational forms of social activity, turns out to be a limited phenomenon. Like wishful thinking in McGregor's experiment, it flourishes only when ego involvement is felt and when objective evidence or knowledge does not place rational constraints upon judgment and report.

In this connection it is well to recall likewise that a number of rumors seem to betray an intellectual hunger rather than an emotional need (cf. p. 210). Because people are curious and want to know, a condition of *importance* is established. But since they do not know, and since they find the topic in question ambiguous, they are susceptible to rumor. The quaint stories that children tell concerning their interpretations of the workings of nature, the mind, the Deity, partake of this character of "curiosity" rumor. Myths and legends, though by no means always free of emotional tendency, also seem often to be little more than primitive versions of science. In short, the "effort after meaning" can by itself constitute the factor of "importance" that underlies rumor (or myth) spreading. Important needs are not exclusively visceral; they can be intellectual as well.

SECONDARY REASONS FOR THE CIRCULATION OF RUMOR

It would not be safe to assume that every individual rumor spreader is motivated by the dynamic pattern we have described. In certain instances, the motivation may be quite special and bear no thematic relation to the story told. For example, the rumor spreader may merely be seeking attention. "I know something you don't know" is often the child's prelude to rumor

[8] Readers who are familiar with the so-called projective techniques in psychology will recognize at once a similarity between rumor and projective tests. These tests are based on *ambiguous* stimuli. An ink blot is amorphous; therefore, its meaning is supplied by the individual who interprets it. Similarly the Thematic Apperception Test elicits a thinly disguised personal story only if the stimulus picture is susceptible of *many* interpretations. Unless the stimulus figures are highly ambiguous, the subject will not interpret them according to his own needs. It is a serious question whether some of the currently used "projective" methods (including the Thematic Apperception Test pictures) are sufficiently equivocal.

spreading. To be "in the know" exalts one's self-importance. While telling a tale a person is, for the time being, dominant over his listeners. Such gratification may be quite irresistible to individuals whose lives are otherwise colorless and uneventful. Further, the rumor spreader may find himself able to bestow a favor on some friend who loves tidbits of scandal, or who has a fondness for macabre stories of death and disaster. Indifferent to the rumor himself, he passes it on for the delectation of his friend.

Again, a person may find it convenient to fill an otherwise awkward gap in the conversation by repeating what he has just recently heard. People who do not share the emotional tendencies implied in the rumor may nonetheless keep it moving. Such meaningless social discourse would not in itself account for the existence or form of the rumor, but it would serve to keep the rumor traveling across a "dead spot" in the chain.

At a time when the United States was still at war with Italy, it was found that 25 per cent of the members of a certain poor Italo-American community listened regularly to Radio Roma and passed along the Axis propaganda to their neighbors. At first sight it would seem that the loyalty of the group should be gravely questioned. But the motivation behind the situation was discovered to be simple and uncomplicated. People whose radios were good enough to pick up the Italian station enjoyed superior prestige in the community. To maintain this prestige they took pains to listen and felt pride in passing along what they heard to their envious neighbors.[9]

[9] Bruner, J. S., and Sayre, J., "Shortwave Listening in an Italian Community," *Public Opinion Quarterly*, 1941, Vol. 5, pp. 640-656.

PART IV

Behavior in the Presence of Others

23. JUDGING PEOPLE

The judgment of the personalities of other people is a daily problem for practically all people. Following is an analysis of first impressions; basic factors involved in judging personality; the interview; a brief schedule for a psychological interview; and qualifications for a good judge of others. These are only some of the many problems in *understanding personality.* The quoted material is based on psychological investigations, plus everyday experience.

THE ABILITY TO JUDGE PEOPLE *

Gordon W. Allport

FIRST IMPRESSIONS

Mr. A and Mr. B meet for the first time. They discuss the weather, the last ball game, and the condition of the stock-market. After five minutes they part without having revealed directly any information of a specifically personal nature. Nevertheless each carries away an impression of the personality of the other. A may think B is straightforward, jolly, well-informed, dependable, and friendly; B may think A modest, tactful, conservative, and reclusive, "a good sort when once you get to know him." Such first impressions are often quite definite, but unfortunately, as John Stuart Mill pointed out, are frequently not as trustworthy as they seem.

In the brief period of first meeting there is little chance for contradictions to appear, or for the judge to ascertain which traits are central and which are incidental in the personality.

* From *Personality: A Psychological Interpretation,* by Gordon W. Allport. New York: Henry Holt and Company, 1937, Chap. 18, "The Ability to Judge People," pp. 500-516. Copyright, Henry Holt and Company. Reprinted by permission of the publisher and author.

Some features are hidden entirely, especially those that are asocial; the *persona* is not easy to penetrate at first meeting, even though its presence may be suspected. Nevertheless a brief acquaintance often does result in amazingly rich impressions, many of which are proven upon further acquaintance to be correct. Such successful judgments are significant because, lacking personal information, or a telltale context of conversation, the cues are derived almost entirely from expressive movements—from appearance, gesture, and manner of speaking.

The astonishing rapidity with which first judgments are made can easily be demonstrated. While riding in a public conveyance close your eyes and turn your head toward some fellow passenger not previously observed, perhaps someone sitting obliquely opposite. Open your eyes for a brief glimpse lasting two or three seconds, and then with the eyes closed introspect upon the impressions as they arise. Here is a person, never before seen and completely unknown. With but the briefest visual perception, a complex mental process is aroused, resulting within a very short time, thirty seconds perhaps, in judgments of the sex, age, size, nationality, profession, and social caste of the stranger, together with some estimate of his temperament, his past suffering, his "hardness," his ascendance, friendliness, neatness, and even his trustworthiness and integrity. With further acquaintance many of the impressions would no doubt prove to be erroneous, but the exercise serves to call attention to the swift "totalizing" nature of our judgments. The fact that one perceives a personality at first contact, not by fragments pieced together with painful slowness but with swift "intuition," is a matter of considerable theoretical importance.[1]

The reliability of first impressions has been studied experimentally. Using a somewhat generous allowance of time (half an hour) Spielman and Burt examined the agreement of two independent investigators interviewing 16-year-old children.[2] Each investigator used a five-point rating scale. For "primary instincts"

[1] *Intuition* as used in this connection means simply *a unitary perception resulting from a complex pattern of inter-related cues.*

[2] Spielman, W., and Burt, C., *Industrial Fatigue Research Board Reports*, 1926, No. 33, pp. 57-72.

(McDougall's list) the agreement ranged from +.85 for *submissiveness* and +.75 for *fear,* down to +.37 for *curiosity* and +.23 for *acquisitiveness.* Among "secondary qualities" the range was from +.77 for *self-confidence* and +.64 for *energy,* down to +.44 for *punctuality* and +.36 for *reliability.* The authors conclude that the qualities more reliably rated on the whole are those that are emotional and "instinctive," and likewise those that are socially acceptable. Anti-social qualities are concealed behind the *persona* during the first interview, and are therefore impossible to rate. Nothing is established in this experiment concerning the validity of these impressions, and the agreement of the judges with one another seems on the whole rather higher than in most studies of a similar nature.

On the basis of extremely short interviews, lasting only 30 seconds, another investigator made estimates of the probable abilities of apprentices in the printing trade. Checked against a long series of aptitude tests, half the cases, it is reported, showed "good" agreement, and the other half only "fair" or "poor" agreement.[8] This study illustrates one way in which first impressions may be *validated,* but it unfortunately does not express its results clearly or objectively.

Still another investigation studied both the agreement (between two judges) and the validity of first impressions gained from brief interviews with 25 subjects. The average correlation between the two sets of ratings for such qualities as *expansiveness, neatness,* and *emotionality* was about +.40. Such an agreement compares favorably with many rating-studies where judges have had the advantage of long acquaintance with their subjects. The interviewers employed questions that were not directly personal in nature, and each interview was terminated at the end of the ninety seconds. At the close of the interview the judge made his ratings. He likewise predicted the type of behavior which the subject would show in certain subsequent experimental situations. These later experiments were conducted by a third investigator, in this way providing a validation for the "snap" predictions. In many respects, especially in the prejudgments of *impulsiveness, verbosity, co-operativeness,* and *originality,* the predictions of the

[8] Englemann, W., *Industrielle Psychotechnik,* 1928, 5, 307-310.

subjects' behavior were borne out. On the whole the predictions of one of the interviewers were more successful than those of the other.[4]

In interpreting all experiments of this type it must be borne in mind that by its very nature the short interview tends to put the subject on his guard. Generally during the first few moments of *any* interview he does not behave in a natural way, but wears his protective mask. Experimental interviews therefore are not well suited to eliciting spontaneous and unpremeditated behavior.

THREE BASIC FACTORS INVOLVED IN JUDGING PERSONALITY

An experiment dealing more explicitly with the validity of first impressions will next be described in order to illustrate the roles of the three basic variables involved in any judgment of personality (whether based on first impressions or on long acquaintance).

The experiment is that of S. G. Estes.[5] This investigator used short (two-minute) motion picture records of behavior of subjects whose personalities had been intensively studied by a group of twenty psychologists over a period of one academic year. In these films the subjects performed briefly certain "expressive" tasks (such as divesting themselves of coat, tie and shirt; playing slapjack and wrestling with an opponent; holding a lighted match as long as possible, and building a house of playing cards).

In one portion of the experiment film-records were employed for eight subjects upon whom extraordinarily complete criteria-data were available. Thirty-seven judges watched the films (each shown twice, making a four minute "first impression"). These judges were all psychiatric social-workers having at least two years' practical experience in addition to their formal training. The judges' ratings were made with the aid of the same schedule of variables that had been employed in the intensive one year investigation of the personalities of the subjects. Hence it was possible to make a direct comparison between the judgments based

[4] This work is described by H. S. Odbert, *The Consistency of the Individual in His Imaginal Processes.* Cambridge: Harvard College Library, 1934.

[5] Estes, S. G., *The Judgment of Personality on the Basis of Brief Records of Behavior.* Cambridge: Harvard College Library, 1937.

on film-records and upon the prolonged experimental and clinical study.

In such a situation the excellence of the judgment is found to vary

(1) with the inherent ability or shrewdness of the judge,

(2) with the nature of the variable (trait) rated,

(3) with the "open" or "enigmatic" character of the subject.

In reference to the first of these factors (which seems likewise to be the most important), it was found that the 10 best judges were uniformly better than the 10 poorest judges for *all* the variables and for *all* the subjects. The average efficiency (correctness) of the 10 best judges was 33 per cent higher than that of the 10 poorest; and the record of the best single judge averaged 62 per cent better than that of the poorest judge. The conclusion is inescapable that even in a homogeneous and highly trained profession such as psychiatric social work the difference in ability to "size up" individuals on brief acquaintance from appearance alone is very striking. What personal qualities make one judge more capable than another is an intricate question considered later. Suffice it here to say that Estes found within the age-range of his judges (25-52) no influence of age, no relation to length of professional service, sibling status, nor to the fact that the judge had himself been psychoanalyzed, as half of them had been.

The second factor concerns the variable or trait in respect to which the subjects are judged. With considerable uniformity for all the subjects certain qualities were rated well above chance, viz., *inhibition-impulsion, apathy-intensity, placidity-emotionality, ascendance-submission.* It is clearly evident that these qualities are overt; they are "expressive" traits which represent the individual's characteristic mode of adaptation to the world around him. Poorly rated variables included such covert qualities as *objectivity-projectivity* (*i.e.,* realism-paranoia), *desire for change,* and the "need" for *rejection* (*e.g.,* snobbishness), the "need" for *play,* and the "need" for *nurturance* (e.g., "parental instinct"). These badly rated traits are obviously not of the type that the situations used in the film-records would reveal, and likewise they seem less well-defined and therefore less easily understood by the judges than the traits correctly rated.

In brief, the evidence here supports the conclusion that in order to be accurately judged traits should be overt, expressive and well-defined. Poor judgments are to be expected when the quality is hidden, not issuing readily into ordinary action, or when it is ill-defined and therefore confusing to the judge. The best-rated trait (*inhibition-impulsion*) was judged by the thirty-seven judges 28.2 per cent more accurately than the poorest-rated trait (need for *nurturance*).

The third important factor in the judgment-situation is the "openness" of the subject. For one of the eight subjects these 37 judges agreed with the criterion ratings on the average 25 per cent better than would be expected by chance, but on another (the most enigmatic) of the eight, only 5 per cent better than chance. Both the best judges and the worst judges had the same relative difficulty. Although their ratings were of unequal accuracy, both found the same subjects easy to rate, or hard to rate. Considering the results of all the judges together on all of the variables rated, the correctness for the most "open" personality was 22 per cent better than for the most "enigmatic" personality. We are forced to conclude that at first meeting the *persona* of some individuals is definitely a handicap to the judges, whereas the expressive behavior of other individuals is relatively transparent.

In summary, to secure the most trustworthy judgment from first impressions (and probably from long acquaintance as well), it is necessary to have *a gifted judge, applying his skill to certain overt and readily accessible traits in a subject who is himself not deceptive or enigmatic.*

THE INTERVIEW

Unlike first impressions which, as a rule, are obtained incidentally in the course of an impersonal relationship, the interview seeks to secure directly as much information of a personal nature from the subject as is relevant to the interests of the interviewer. The method is age-old, but still is of paramount importance in most fields of social investigation.[6] Scientific studies of interviewing are as yet few in number, and are for the most part artificial

[6] A serviceable manual for interviewers has been prepared by Bingham, W. V., and Moore, B. V., *How to Interview*, 1934.

and unsatisfactory, for a good interview requires variation and spontaneity, and only with difficulty can it be reduced to rules and formulae.

Although interviewing is an art, it clearly involves the same three factors as do all judgment-situations. There is first the skill of the interviewer (probably the most important and most complex factor of all). Secondly, there is the openness or enigmatic quality of the subject himself. Thirdly there is the selection and framing of questions that will reveal significant and trustworthy information concerning the subject.

In considering the third factor, one must first know what the goal of the interview is. Significant questions for a psychiatrist to ask might be immaterial for a census-taker. But assuming that the goal of the interview is *psychological, i.e.,* to obtain the fullest and most accurate knowledge possible of a personality, how should the interviewer proceed? He may use various published guides for the study of personality. Or he may have at hand a list of topics with the aid of which he can frame specific questions according to the progress of the interview. Or he may proceed in a planless way, letting one line of inquiry suggest the next. Ordinarily the second plan is most satisfactory, neither as rigid and mechanical as the first nor as loose and precarious as the third. The following brief schedule of topics has been found satisfactory in guiding interviewers who wish to follow this plan. It is fairly comprehensive, though it can readily be expanded or contracted to fit the individual case. There is no inviolable sequence. For one person a given topic may yield nothing of significance; for another the same topic may contain the most important clues, and for that reason require expansion. Needless to say, the interviewer must be on his guard to distinguish conventional and self-protective answers from those that are frank and genuine.

A BRIEF SCHEDULE FOR A PSYCHOLOGICAL INTERVIEW

1. Age
2. Nationality
3. Degree of education
4. Sicknesses and accidents

5. Occupational history and plans
6. Hobbies
7. Cultural interests
8. Ambitions (*e.g.,* what he hopes to accomplish within the next two years)
9. Personal attachments (*e.g.,* who has influenced him most)
10. Daydreams
11. Fears and worries
12. Humiliations and disappointments
13. Marked aversions
14. Sex experience
15. Neurotic difficulties
16. Religious experience
17. Philosophy of life

These topics deal in approximately equal proportion with the life-history, the present situation, and the subject's outlook into the future. They provide an aid in *understanding* the subject rather than in describing him.

Certain items in the above schedule pertain to the social status of the subject. Information of this order is essential; for only by knowing the "frame of reference" within which a personality has developed can the interviewer understand fully his subject's preconceptions and codes. In recording the cultural frame, however, the interviewer should not fall into the erroneous assumption of many social determinists that the subject will, of necessity, in his own personal life hold to each and every norm that characterizes his race, religion, or social class.

The success of an interview depends not only upon properly framed questions, but likewise upon the attitude of the subject. The interviewer must seek to remove antagonism and suspicion, and to create a situation in which the subject feels encouraged to speak, and confident that his interests are protected. But where the subject is unintelligent or reticent or disingenuous, this is easier said than done. It is ordinarily more satisfactory to interview a person of high intelligence and good cultural background than of low intelligence and inferior social position. Yet, the person with a brilliant mind, if neurotically defensive or inclined

to deception, is perhaps the most difficult of *all* types to deal with. In general the method of the interview is satisfactory only when the subject possesses a reasonable degree of intelligence, has some insight, and above all is willing (preferably, eager) for the interview to take place.

The third and most complex factor in the situation is the skill of the interviewer. The psychologist cannot at present include in a single formula the intricate combination of abilities that makes a good judge of people, nor can he tell anyone how to become all at once a great "character reader." He can, however, offer an analysis of some aspects of this skill, and can pronounce upon some of the qualifications displayed by successful judges.

QUALIFICATIONS FOR A GOOD JUDGE OF OTHERS

Combining the findings of Vernon with the results of other investigations, published [7] and unpublished, a summary statement may be made of the qualifications for a good judge of people, so far as they are at present understood.

1. *Experience.* A good judge requires first of all maturity, which means not only the attainment of thirty years or so in age, but likewise a rich store of experience with human nature in its varied and more intricate forms. The youth sees people in the narrow perspective of his limited experience, and when forced to judge those whose lives differ markedly from his own, frequently resorts to such callow and inadequate clichés as "a good sport," "an old stick-in-the-mud," or "queer." The jargon of adolescents contains any number of such characterial clichés. In spite of the protest of each younger generation that the elder fails to understand it, the chances are vastly in favor of it misunderstanding the elder.

Without a broad and long-continued acquaintance with all manner of people, the elementary basis for logical inference is lacking. Each judgment partakes of previous judgments, and is corrected by them. For each of the innumerable expressions of

[7] For example, Adams, H. F., *Journal of Abnormal and Social Psychology*, 1927, Vol. 22, pp. 172-181; Valentine, C. W., *British Journal of Psychology*, 1929, Vol. 19, pp. 213-238; Gross, H., *Criminal Psychology*, translated 1918; Allport, G. W., *The Family*, 1930, Vol. 11, pp. 124-128; Hollingworth, H. L., *Vocational Psychology and Character Analysis*, 1929.

personality, the experienced person has at his disposal a rich apperceptive chain of well-tested interpretations. Even if association and inference do not represent the only mental processes involved in understanding people, if—as is probable—some concession must be made to the theories of intuitive understanding, still the solid foundations of experience are the first and most essential requirement, for intuition cannot occur in an experiential vacuum.

2. *Similarity.* Another important, but not unexceptionable, requirement is that the judge in his own nature resemble the individual whom he is attempting to judge. According to Klages, "understanding is possible only by virtue of *some* similarity between the perceiving self and the perceived object; and as dissimilarity grows, understanding gives way to a failure to understand." [8] This requirement is simply a corollary of the first. Experimental studies have shown that it is indeed a fact that the best judges of a trait in another person are those who themselves possess the trait in a high degree. But the correlation is not perfect, and the situation is far from simple: flexibility of imagination in one judge may be worth more than stores of unused experience in another.

Similarity, it will be noted, is a special case of "experience." The more an associate resembles me, the more experience, so to speak, have I had with *him.* It is for this reason that members of the same racial, religious, or occupational group are ordinarily the best judges of one another. A capitalist understands a capitalist, a communist a fellow-communist, more adequately than members of one group understand members of the other. And it is not merely for reasons of democracy that Rotarians call one another by their first names; there is genuine fellow-feeling to justify the familiarity.

3. *Intelligence.* Experimental studies have found repeatedly that some relationship exists between superior intelligence and the ability to judge others. The positive correlations hold even within the high and narrow range of intelligence which characterizes the selected groups of judges employed in most of these experiments. Vernon, it will be recalled, found that high intelli-

[8] *The Science of Character,* translated 1928, p. 43 and following.

gence is a characteristic especially of good self-raters and of good judges of strangers, but that for raters who are well-acquainted with the subjects, experience can to some extent be a substitute for exceptional intelligence. On the average, however, good intelligence is necessary, and the reason is simple enough. Understanding people is largely a matter of perceiving the relations between past and present activities, between expressive behavior and inner traits, between cause and effect, and intelligence *is* the ability to perceive just such relations as these.

4. *Insight.* The proper realization of our own anti-social tendencies, of our own hypocrisies and inconsistencies, and of our own complex motives can usually prevent us from making too conventional and too simple a diagnosis of our fellowmen. Blindness and blunders concerning our own natures will automatically carry over to our judgments of others. A compulsive neurosis (or any other quirk) not understood in oneself, is bound to enter as a projection or as a value-judgment into one's estimate of others. In the practice of psychoanalysis the prerequisite of self-knowledge has long been recognized. Before the analyst can unravel the knots of other personalities he must first disentangle his own.

5. *Complexity.* As a rule people cannot comprehend others who are more complex and subtle than they. The single-track mind has little sympathy for the warring of interests of the cultured and versatile mind, and the Philistine devoid of emotional conflicts is helpless in the face of the turbulent confessions of a Barbellion or a Marie Bashkirtsev. Two souls dwelt within the breast of Faust, and but one within the breast of his famulus, Wagner; it was Faust only who was able finally to gain an understanding of human life.

It follows that the psychiatrist, since he deals with exceedingly complex mental conditions, should benefit by the possession of a complex nature; and if he has neurotic difficulties of his own and manages them well, they may even add to his qualifications. This is not to say that there is no place for the buoyant, uncomplicated psychiatrist whose role is not so much the understanding as the encouraging of patients caught in the snares of a depression. Therapeutically it is often more valuable to radiate health and good spirits than to enter sympathetically into the distortions and

complexities of the patient's mental life. Perhaps there are two types of successful psychiatrists: those who cure by the tortuous reconstruction of personality, and those who cure by radiant suggestion.

6. *Detachment.* Experiments have shown that there are generally certain asocial trends in the personalities of the best judges. Introversion is more common among them than extroversion, and the best judges tend themselves to be enigmatic and hard to judge. On the average, too, they stand low in social values. Those who are preoccupied with social values have little time to consider others dispassionately; they feel sympathy, pity, love, or admiration, but they do not detach themselves sufficiently from the emotional relationship to gain an impartial view. An individual, on the other hand, who does not at every moment participate, but who can stand aside and observe, "never missing a trick," is likely to make more valid judgments. It frequently happens, as in the case of novelists, that the good judge may participate heartily enough at times, but that afterward he withdraws, and in retrospect considers events and people with an almost grim detachment.

7. *The Esthetic Attitude.* Frequently associated with asocial characteristics is the esthetic attitude. As a qualification it seems to stand above all others, especially in the case of the most gifted judges. The esthetic attitude seeks always to comprehend the intrinsic harmony of any object that is the center of attention. The object may be as trivial as an ornament or as substantial as a human being; in any case the singleness and the symmetry of the structure are what interests the esthetic person. This attitude is indispensable to the novelist and biographer. When highly developed it may to a certain extent offset limitations of experience, of intelligence, of insight, of similarity and complexity. But when it is combined with these qualifications it enormously enhances a judge's skill.

8. *Social Intelligence.* This qualification is not indispensable. The novelist and the artist often lack it. The interviewer, on the other hand, must possess the "social gift," for his function is most complex: he must listen quietly and yet probe, encourage frankness and yet never seem shocked, be friendly and yet reserved,

patient but prodding, and through it all never seem bored. Such a delicate balance of accomplishments requires in high degree any and all traits making for frictionless personal relations. To do and to say the tactful thing requires a prognostication of a person's most likely responses. Hence social intelligence is linked with the ability to make swift and almost automatic judgments of people. On the other hand social intelligence is not identical with *Menschenkenntnis,* for it does not necessarily imply *deep* knowledge of an individual, nor the capacity to systematize and to express one's judgment. Social intelligence lies at the behavioral rather than at the conceptual level. It leads to social adjustment, but not necessarily to profound understanding.

24. STEREOTYPING

Stereotyping is one of the most important concepts of social psychology. Results from three different studies are reported below: stereotypes and reality; occupational prestige; and definiteness of racial stereotypes. Stereotyping is a psychological process in daily use by most people.

STEREOTYPES *

Paul R. Farnsworth

Stereotyping as a timesaving device. No two people behave in precisely the same manner. All Chinese look and act alike only to the Occidental who has made the acquaintance of but a few Orientals. The larger the number of Chinese he closely observes, the more striking become their differences. And so it is with Japanese, Germans, Negroes, capitalists, and maiden ladies. Yet the human life span is so short that even the nonagenarian lacks the time necessary to learn the myriads of discriminations he should make in reacting to his fellows. He is forced to lump people together into ill-defined classes and often to react to the class characteristics instead of to the individual class members. This is most unfortunate as no member fits his class at all perfectly. Moreover the stereotype or class, useful at an early point in its history, often becomes progressively unrealistic until terrible injustices are committed in its name. Thus, the Indians of the sixteenth and seventeenth centuries were cruel savages, or so goes the stereotype. However, even a slight excursion into North American colonial history will disclose the undeniable truth that in the

*From *Fields of Psychology: An Experimental Approach*, Robert H. Seashore (Editor). New York: Henry Holt and Company, 1942, Chap. 36, "Stereotypes," by Paul R. Farnsworth, pp. 535-550. Copyright, Henry Holt and Company. Reprinted by permission of the publisher, editor, and author.

matter of cruelty the conquering Caucasian was at least the Indian's peer.

Stereotypes and reality. The first paper to be reported in this chapter describes a situation whose existence students of social affairs have long suspected: a political party which surrounds itself with a cloak of extreme respectability and thereby gains a rather unreal stereotype can completely annihilate a rival with a "bad" name even though the latter party possesses a reasonably acceptable platform. The moral in this carries over to other fields. The citizen who desires to further a fairly liberal cause weakens his position by joining a "radical" organization even when the latter is devoted to the fostering of the same worthy project. The person who would aid in improving the moral tone of his city must not identify himself with groups of the "holier than thou" sort. The politician with no program at all to offer can frequently win by mouthing platitudes and waving the banner of the "right" party. To maintain a high social status one must not be a Republican in South Carolina or a Socialist in Vermont.

Occupational prestige. Which of the professions do we regard as of greatest social importance and which of lesser worth? As the second section of the chapter discloses, students in professional schools have rather definite ideas on the subject. Their notions are obviously not inborn but arise rather from the complex of stereotypes their culture offers them. The jurist is highly regarded in America but not in the Soviet Union. The soldier rates high during periods of international crisis but low during the peaceful times which follow. The small child holds in high regard the fireman, the policeman, and even the garbageman. Now obviously he is not reacting to the specific details of the job of garbage collector, but rather to an unrealistic and childish class description, to the "mental picture" in which the garbageman "gets around" more than do most people, rides on the largest of trucks, receives enormous pay, develops strong muscles, and smokes strong cigars. We all have "mental pictures" of some sort. Occupational prestige, then, is a function of what we have learned—both the true and the false—about the occupations in our culture area.

Definiteness of racial stereotypes. The last section deals with

the relation between definiteness of racial stereotype, racial prejudice, and frequency of social contacts between the races in question. It would be a splendid thing if stereotypes disappeared as soon as contacts between the races occurred in large number. But, unfortunately, racial stereotypes persist even after extensive acquaintance. Thus, La Piere[1] has found that the Armenians of Fresno County, California, are commonly considered to be "dishonest, lying and deceitful." Yet the records of the Merchants' Association give them as good credit ratings as those received by the other groups. Moreover, the Armenians apply less often for charity and appear less frequently in legal cases. Prejudices and stereotypes die hard. And, as Katz and Braly[2] show, a racial stereotype need not be very definite to have associated with it a large amount of prejudice.

STEREOTYPES AND REALITY

Stereotypes as reality viewed through the spectacles of our complexes. Everyday experience teaches us that our fellow men will accede to our wishes more easily if we phrase our requests in such a way as to avoid arousing their "pet peeves," their hostile complexes. No matter how intelligent they may be, they do not behave solely as logical machines. Instead, they view each happening through emotional spectacles. They may condone the criminal actions of Mr. H. "because he comes from such a fine New England family and fine families of course are never anti-social." The fact that the social consequences of a crime perpetrated by one of their peers may be far more serious than one committed by a tramp may not particularly disturb them. They may sympathize far more with a motherless babe than with a child of eight who has just lost his mother even though it is clear that the babe will adjust to the loss more easily than will the older child. Such lack of logic is also common in the political field. A person may be most enthusiastic about a certain social program. Yet, let it get

[1] La Piere, R. T., "Type-Rationalizations of Group Antipathy," *Social Forces*, 1936, Vol. 15, pp. 232-237.

[2] Katz, D., and Braly, K. W., "Racial Stereotypes of One Hundred College Students," *Journal of Abnormal and Social Psychology*, 1933, Vol. 28, pp. 280-290.

linked to the wrong person or party and his thinking becomes immediately warped.

The Hartmann study. It was to demonstrate this contradiction between actual social philosophy and political stereotypes that Hartmann conducted the study[8] which is described in part in this section. One hundred sixty-eight representative citizens from an agricultural region in Centre County, Pennsylvania, were interviewed at their homes during May and June, 1934. They were offered 20 statements on governmental policy "involving significant social and economic problems" (p. 354). Complete agreement with 10 of the statements which favored such matters as government ownership and management of railroads, minerals and land, government insurance, socialism, cooperatives, and the absence of huge fortunes branded the subject as a "radical." Definite approval of the other 10 statements which favored the converse of these sentiments caused the subject to be classified as a "conservative."

The feeling tone attached to 22 real and fictitious party labels was ascertained by presenting the subjects with cards which contained the following directions:

> On each of the accompanying cards you will find the name of a single political party. You probably do not feel the same about each one. *Assuming that the platforms of all these parties are the same, arrange the names on these cards in the order of your liking for them.* Try to answer for yourself the question, "Which name do I like most?" Then ask, "Which name do I care least for?" Finally, place all the remaining party-names in their proper position, according to your *general liking* for them (p. 337).

The anonymity of the responses was guaranteed by the interviewer. The labels *Republican, Democratic, Farmer-Labor* and *Labor* were liked most, while *International, Radical Reform, Technocratic* and *Communist* were liked least.

In spite of the clean-cut preference expressed for the more conservative party labels, 55.5 per cent of the responses to the

[8] Hartmann, G. W., "The Contradiction Between the Feeling-Tone of Political Party Names and Public Response to Their Platforms," *Journal of Social Psychology*, 1936, Vol. 7, pp. 336-357.

20 statements indicated support of "a program of socialization with its promise of enhanced status to the working-class population and a corresponding reduction in the power of the privileged groups through a 'redistribution of wealth' " (p. 338). While the women tended to be slightly more conservative than the men, the sex differences were small and not consistent.

Conclusions. Although the majority of the voters were apparently in favor of the specific things for which socialism stands, 61 per cent stated that they did not wish to be oriented toward a socialist society. This phenomenon is in line with that exhibited in the 1940 national elections. The winning New Deal which flourishes under the label of the Democratic party sponsors a program which, only a few years ago, would have been generally regarded as a program of socialization. Yet the traditional upholder of socialization, the Socialist party, polled very few votes. We find ourselves forced to agree with Hartmann that "apparently a sharp discrepancy exists between what most American citizens want and the political channels through which they seek to attain it" (p. 355). They see party platforms through the stereotypes of party labels.

OCCUPATIONAL PRESTIGE

The method of paired comparisons. The problem of occupational prestige is one of values. And values, to the extent that they can be validly quantified, are traditionally measured by one of the major psychophysical methods or some variant. There are a number of these methods, all of which yield roughly the same end results. Yet each is, generally speaking, especially well adapted to some particular need. Thus, to the subject who must judge between a number of stimuli, one of the most satisfactory of the possible procedures is that in which the stimuli are presented to him in pairs. Every stimulus appears once (or sometimes twice) with each of the other stimuli. The rater makes a value judgment by indicating which pair member he considers the better in the quality under consideration—the better liked, the more beautiful, or, as in this instance, as having the greater occupational prestige. The major weakness of this method lies in

the fact that the number of possible pairs increases much faster than the number of stimuli.[4] Thus, as no judge can be asked to rate more than a limited number of pairs without a possible loss of interest, some other method must be employed if the number of stimuli is at all large.

Coutu experiment. In an experiment on occupational prestige by Coutu[5] 243 (39 per cent) of the engineering students, 142 (30 per cent) of the law, and 202 (58 per cent) of the medical students registered in 1934-35 at the University of Wisconsin were given the following directions.

> This is not a test—there are no correct answers. This is a study designed to measure people's attitudes toward certain occupations. Below are listed a series of occupations arranged in pairs. You are to *underline* the one occupation in each pair which you consider the more honorable, the more admirable, or the more worthy of prestige—the one in each pair which you, personally, hold in greater respect or esteem. Judge by your own feelings in each case. If in some instances you are unable to decide, just make a guess, *but do not skip any pair.* Be sure to underline one occupation in each pair, even if you have to guess.
>
> Example: Journalist-Architect
>
> If you respect, admire or esteem a journalist more than an architect, underline *journalist;* but if you respect, admire or esteem an architect more than a journalist, then underline *architect.*

These directions were followed by a list of 190 pairs of occupational names (each of 20 occupations paired with every other occupation).

Data. The votes given to the various occupations by each group of students were counted and transmuted into sigma

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[4] The number of pairs can be found by the formula $\frac{N(N-1)}{2}$ where N is the number of stimuli. So, while 5 stimuli can be judged in 10 pairings, 10 stimuli necessitate 45 pairings.

[5] Coutu, W., "The Relative Prestige of Twenty Professions as Judged by Three Groups of Professional Students," *Social Forces,* 1936, Vol. 14, pp. 522-529.

scores.[6] A zero score was assumed for the occupation which received the highest number of votes. The other occupations were placed away from this position on a linear scale, the steps of which were in terms of sigma values.

Conclusions. The following conclusions can be safely made:

1. Each of the three student groups gave its own prospective occupation the highest rating.

2. As the typical engineer and lawyer each rated medicine a close second to his own particular occupation, and as the medical students rated no occupation as at all on a par with medicine, first place went to medicine when all three distributions were combined into a single ranking.

3. The engineering list displayed the smallest spread (2.96 sigma) and the medical group by far the largest (5.28). In fact, the position of college professor which came *third* on the medical scale had an identical score with that of the osteopath which ranked *last* on the engineering scale. The range shown by the lawyers was intermediate (3.53) and showed more resemblance to the spread of the engineers than to that of the medical group.

It is clear from the above data that medical students differentiate between the several occupations more severely than do the other groups. The idea of a hierarchy of occupations apparently means more to them than it does to other students. These facts may quite conceivably have an important bearing on the traditional hostility of the medical groups toward socialized medicine; for any move toward such a goal might lower the status of medicine which, at least in the eyes of medical students, appears greatly above that of all other professions.

DEFINITENESS OF RACIAL STEREOTYPES

Racial prejudice and stereotypes. Only a small minority of us are well acquainted with more than a few members of most races. Many racial and national groups we know solely through the

[6] The sigma score is a relative measure obtained by dividing the deviation of the raw score from the group mean by the standard deviation of the distribution. Sigma scores are held by statisticians to be directly comparable; that is, they express the relative positions a person holds in particular distributions. If, then, he achieves the same sigma score on two tests he occupies the same relative position in these distributions.

medium of books and other secondary sources. Moreover these indirect sources of contact are likely to have given us most unrealistic mental pictures. The Turks we brand as a murderous race, for did not they massacre the innocent Armenians? The Dutch must be the greatest per capita soap users as the good housewives do nothing but scrub. And the cultured natives of Borneo are expected to behave in the manner of "The Wild Man from Borneo" of our circuses.

Are our most definite and decided stereotypes associated with those races for which we have the greatest antipathy? Does friendly contact with a racial or national group lessen the aversion ordinarily directed to it? Or may it be that happy personal relations with members of a particular group alter only our own private stereotyped attitudes but not those that we publicly express? Katz and Braly have attempted to discover certain of the factors related to the definiteness of the racial stereotype.

Katz and Braly study. In a preliminary study 25 Princeton undergraduates were presented with a list of 10 national and racial groups and the request to "list as many specific characteristics or traits as you think are typical." The list of traits so obtained was supplemented by the investigators until it reached the number of 84. The national and racial (and linguistic) groups to be considered were: Germans, Italians, Negroes, Irish, English, Jews, Americans, Chinese, Japanese, and Turks.

In the major portion of the study 100 undergraduates were asked to select the traits which should be associated with each of the 10 groups. The students were to check the 5 trait adjectives most typical of each race. Table 1 shows the 5 adjectives mentioned most often in each instance.

Even a superficial inspection of the data of Table 1 discloses the fact that Negro, German, and Jewish stereotypes are more definite than the Chinese, Japanese, and Turkish. However, in order to measure the degree of definiteness in a more precise and quantitative manner the following procedure was developed. As there were 100 subjects and each of them checked 5 traits, there were 500 votes to be cast each time a racial group was considered. The measure of definiteness finally set up by the authors was "the least number of traits which have to be included to find 50 per

cent of the 500 possible votes" (p. 287). From this it follows that perfect agreement exists whenever 2.5 traits receive 50 per cent of the votes (250 ÷ 100 = 2.5). Table 2 indicates the rank order of definiteness.

TABLE 1[7]

FIVE MOST COMMONLY MENTIONED TRAITS

TRAITS	PER CENT	TRAITS	PER CENT
Germans		*Jews*	
Scientifically minded	78	Shrewd	79
Industrious	65	Mercenary	49
Stolid	44	Industrious	48
Intelligent	32	Grasping	34
Methodical	31	Intelligent	29
Italians		*Americans*	
Artistic	53	Industrious	48.5
Impulsive	44	Intelligent	47.5
Passionate	37	Materialistic	33.3
Quick-tempered	35	Ambitious	33.3
Musical	32	Progressive	27.3
Negroes		*Chinese*	
Superstitious	84	Superstitious	35.1
Lazy	75	Sly	29.9
Happy-go-lucky	38	Conservative	29.9
Ignorant	38	Tradition-loving	26.8
Musical	26	Loyal to family ties	22.7
Irish		*Japanese*	
Pugnacious	45	Intelligent	47.9
Quick-tempered	39	Industrious	45.7
Witty	38	Progressive	25.5
Honest	32	Shrewd	23.4
Very religious	29	Sly	21.3
English		*Turks*	
Sportsmanlike	53.5	Cruel	54.0
Intelligent	46.5	Very religious	29.9
Conventional	34.3	Treacherous	24.1
Tradition-loving	31.3	Sensual	23.0
Conservative	30.3	Ignorant	17.2

[7] Adapted from Table 1 in Katz, D., and Braly, K. W., "Racial Stereotypes of One Hundred College Students," *Journal of Abnormal and Social Psychology*, 1933, Vol. 28, pp. 280-290.

TABLE 2[8]

DEFINITENESS OF STEREOTYPE

RACE OR NATIONAL GROUP	NO. TRAITS REQUIRED
Negroes	4.6
Germans	5.0
Jews	5.5
Italians	6.9
English	7.0
Irish	8.5
Americans	8.8
Japanese	10.9
Chinese	12.0
Turks	15.9

Conclusions. No one can seriously doubt that American college students have had their most numerous social contacts with American nationals. Yet the American stereotype was found to be quite poorly formed. Other studies have shown that of all racial and national groups Negroes and Turks meet the greatest amount of prejudice.[9] But in the table above these two groups stand at opposite ends in the matter of definiteness of stereotype. It is clear, therefore, that definiteness of stereotype is closely related neither to prejudice nor to frequency of social contacts.[10]

[8] Taken from Table 2, Katz, D. and Braly, K. W., "Racial Stereotypes of One Hundred College Students," *Journal of Abnormal and Social Psychology*, 1933, Vol. 28, pp. 280-290.

[9] Bogardus, E. S., *Immigration and Race Attitudes*. New York: Heath, 1928.

[10] For a comparison with the stereotypes of Negro college students see Bayton, J. A., "The Racial Stereotypes of Negro College Students," *Journal of Abnormal and Social Psychology*, 1941, Vol. 36, pp. 97-102. See also Katz, D., and Braly, K. W., "Racial Prejudice and Racial Stereotypes," *Journal of Abnormal and Social Psychology*, 1935, Vol. 30, pp. 175-193.

25. FRUSTRATION

Frustration may produce many different responses in different people under different circumstances. Reactions to frustration may be as *varied* as aggression, withdrawal, regression, resistance, anger, guilt and remorse, shame and embarrassment. The experiment reported below reveals the effects of frustration on young children in terms of constructiveness of play. It also suggests that increase in security brought about by friendly social interaction tends to diminish the influence of frustration. As to some other effects of frustration, see Selection 17, *Perception,* pages 156-167.

CONSTRUCTIVENESS OF PLAY AS AFFECTED BY GROUP ORGANIZATION AND FRUSTRATION *

M. Erik Wright

Recent investigations have shown that the constructiveness of play is dependent upon more factors than just that of the intellectual level of child. In a study by C. E. Meyers[1] creativity of a child's play was shown to be influenced by the nature of adult commands with respect to his play. The two adults in the experimental situation would sometimes agree in forbidding the child to play with a certain toy, and at other times disagree with each other in their commands to the child about not playing with a certain toy. In a similar manner

* From "Constructiveness of Play as Affected by Group Organization and Frustration," by M. Erik Wright, *Character and Personality,* 1942, Vol. 11, pp. 40-49. Reprinted by permission of the publisher and author.

[1] Meyers, C. E., *Security and Conflicting Adult Authority.* Iowa City: University of Iowa, 1940 (unpublished doctoral dissertation).

they might agree or disagree in their positive suggestions to the child. The conflict of authority between the adults tended to create an atmosphere of considerable insecurity for the child and resulted in significant decreases in the level of constructiveness of the play as well as in the amount of time spent in play. Barker, Dembo, and Lewin,[2] investigating the influence of frustration on a child when alone, found a significant relationship between the degree of frustration and the amount of regression in the level of constructiveness of play. Thus the degree of security and the strength of frustration are two factors whose influence on the level of constructiveness has been demonstrated. Most clinicians would readily agree that children who are emotionally disturbed during a testing interview perform at a lower level than during a period of calm. The intelligence test may well be considered a measure of constructiveness, and by implication, such factors as bear an important relationship to the level of constructiveness shown in a given situation may be significant for the measurement of intelligence. This paper[3] is concerned with one such factor which may play an important role in constructiveness, namely, the social atmosphere surrounding the child. It asks the question whether or not the presence of a second child, whose social relation with the first is more or less structured, will influence the constructiveness of the child when he is in a frustration situation.

EXPERIMENTAL PROCEDURE

The subjects were 78 children, from 3 to 6 years of age, in attendance at the Iowa Child Welfare Research Station Preschools. These children were paired on the basis of the strength of friendship existing between them as determined by teacher ratings and the observations of the experimenter. This procedure yielded 18 pairs of strong friends and 21 pairs of weak friends.

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[2] Barker, R., Dembo, T., and Lewin, K., "Frustration and Regression: An Experiment with Young Children," *University of Iowa Studies in Child Welfare*. Iowa City: University of Iowa, 1941, Vol. 18, No. 1.

[3] Based on a dissertation submitted to the State University of Iowa in fulfillment as a partial requirement for the Ph.D. degree. The study was completed under the direction of Drs. T. Dembo and K. Lewin at the Iowa Child Welfare Research Station.

Each pair of children participated in two experimental sessions. The first was a standard situation in which the children could play with all the toys present. This was called the free play period. In the second session the children were first permitted to play in a part of the room which included the standard toys as well as many very attractive toys. After they had become quite involved in the play with these desirable toys, they were brought back to the standard situation and a wire fence was interposed between themselves and the attractive toys. These toys were plainly visible but no longer available for play. This was termed the frustration period. After the frustration period, the barrier was raised and the children were permitted to return to the enriched area in order to avoid any post-frustration effects.

RESULTS

Two aspects of the play behavior were considered: (1) the level of constructiveness and (2) the total volume. In order to evaluate the level of constructiveness of play it was necessary to set up a scale for ranking the different play activities. The scale, consisting of four levels, was based on the principles of complexity of organization, usage of materials, and planning. The volume of play was expressed in terms of the total duration of play.

The following criteria were used by the judges in rating the play activities:

Constructiveness I. This was the lowest ranking for constructiveness. The activities ranked as Constructiveness I had little, if any, planning. The other characteristics of this level of play were (a) its exploratory nature and (b) its usage of materials in a primitive form. That is, the toys were used as "objects," and their particular character was disregarded.

Examples of some of the activities included under this heading were: moving the truck back and forth, shaking the phone, swinging the fish pole back and forth, spilling out the pegs, nonsense gibberish meant as play (e.g., J says: "Cluck, clock, clik." V answers: "Clik, clik, clink").

Constructiveness II. Existence of a very simple plan in the play with a definite goal. Only a few steps seemed to be differen-

tiated between the initiation of the action and the entrance to the goal area. This level of play was further characterized by (a) simple usage of materials in accord with their specific nature, (b) the appearance of a means-end relation in the play, and (c) a very short time perspective.

This category covered such activities as piling the blocks in a definite arrangement, fishing, putting crayons into their box, scribbling, making comparisons, making simple line patterns.

Constructiveness III. A fairly definite goal with an elaboration of planning, characterized by (a) presence of a goal region with subparts, (b) a more complex path to the goal, and (c) a somewhat longer time perspective.

On this level were such activities as carrying a given object on the truck to a definite place, drawing a picture with differentiable parts, carrying on barter, baking a cake for supper, feeding the fish, building a definite structure with blocks.

Constructiveness IV. This was used to designate the highest level of play. This play involved considerable organization. The characteristics were (a) presence of a plan with a fairly long time perspective, (b) integrated sub-units of play, (c) recognition of the "pretense" character of the play, and (d) use of the play material in other than its conventional form.

Constructiveness IV included driving the truck to Chicago, where the load of cattle would be sold; drawing a picture of a car and a trailer, all set for a trip; small dramatic skits.

The differentiation into four levels of constructiveness was as fine as the observations warranted, since the main focus of the study was upon the social interaction of the children and only secondarily upon their play activities.

The average constructiveness was expressed as a Constructiveness Index (C.I.), which was determined by the equation:

$$\text{Constructiveness Index} = \frac{C_1 \cdot t_1 + C_2 \cdot t_2 + C_3 \cdot t_3 + C_4 \cdot t_4}{\text{Total duration of play } (t_1 + t_2 + t_3 + t_4)}.$$

C_1, C_2, C_3, C_4, are levels of constructiveness, and t_1, t_2, t_3, t_4, are the amounts of time spent at each of the levels. In this formula the constructiveness rating was weighted by the time spent in play

at that level, and the sum of weighted constructiveness ratings divided by the total duration of play is called the constructiveness index.

Reliability of the judges' ratings was .75 for per cent of absolute agreement as to the level of constructiveness for the play action, and .90 for per cent agreement to within one step. Reliability was determined as the proportion of agreement to the total number of judgments made. One procedure for the validation of the scale was to correlate the level of constructiveness in the free play situation with age. This yielded a coefficient of $r = .47 \pm .06$, significant at the 1 per cent level.[4] The principles on which this four-point scale of constructiveness was based were comparable to those used by Barker, Dembo, and Lewin,[5] and it was assumed that the theoretical basis on which their scale was validated also would hold for this scale.

TABLE 1

THE AVERAGE INDEX OF CONSTRUCTIVENESS (I.C.) OF THE TOTAL GROUP FOR ALL PLAY, SOCIAL PLAY, AND SOLITARY PLAY IN THE FREE PLAY AND FRUSTRATION SITUATIONS

	I.C. FOR ALL PLAY	I.C. FOR SOCIAL PLAY	I.C. FOR SOLITARY PLAY
Free Play	2.57	2.67	2.42
Frustration	2.31	2.53	2.03

Index of Constructiveness in Free Play and Frustration. Under the influence of frustration the level of constructiveness of the total group decreased. In Table 1 the average constructiveness (as expressed by the Index of Constructiveness) of the total group is compared in the two situations.

There is a drop in the I.C. for all play from 2.57 in free play to

[4] Lindquist, E. L., *Statistical Analysis in Educational Research.* New York: Houghton Mifflin Company, 1940.

[5] Barker, R., Dembo, T., and Lewin, K., "Frustration and Regression: An Experiment with Young Children," *University of Iowa Studies in Child Welfare.* Iowa City: University of Iowa, 1941, Vol. 18, No. 1.

2.31 in frustration, and this decrease is significant at the 1 per cent level by Student's "t" test.[6] Barker, Dembo, and Lewin[7] have demonstrated that this regression in the average level of constructiveness occurs even when play units of equal duration, in both the free play and frustration situations, are compared. This indicates that the regression cannot be attributed solely to shorter units of play action under frustration.

The regression in the level of constructiveness under frustration is not confined to the total play, for it is also found in social and solitary play. The Index of Constructiveness of solitary play shows a larger decrease from free play to frustration than it does for social play. One interpretation of this difference might be that in social play the accessibility of the children to each other under frustration is greater than it was in free play. The increased number of regions which results from this tends to counteract the influence of the background of frustration. It is to be noted that social play in both experimental situations shows a consistently higher level of constructiveness than solitary play. This fact holds not only for the total group but also for all the age groups used in the experiment.

The decrease in the average level of constructiveness was not merely an overall effect of frustration, for the extent of regression was found to be related to the strength of frustration. The strength of frustration was measured in terms of the amount of time spent in action against the barrier (towards the nonavailable toys) and in attempts to escape from the experimental situation. The correlation between the Index of Constructiveness and the strength of frustration was $r = -.50 \pm .06$, significant at the 1 per cent level. That is, the stronger the frustration, the greater the tendency for the level of constructiveness to decrease. In general, the results for pairs of children showed the same trends with respect to decrease in constructiveness under frustration as the Barker, Dembo, and Lewin study found for the solitary child.

[6] Lindquist, E. L., *Statistical Analysis in Educational Research*, New York: Houghton Mifflin Co., 1940.

[7] Barker, R., Dembo, T., and Lewin, K., "Frustration and Regression: An Experiment with Young Children," *University of Iowa Studies in Child Welfare*. Iowa City: University of Iowa, 1948, Vol. 18, No. 1.

The strong friends tend to have a higher average Index of Constructiveness for all play than the weak friends in the free play situation. In Table 2 we note that the difference in favor of the strong friends seems largely due to the higher index of constructiveness which they show in solitary play over the weak friends. In the relatively calm atmosphere of the free play situation, the social play of both groups of friends reaches the same level of constructiveness (I.C. for strong friends is 2.68; for weak friends, 2.67). It is only when the children play by themselves in the free play situation that we note any difference in performance level

TABLE 2

THE AVERAGE INDEX OF CONSTRUCTIVENESS (I.C.) OF THE STRONG AND WEAK FRIENDS FOR ALL PLAY, SOCIAL PLAY, AND SOLITARY PLAY IN THE FREE PLAY AND FRUSTRATION SITUATIONS

	I.C. FOR ALL PLAY		I.C. FOR SOCIAL PLAY		I.C. FOR SOLITARY PLAY	
	FPL	FRUS	FPL	FRUS	FPL	FRUS
Strong Friends.....	2.66	2.40	2.68	2.61	2.54	2.12
Weak Friends.....	2.49	2.23	2.67	2.47	2.33	1.95

between the strong and weak friendship groups (I.C. for strong friends is 2.54; for weak friends, 2.33). The difference between the strong and weak friends in the Index of Constructiveness for social play becomes more evident when both groups are under the increased tension of the frustration situation. Both the strong and weak groups decrease in constructiveness under frustration in the solitary play, but the relative difference between the two indices of constructiveness does not increase.

The strong friends have a consistently higher level of constructiveness under frustration than the weak friends for social, solitary, and total play. This trend was found to be consistent for the friendship groups at the various age levels. It seems safe to infer that the strength of friendship is a factor influencing the effect of frustration upon the level of constructiveness. The higher level of constructiveness reached by the strong friends may be a function of the greater security they feel (because of their

friendship for each other) in the frustration situation both when in social contact and alone.

There is a significant decrease in the Index of Constructiveness from free play to frustration for the strong and the weak friendship groups, and both groups show the largest decreases in constructiveness for the solitary play.

Volume of Play in Free Play and Frustration. The volume of play serves as an indication of the relative interest of the children in play, as shown by the amount of time spent in that type of activity. In Table 3 the data on the volume of play for the total group in the free play and frustration situations are presented.

TABLE 3

VOLUME OF PLAY OF THE TOTAL GROUP IN FREE PLAY AND FRUSTRATION. PROPORTION OF PLAY SPENT IN SOCIAL AND SOLITARY ACTION*

	PER CENT OF TOTAL EXPERIMENTAL PERIOD	PER CENT OF TOTAL VOLUME OF PLAY	
		SOCIAL	SOLITARY
Free Play	71.0	62.1	27.4
Frustration	42.4	67.8	25.5

* The volume of social unreciprocal play (play carried on while the child was attempting a social contact which the other child did not react to) was approximately the same in free play and frustration and was not included in either Table 3 or 4. Thus the per cent does not equal 100 in each case.

The children spent almost three fourths of the free play period in play activities. The remainder of the time was taken up with such actions as talking with the experimenter, watching him write, looking out of the window, etc.

In both the free play and frustration situations there was more than twice as much time spent in social play as in solitary play (Table 3). The toys had been carefully selected so as to permit either solitary or social play at any of the levels of constructiveness. It seems safe to rule out the hypothesis that the larger volume of social play was a function of the nature of the play materials. A more likely interpretation might be that the children found an added stimulation from each other in the course of

social interaction which was not present in solitary play and that this tended to make the play more attractive and interesting.

The volume of play shows a significant decrease (1 per cent level) from free play to frustration. This drop is found at each of the age levels. The distribution of time between social and solitary play does not markedly alter.

In Table 4, the volume of play for the two groups has been compared in the free play and frustration situation, including analysis into social and solitary components of play. Both the strong and the weak friends show considerable interest in play during the free play situation. The strong friends tend to show

TABLE 4

VOLUME OF PLAY FOR THE STRONG AND WEAK FRIENDS IN FREE PLAY AND FRUSTRATION. PROPORTION OF TIME SPENT IN SOCIAL AND SOLITARY PLAY

	PER CENT OF TOTAL EXPERIMENTAL PERIOD		PER CENT OF TOTAL VOLUME OF PLAY			
			SOCIAL		SOLITARY	
	FPL	FRUS	FPL	FRUS	FPL	FRUS
Strong Friends.....	74.6	49.8	64.0	77.4	26.2	21.5
Weak Friends.....	68.0	37.3	58.9	56.7	28.6	29.8

more interest in play than the weak friends (however, the difference of 6.6 per cent does not reach an adequate level of statistical significance). This difference can be accounted for on the basis of the larger volume of social play by the strong friends than by the weak friends. When the children played alone in the free play situation, the volume of play for the strong friends and the weak friends was at about the same level. As with the total group, the volume of social play was more than twice as large as the volume of solitary play.

Under frustration the interest in play shows a statistically significant decrease for the strong and the weak friend groups. The strong friends decrease about 25 per cent, and the weak friends decrease 31 per cent in the amount of time spent in play. The difference between the two groups in the volume of play in frustration (12.5 per cent) reaches only a low level of statistical sig-

nificance (11 per cent on Student's "t" test). The direction of the difference, however, is consistent for the friendship pairs at all age groups, both in free play and in frustration; and quite probably, if a larger sample had been used, a more significant statistical difference would have been found to exist between the strong and weak friends in the amount of time spent in play.

The greater interest in social play over solitary play which was found in free play also prevails for both groups of friends in the frustration situation. The strong friends show a marked increase (13.4 per cent) in social play and a decrease (5 per cent) in their volume of solitary play. The weak friends show only a minor fluctuation from free play to the frustration situation in the proportion of play time spent in social and solitary play.

From the above discussion on the volume of play (i.e., interest in play activities) of the total group and the friendship groups on the two experimental situations, it may be concluded that the volume of play is influenced by: (1) the nature of the situation, viz., free play or frustration, and (2) the degree of friendship existing between the children.[8]

INTERPRETATIONS

One of the basic principles embodied in the formation of a scale of constructiveness is the degree of organization displayed in the play. Organization involves the factors of planning and "sequence character" of the play. The following incident is illustrative of what is meant by these two terms. Bobby has been playing with Walter, and during this episode of play they have discussed and carried out the following activities: "rounded up the cows, loaded the truck with cattle, driven the truck to Chicago, sold the cattle, brought the truck and the money home, and bought some pretty things for the dolly with the money."

It is evident that an important aspect of planning is an anticipation of the character of the future (i.e., "time perspective") and the degree to which that future seems to be within the con-

[8] In this paper we shall attempt only a very brief presentation of the relation between the theory of constructiveness and social relations. Barker, Dembo, and Lewin go into considerable detail with reference to the theory of constructiveness.

trol of the individual. That is, how far in the future the child sees himself as determining the course of events, will considerably influence the extent and complexity of the planning and thereby the level of organization of the play.

In the free play period the children were undisturbed in their play. The frustration period was marked by the sudden interference by the experimenter with the play which the children were enjoying very much. He brought them back to the standard situation and placed a wire fence between the children and the attractive toys. A decrease in constructiveness under frustration may be expected on the following bases: (1) the heightening of the emotional tension as a result of the frustration of the desire to play with the attractive toys (cf. Barker, Dembo, and Lewin) and (2) the unexplained intervention of the experimenter which acted to make the future very uncertain and therefore, by limiting the possibilities of planning, led to a decrease in the degree of organization of the play. The results show that (1) there was a significant decrease in constructiveness under frustration as compared with free play and (2) that the level of constructiveness was negatively correlated with the strength of frustration.

We have pointed out above that a decrease in the feeling of control over the future would result in a lowering of the level of constructiveness. From this, and the other preceding remarks, it should follow that an increase in the feeling of control over the future should result in an increase in the level of constructiveness. It is probably correct to say that the feeling of control over the future is dependent upon the degree of security felt in the present. If we assume that strong friends (which relation is characterized by a willingness to mutually support one another) have a greater feeling of security than do weak friends, then it follows that the strong friends should have a higher level of constructiveness than the weak friends. This is borne out by the data on constructiveness for the strong and weak friends reported in the results.

The level of constructiveness, besides being dependent upon time perspective and planning, is also determined by the variety of different, but related subparts which are included in the given play unit. When two children play together with the same toy,

or are engaged in the same activity, the variety of subparts is greater than when each plays alone. Not only does each bring his own repertoire of experience with a given activity to the play situation, but the stimulation, cues, and suggestions which each contributes to the other tends to widen considerably the scope of possible activities in the play. The data on constructiveness show that in both the free play and frustration situations the social play of all groups had a higher level of constructiveness than the solitary play.

SUMMARY AND CONCLUSION

1. Experimental frustration was produced in 39 pairs of preschool children from 3 to 6 years of age, who had been divided into two groups on the basis of strength of friendship. There were 18 pairs of strong friends and 21 pairs of weak friends. The procedure used was a modified Barker, Dembo, and Lewin technique.

2. There was a statistically significant decrease in constructiveness from free play to frustration for the group as a whole.

3. There was a statistically significant negative correlation between constructiveness level and strength of frustration ($r = -.50 \pm .06$).

4. The level of constructiveness of social play was consistently higher than that for solitary play both in the free play and frustration situation.

5. There was a statistically significant decrease in constructiveness for both the strong and the weak friends in the shift from free play to frustration.

6. The strong friends tended to have a higher level of constructiveness than the weak friends. This was particularly true under frustration.

7. There was a significant decrease in the amount of time spent in play under the influence of frustration.

8. Both in free play and frustration there was about twice as much time spent in social as in solitary play.

9. The strong friends consistently tend to spend more time in play than the weak friends in both free play and frustration. In the latter case the difference approaches statistical significance.

10. Both the strong and the weak friends show a significant decrease in the volume of play under frustration.

11. It is theoretically suggested that the increase in security and control over the situation brought about by friendly social interaction tends to diminish the influence of frustration upon the level of constructiveness. Furthermore, the social stimulation of interpersonal interaction tends to lead to higher constructiveness.

26. SUGGESTION

This is a portion of one chapter from a monograph which presents experimental evidence on *suggestion* in response to propaganda, in interpretation of inkblots, in reaction to examination instructions, and in judgments of the attributes of tones. In all instances—including the experiment below regarding the Rorschach inkblot test—both *pre-existing attitudes* and *situational factors* were found to be of tremendous importance. For further material on suggestion, see Selection 31, *Critical Social Situations,* pages 302-307; and Selection 34, *Social Norms (Frames of Reference),* pages 327-338.

SITUATIONAL CONDITIONS OF SUGGESTION: THE RORSCHACH INKBLOT TEST *

Thomas E. Coffin

PURPOSE

The present experiment raises the question of the suggestibility of complex perceptual responses to ambiguous stimuli.[1] It has frequently been shown that subjects will agree to a suggested description of a situation, when the description is verbalized by the suggestor himself. They will assent to a statement or "leading question." But can response to perceptual data be suggestively influenced beyond a point of pas-

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* From *Some Conditions of Suggestion and Suggestibility: A Study of Certain Attitudinal and Situational Factors Influencing the Process of Suggestion,* by Thomas E. Coffin, Chapter 4, "Situational Conditions of Suggestion: The Rorschach Inkblot Test," *Psychological Monographs,* 1941, Vol. 53, No. 241, pp. 49-62. Reprinted by permission of the publisher and author.

[1] This experiment was reported in briefer form at the 1939 spring meetings of the Eastern Psychological Association, at Bryn Mawr College, Bryn Mawr, Pennsylvania.

sive *assent*? Can suggestion direct the subjects' *own* verbalizations? Can we influence the subject actively to construct the situation in accordance with suggestion rather than simply *accepting* an imposed construction? Moreover, will the subject interpret the situation according to any and every suggestion offered, or is his interpretation demonstrably related to existing attitudes not specifically associated with the given stimulus-situation?

These are the questions around which the following experiment is organized. The material chosen for the experiment was the Rorschach Inkblot Test, which offers for judgment stimuli of intentional ambiguity.

PROCEDURE

Our general procedure was to obtain the subject's evaluation of a series of common occupations, then to suggest to him that the members of the occupations most preferred by him tend to respond in one manner, and that members of non-preferred occupations respond in a different manner. Then by administering the Rorschach test to the subject himself and examining his own responses, we were able to determine which of the available suggestions the subject had accepted, and their correspondence to his expressed attitudes.

The attitude questionnaire was modified from the one used by Anderson in his study of the occupational attitudes of college men.[2] The subjects were given a list of ten occupations and directed to rank them "in the order of their social standing according to your judgment." The occupations to be ranked were banker, barber, chauffeur, ditch digger, factory worker, lawyer, manufacturer, mechanic, physician and professor. In addition, they were asked to state in which of these occupations they would most (and in which least) desire to be engaged, what their father's occupation was, and what occupation they planned to enter. One-half of the subjects filled in the attitude scale before viewing the inkblots and one-half received it after the blots.

In administering the suggestions, the following procedure was adopted: the subjects were informed that they were to be given a

[2] Anderson, W. A., "The Occupational Attitudes of College Men," *Journal of Social Psychology*, 1934, Vol. 5, pp. 435-466.

"personality test" in the form of inkblots. These blots were meaningless in themselves, but an individual could "imagine various things in them," much the way one "sees things in clouds." "On the basis of the sorts of things seen in the blots, it is possible to analyze the individual's personality-type. For example, I have just received a reprint from an outstanding psychologist at Harvard, who reports that men in different occupational standings tend to see different types of things in the inkblots. If what he finds is true, this gives us an important basis for vocational guidance. So part of my purpose in giving you this test is to see if I find the same thing with college students." Then the subject was handed a short article which the experimenter had written and had printed, containing the actual suggestions to which the subject was to be exposed.

This article was printed in such a form as to resemble a standard reprint of a paper in a scientific journal. The page make-up and typography followed the form of short reprints from the *Journal of Abnormal and Social Psychology,* and the page was headed with the impressive though fictitious journal-title, *The Annals of the Academy of the Social Sciences.* Authorship was ascribed to "C. C. Hollingsworth, Harvard University." The article itself consisted of a paragraph of introduction "explaining" the principle and usage of the Rorschach test, followed by the actual suggestion-material. This was presented in the form of the supposed results of the imaginary study being reported in the reprint:

One thousand subjects were selected from various occupations: professional men, including doctors and lawyers; business men, including bankers and executives; skilled laborers; and WPA workers. These men were given the Rorschach Test to determine whether typical differences in interpretation differentiate the various groups from one another. The results show consistent differences between the groups. The group of professional men tended predominantly to view the inkblot as a *whole.* They did not break it down into details, but saw meanings to it as a total picture. The group of business men tended chiefly to see *animals* in the blots. The skilled laborers saw mainly *inanimate* objects. The WPA group tended to analyze the blot into various *details,* viewing it not as a whole but as many separate parts.

There followed a paragraph of meaningless "statistical analysis," designed to convey the authenticity of these findings. At the close, there was a tabular summary of the findings, calling the suggested responses again to the subjects' attention. The subjects, 30 volunteers from the elementary psychology classes, were divided into two groups of 15 subjects each, and the groups given opposite suggestions, in order that by comparison of their results we might determine the effect of the suggestions. Two forms of the article were printed, identical in form and content, with the exception of the suggestions contained. To group I was given the reprint containing suggestions that business and professional men tended to view the blot as a *whole* and that they saw chiefly *animals* in the blots, whereas laborers and WPA workers analyzed the blot into details, and tended to see inanimate objects. Group II was given a reprint with the opposite suggestion, that business and professional men analyzed the blots into *details* and saw mainly *inanimate objects,* while laborers and WPA workers saw the blot as a whole and perceived animal forms.

When the subject had read the reprint, the experimenter showed him a sample blot from the Rorschach series to familiarize him with the material, and then started him on the test-blots. In order to produce a significant number of responses and yet not demand too much of the subjects' time, six of the ten standard Rorschach inkblots were used. An approximate time-limit of five minutes was set for the viewing of each blot.[8] However, if the subject declared he had exhausted his responses before this time had entirely elapsed, he was permitted to proceed with the next

[8] That this is ample time to permit of adequate response to the blot is indicated by Thornton and Guilford's finding of a mean time of from 2 to 4 minutes taken for each card by 50 college students. (Thornton, G. R., and Guilford, J. P., "The Reliability and Meaning of Erlebnistypus Scores in the Rorschach Test," *Journal of Abnormal and Social Psychology,* 1936, Vol. 31, pp. 324-330.) Vernon finds that the majority complete the test in half an hour, though occasionally some may require as much as two and one-half hours. (Vernon, P. E., "The Rorschach Inkblot Test. I, II, III," *British Journal of Medical Psychology,* 1933, Vol. 13, pp. 89-120, 179-205, 271-295.) Beck finds the average adult to require 30 minutes, the superior adult, 40 to 60 minutes. (Beck, S. J., "Introduction to the Rorschach Method," *Monograph No. 1, American Orthopsychiatric Association,* 1937.)

blot. The subject sat at ease in a comfortable chair, with the blots on a desk before him. The blots were arranged face-down in a standard order. To control the factor of primacy one-half of the subjects went through the blots in the order from I to VI; the order was reversed for the other half, being from VI to I. The experimenter recorded all responses as they were given, including any incidental comments made by the subject.

SCORING OF RESPONSES

Since we were interested in measuring response to suggestion, rather than in obtaining true psychograms, the responses were scored only for the categories which had been suggested in the reprint.[4] Since many of the conventional Rorschach categories commonly yield very few responses each, the scoring was simplified by including only categories which promised to give a substantial number of responses. A further important reason for this procedure lies in the fact that the definition or description of many of the categories is so involved that it would have been difficult to "suggest" them to the subjects without the likelihood of arousing too strongly "critical" an attitude. The complex description necessary to convey the idea would have militated against its ready acceptance. Furthermore, the more involved the description the greater the danger of the suggestion losing force owing to the difficulty of retention over the period of time required for the experiment. This would also have introduced a further variable into the experiment, in the form of individual differences in memory ability. The categories chosen seemed likely to be "meaningful" to and easily retained by the subjects.

Consequently, in the interests of simplicity and effectiveness in suggesting and scoring the responses, it was deemed advisable to limit the items for consideration to two pairs of opposites, whole-responses versus detail responses, and animate versus inanimate

[4] "Complete" scoring includes measures of nearly 20 factors, such as total responses, wholes, details, specific types of details, form, movement, chiaroscuro, vulgar, animal and human responses (compare Beck, and Vernon, same citation as footnote 3). The present scoring is more restricted than the conventional technique, and the results are consequently not susceptible of interpretation in terms of the formal Rorschach "factors."

objects.[5] The scoring of the Rorschach test is at best somewhat subjective and variable. It was felt that the categories selected offered better than average possibility of objectivity and consistency in scoring. These categories, for the purposes of this investigation, were defined in the following manner. "Whole-responses" are responses for which the "whole inkblot" was the stimulus, interpretations referring to the total pattern of the blot. For example, the blots, being bilaterally symmetrical, frequently suggest butterflies, moths, football shoulder-pads, etc. Such images refer to the total pattern of the blot, and are classified as whole-responses. "Detail-responses," on the other hand, are interpretations of specific details within the inkblot.[6] For instance, a certain detail may be seen as a fishhook, the head of a dog, a shoe, etc. Since these images refer to a detail of the blot rather than to the total picture, they are considered detail-responses. In addition, a given response, whether it refers to the whole or to a detail, may represent an image of an animal form, or of an inanimate object.[7] Butterflies, moths or dogs' heads refer to animal forms: fishhooks, shoes and shoulder-pads are inanimate objects. Therefore the category of "animal forms" includes all responses, whether to the whole or part of the blot, which refer to animals or parts of

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[5] Vernon's words afford some justification for this choice. Whole versus detail is relatively objective in scoring, "Since it is fairly easy to decide whether or not a response is a *g* [whole]. . . ." The relative frequency of animal responses is also indicated: ". . . the animal interpretations must always be enumerated. Being the commonest kind of answer . . ." (Vernon, same citation as footnote 3.)

[6] "*Ganzantwort, i.e.,* a response which interprets the blot as a whole. . . . *Detailantwort, i.e.,* a response which interprets some part or detail of the blot." (Vernon, same citation as footnote 3, p. 99.) In one of the plates, there are tiny 'secondary' spots of ink, not connected to the body of the main blot, much smaller in size and printed in red rather than black ink. In conformity with accepted Rorschach technique "whole-responses" to this blot need not necessarily include reference to these secondary spots. (Compare Beck, and Vernon, same citation as footnote 3.)

[7] In conventional scoring of the test, "The procedure is to consider each response, first in respect to its 'mode of apperception' [whole versus detail], then its 'quality,' and finally its 'content.' The several categories to which the response belongs are designated by the letters or abbreviations of their German names. . . . Thus when a response has been completely scored it will have received three such symbols." (Vernon, same citation as footnote 3, pp. 95-96.)

animals. "Inanimate objects" includes all responses, whether to whole or part, which refer to inanimate, non-animal forms.

These definitions cover the great bulk of the responses. There were, however, a few images which "logically" could fit into either the animate or inanimate class. "Pelvic-girdle," for example, may refer to a part of a living organism, or to an inanimate structure of bone. The most satisfactory method of categorizing responses such as this seemed to be to appeal directly to the subject himself. What we were interested in was the correspondence between his responses and the suggestions given him. Since, as stated above, it was thought unwise to attempt too detailed a definition of the categories in giving the suggestions, the subject had a certain leeway in interpreting the meaning of the terms "animate" and "inanimate." To one subject, "skin of animal" might be part of an animal and therefore in the animal class; to another subject, it might be a dead pelt, and "inanimate." Therefore the only adequate means of classifying the response was to ask the subject "what it meant to him." [8]

Accordingly, a preliminary classification of the responses was carried out in coöperation with the subject himself. After he had completed the test, he was asked to indicate what he had "meant" by his responses, with particular reference being made to those which seemed equivocal in classification. By phrasing questions in such a manner as to "draw him out" on the items, it was possible to gain the necessary data without arousing suspicion of the experimenter's objectives. Later, in going over the subjects' records in the course of the final scoring, there were discovered a few responses which did not obviously fit into either category, and on which no supplementary data had been secured. One subject, for example, gave two or three interpretations of the "mood" of the blots. "I get the idea of rain, sunshine, grass growing, new

[8] "If the experimenter is dubious, at any time, as to the proper classification of a response, he should mark it with a cross and go through the series again at the end of the experiment, questioning the subject with respect to these doubtful interpretations." (Vernon, same citation as footnote 3, p. 94.) "It is necessary to go back over the record, response by response, and find what portion has been reacted to. . . . In many instances, questioning will indicate the direction of O's thoughts." (Beck, same citation as footnote 3, pp. 191, 261.)

life, cheer, happiness, joy, optimism." "The general impression is design, light and flimsy." Another subject remarked, "This blot has an Oriental air to it." In all, there were about a dozen such "unclassifiable" responses. These were not included in the final compilation of scores. Because of their small numbers, and because they were about evenly distributed between the experimental groups, their omission does not materially affect the results. By far the greatest number of items were readily separable into the appropriate classes. "Bat flying," "mountain range," "map," "book open," "two men doing something," "rock formation": these are the common and easily classified interpretations.[9]

The determination of whole-responses versus detail-responses was not difficult. In the experimental period, the experimenter, according to standard procedure, sat behind and slightly to one side of the subject. The subjects, most of whom took a lively interest in the test, in many cases spontaneously indicated the aspects of the blot which suggested their ideas. They would say, "The whole thing looks like a map of a mountain lake," or, "There, that little part reminds me of a witch on a broomstick," pointing to the detail they were regarding. As a result, a great proportion of the responses could be marked W (whole) or P (part) as they were being recorded. For the remainder, the subject was asked at the close of the test to describe the stimulus for his image: "Which aspect of the blot was it that suggested a deer's head to you?" In this, as in the checking of animate versus inanimate responses, the subjects coöperated freely and interestedly.[10]

During the final scoring, all record-sheets were grouped together, with identifying symbols concealed, and each subject's responses tallied on a separate sheet under the appropriate head-

[9] In fact, as has been found by other workers with the inkblots, the imagery of different subjects on given blots seems to follow along lines which, in view of the amorphous character of the stimuli, are sometimes surprisingly consistent. The experimenter becomes able, after some experience, to predict in a goodly number of instances the ideas which will be suggested by a certain blot or detail. It is only the occasional subject who consistently produces more than variations on the general theme. In our experimental situation, this tendency is probably augmented, as it was in Sarbin's case, by the nature of the Aufgaben imposed.

[10] "Most subjects seem to evince great interest in the test." (Vernon, same citation as footnote 3, p. 93.)

ing, "Whole," "Detail," "Animal," "Inanimate." Since each item could both represent an animate or inanimate object and be a response to the whole or to a detail, every response was tallied twice, once as a whole or detail and once as animate or inanimate. From these tallies, total individual and group results were derived and percentages computed.

RESULTS

The first requirement is to ascertain the comparability of the two experimental groups with regard to the attitude variable. This is done by determining the average rankings of the various occupations made by each group. As may be seen in Table 1 we find a very close correspondence in these rankings.

TABLE 1

AVERAGE RANKINGS OF OCCUPATIONS

	GROUP I	GROUP II	DIFF.
Physician	2.2	1.7	0.5
Professor	2.5	2.4	0.1
Manufacturer	3.1	4.3	1.2
Lawyer	3.7	3.7	0.0
Banker	3.9	3.1	0.8
Factory worker	6.8	7.4	0.6
Mechanic	7.0	6.7	0.3
Chauffeur	7.7	7.8	0.1
Barber	8.6	8.4	0.2
Ditch digger	9.6	9.7	0.1
Average diff.			0.29

The 'business and professional' occupations are ranked highest in each case, and the 'laborer's' occupations, lowest.[11] The average difference between the rankings of group I and of group II, on a ten-point scale, is only 0.29 points. The closeness of the

[11] This ranking is in agreement with those made by Anderson's college students. He found the professions and business occupations heading the list, laborers lower, with ditch digger lowest of all. Katz and Schanck comparing these results with the divergent findings of Davis on ratings made by Russian school children, point out the cultural determination of such occupational evaluations (Katz, D., and Schanck, R. L., *Social Psychology*. New York: John Wiley & Sons, Inc., 1938).

correspondence is also attested by the rank-difference correlation between the two rankings, rho = .94, P.E. = .024. We may assume then that the two groups are quite comparable with regard to their attitudes toward the occupations mentioned in the reprints read by the subjects. Furthermore, the vocational choices expressed by the subjects themselves lay unanimously, with both groups, in the business or professional fields.

Therefore the effect of the reprint read by group I was to suggest that members of highly-regarded occupational groups (business and professional men) tended to view the inkblots as wholes and to imagine chiefly animal forms in the blots. The reprint also

TABLE 2

GROUP RESPONSES TO RORSCHACH INKBLOTS

		"WHOLES"		"DETAILS"		"ANIMALS"		"INANIMATE"		
GP.	SUGGESTION GIVEN	No.	%	No.	%	No.	%	No.	%	TOTAL
I	Whole-animal	290	39.0	454	61.0	358	48.2	386	51.8	744
II	Detail-inanimate	48	6.2	711	93.8	187	24.6	572	75.4	759
	Differences		32.8		−32.8		23.6		−23.6	

suggested that members of non-preferred occupations (laborers and WPA workers) analyzed the blots into details and saw mainly inanimate objects. The suggestions conveyed to group II were the reverse of this, that highly-regarded groups analyzed the blots and saw inanimate objects, while non-preferred groups saw the blots as wholes and imagined animal forms in them.

Table 2 shows the total number and percentage of whole- and detail-responses and of animal and inanimate objects seen by group I and group II. The total number of responses available for scoring is 1,503, and since each of these is scored in two ways, our percentages are based on approximately 3,000 scorings. Group I gave a total of 744 responses to the six blots (omitting 7 "unclassifiable" responses), an average of 49.5 responses per subject; group II gave 759 responses (omitting 6 "unclassifiable" re-

sponses), or 51.2 per subejct.[12] We find that both groups, as is usual with the Rorschach test, gave more detail-responses than whole-responses. However, group I, which had received the suggestion that business and professional men see wholes, gave 39.0 per cent whole-responses, while group II, who received the "details" suggestion, gave only 6.2 per cent whole-responses; 93.8 per cent of the group II responses were details, only 61.0 per cent of the group I responses were to details.[13] Thus, two groups given different suggestions show a difference of 32.8 per cent in their reports. Again, both groups saw more inanimate objects than animals, but group I, given the suggestion to see animals, reported 48.2 per cent of their responses as animals or parts of animals. Group II, who received the suggestion "inanimate," report only 24.6 per cent of their images as animate, while 75.4 per cent are inanimate; only 51.8 per cent of the group I responses are inanimate. The different suggestions produce a difference of 23.6 per cent in the responses.

The differences between the two groups, and the significance of the differences, are shown in Table 3. The differences between the groups are statistically significant both in regard to wholes versus details (critical ratio $= 7.85$) and animate versus inanimate objects (critical ratio $= 4.13$).

Since the absolute number of responses given by different individuals varied rather widely in each group (from approximately 20 to nearly 90), it was thought advisable to translate these numbers into percentages and calculate the averages from them. This procedure tends to rule out the possibility of the group results being largely determined by an extreme number of responses on the part of a few individuals. The picture appears very similar when we examine the data in this alternative manner. Table 4 presents a summary of these results. The figures are

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[12] "Probably an optimum number of about 50 responses from each subject should be aimed at" (Vernon, same citation as footnote 3, p. 98).

[13] Rough norms for the Rorschach test under standard conditions would seem to be approximately 25 per cent whole-responses and 75 per cent details. (Compare Beck, and Vernon, same citation as footnote 3.) Thus, the suggestion "wholes" appears to have increased the frequency of this response (39 per cent), and the suggestion "details," to have increased the proportion of detail-responses (93.8 per cent).

TABLE 3

SIGNIFICANCE OF DIFFERENCES IN NUMBER OF RESPONSES

CATEGORIES AND GROUPS	M	σ_M	DIFF.	C.R.
"Wholes"				
Group I	39.0	3.89	32.8	7.85
Group II	6.2	1.47		
"Details"				
Group I	61.0	3.89	32.8	7.85
Group II	93.8	1.47		
"Animals"				
Group I	48.2	5.00	23.6	4.13
Group II	24.6	2.89		
"Inanimate"				
Group I	51.8	5.00	23.6	4.13
Group II	75.4	2.89		

TABLE 4

SIGNIFICANCE OF DIFFERENCES IN PERCENTAGE OF RESPONSES

CATEGORIES AND GROUPS	M %	σ_M	DIFF.	C.R.
"Wholes"				
Group I	38.6	3.77	31.6	7.98
Group II	7.0	1.18		
"Details"				
Group I	61.4	3.77	31.6	7.98
Group II	93.0	1.18		
"Animals"				
Group I	51.4	3.95	25.7	5.38
Group II	25.7	2.68		
"Inanimate"				
Group I	48.6	3.95	25.7	5.38
Group II	74.3	2.68		

obtained by calculating the percentage of each individual's responses which fall into each category and then averaging the percentages of the 15 members of each group.

The differences between group I and group II in terms of averages of the individual percentages are quite comparable to the differences in the absolute numbers of responses, being 31.6 per cent (as compared with 32.8 per cent) for wholes versus details and 25.7 per cent (as compared with 23.6 per cent) for animate versus inanimate. Again these differences are statistically significant (critical ratios = 7.98 and 5.38, respectively).

These results lead us to the conclusion that, for groups of college students who rate business and professional occupations highly, the suggestion that such people see animals in the inkblots and view the blots as wholes elicits a significantly greater number of animate and whole-responses than does the suggestion that members of non-preferred occupations make this type of response. But with a group of students of comparable occupational attitudes, the suggestion that members of highly-regarded occupational groups see details and inanimate objects produces a significantly greater number of such responses than does the suggestion that non-preferred occupational groups see details and inanimate objects. Thus, not only can appropriate suggestions influence response to the Rorschach inkblot test, but it is shown that, when alternative suggestions are presented to a given group, those suggestions are accepted which are most nearly in accord with the attitudes of the subjects.

27. IMITATION

The word "imitation" is too frequently used as a means of explanation of behavior. Actually it is little more than a *descriptive term* which represents various types of complex functioning of individuals and groups. The passage below gives some notion of the usefulness of imitation and related concepts.

PERSONALITY *

Ralph Linton

Since the development of every habit begins with an attempt to meet a new situation, the processes involved in this attempt are of great importance for the understanding of personality formation. It is obvious that processes of various sorts may be invoked, but the relative importance of these various approaches for the development of human behavior is not always recognized. There seems to be a strong tendency on the part of many writers on the subject to accord first place to the intellectual processes and second to those of trial and error. Actually, the *initial* response of any individual who has to develop a new pattern of behavior to meet a new situation usually depends more on *imitation* than on either of these. *Imitation* may be taken to mean copying the behavior of others irrespective of whether the imitator has become acquainted with this behavior through direct observation, through being told about it or, in the more advanced societies, through reading about it. The only conditions under which the imitative technique cannot be applied

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* From *The Cultural Background of Personality*, by Ralph Linton. New York: Appleton-Century-Crofts, Inc., 1945, Chap. 4, "Personality," pp. 96-102. Copyright, Appleton-Century-Crofts, Inc. Reprinted by permission of the publisher and author.

are (*a*) when the situation is novel for the society as well as the individual and (*b*) when the individual has had no opportunity to learn what other people do in response to the particular situation.

In the normal course of events neither of the above conditions is likely to arise. While every situation which can confront the individual is, at one point, novel for him, very few situations can arise which will be novel for his society as well. As a member of this society he has access to a store of developed behavior patterns which are adequate to meet almost any eventuality. Even situations of extreme rarity are remembered together with the behavior appropriate to them. Thus a total eclipse of the sun will rarely occur more than once in the lifetime of any individual, but practically all societies know that there are eclipses and have stereotyped behavior patterns in connection with them. The effectiveness of such patterns is readily demonstrable, since the sun always comes back. Conditions of isolation under which the individual has to meet a new situation without direct aid from other members of the society are much more likely to arise, but even then he is rarely thrown entirely upon his own resources. All societies devote a great deal of time and energy to training their younger members in what they should do under various hypothetical conditions. Children are instructed not only in the behavior which will be adequate in various situations but also in the cues by which these situations are to be recognized. Although such imitative responses lack the speed and certainty which come with repeated experience, they are exceedingly useful to the individual in meeting emergencies. Thus any boy from a hunting tribe who finds himself alone with darkness falling will know how to go about building a shelter and making himself comfortable even if he has never had to do so before. A city dweller who has never been taught how to do this will be much less successful in taking care of himself. In summary, the individual comes to practically all new situations forearmed with a knowledge of the behavior patterns which other members of his society have developed and tested. It is only when such knowledge is lacking that he has to turn to the laborious process of solving problems for himself.

Even in the rare cases when the individual cannot imitate,

adults very rarely resort to the techniques of simple trial and error based upon overt behavior and its observed results. This method is poorly adapted to dealing with situations of any complexity. The young child's tendency to use it is soon extinguished by its frequent failures. Conversely, the child's tendency to imitate is so consistently rewarded that it soon becomes an automatic response evoked by any novel situation. Adults may revert to simple trial and error now and then, but they usually do so only under conditions of emotional stress, as in moments of rage or panic. Thus even the most intelligent adult may turn to it at some stage in a struggle with a refractory suitcase. However, such lapses are temporary. In the absence of patterns to be imitated, the normal adult technique for solving new problems is to appraise the situation in the light of past experience and to devise what one anticipates will be an adequate response before initiating overt behavior. In colloquial terms, we think first and then act. The mechanisms and processes involved in thinking are complex and poorly understood, and we need not attempt to discuss them here. As they relate to the development of new behavior they apparently involve anticipation of the results of various acts and the inhibition of those which will be ineffective. This process has been termed "symbolic trial and error." While such a definition of thinking probably errs on the side of oversimplification, it expresses the functional aspects of the process fairly well. Thinking is certainly a substitute for overt trial and error, and one which performs the same functions with a lesser expenditure of time and energy.

Intellectual processes operate mainly at the conscious level and involve the manipulation of the conscious residues of experience which we term knowledge. The present connotations of this term are so wide that any attempt to discuss the nature of knowledge would carry us out of the area of psychology and anthropology into that of philosophy. However, the individual's conscious residue of experience includes two sorts of elements which can be distinguished on the basis of their functions relative to the development of new behavior patterns. Every individual is familiar with a series of behavior patterns which have been developed by others. He also has a store of more or less unrelated items of in-

formation which we may term facts. His knowledge of how to go about building a shelter would be an example of the first, his knowledge that water runs down hill an example of the second. Knowledge of the first type functions as the basis of imitative behavior, and its employment involves the use of memory rather than thought. Knowledge of the second type can be related to behavior only through an intermediate process of organization and correlation by which the relation of certain facts to the probable outcome of certain forms of behavior is foreseen. Although knowledge of particular behavior patterns and their results may be employed in such correlations, that is, may function as factual knowledge, factual knowledge cannot serve as a basis for imitative behavior. Thus while both knowledge of how a shelter can be built and that water runs down hill may influence the development of a new behavior pattern, only the first of these can be used as a basis for imitative behavior.

The individual acquires his fund of knowledge not only as a result of his direct observation and experience, but also through instruction. This introduces a factor which may have curious consequences. That part of knowledge which relates to the behavior patterns of other members within a society is usually a close approximation of reality. On the other hand, items of factual knowledge which have become thoroughly verbalized and which are regularly transmitted within a society acquire a sort of independent existence. They must be regarded as constituting culture patterns in their own right. In many cases this sort of patterning is carried to the point where the culturally established facts not only cease to approximate reality but even become largely immune to the checks provided by first-hand observation and experience. All societies include in their store of transmitted knowledge numerous items which are demonstrably untrue. This is especially the case with respect to knowledge of specific past events. No society ever taught its younger generations the truth about its own history. However, it also applies to many cases in which transmitted knowledge might be susceptible to direct checking by current observation. Thus the knowledge that objects of different weights fall at different speeds was transmitted in western society from the time of Aristotle to that of Galileo. It was only with the

development of an all-pervading scepticism and of experimental approaches to the study of natural phenomena that it was consciously subjected to observational tests and became knowledge no longer.

Whether true or false, facts provide the thinking processes with the tools necessary to their operation. Everyone reasons from certain premises, that is, unquestioned items of knowledge, and the nature of these premises is reflected in the conclusions. As far as we can ascertain, the intellectual processes themselves are the same for all normal human beings in all times and places. At least individuals who begin with the same premises always seem to arrive at the same conclusions. It is the universal experience of anthropologists that when they have lived with any "primitive" society long enough to know its premises, they have no difficulty in "thinking native." The seeming illogical conclusions arrived at by members of non-European groups have given rise to numerous treatises on the peculiar qualities of the "primitive" mind, but it is significant that none of these treatises have been written by persons who had an intimate, first-hand knowledge of "primitives." Such conclusions indicate differences in the factual knowledge with which members of different societies operate, not in their mental processes. A tribe which tries to stop a typhoid epidemic by organizing large-scale witch hunts operates logically in terms of the culturally established fact that witches are responsible for disease. When we try to achieve the same end by inoculation and boiling drinking water, we also are acting logically on the basis of our culturally established knowledge that disease is caused by bacteria. Most members of our society have never seen a germ, but they have been taught that germs exist and accept their existence without further proof. Our own not very remote ancestors would have found the witch hunt more logical than the inoculations.

Although the individual's first response to a new situation may be developed primarily through imitation, through logical processes or through trial and error, there are few cases which involve only one of these processes. Even when a particular pattern of behavior has been witnessed repeatedly, the individual who tries to

imitate it for the first time finds himself uncertain about some parts of the procedure. If he has only been told about it his uncertainties are multiplied. Such uncertainties constitute a series of minor problems which have to be solved by thought or by trial and error.

28. HUMOR (LAUGHTER)

Much of the literature on laughter deals only with that which is "funny." Other aspects of laughter—such as attention-getting, imitation, scorn, release from tension, and related factors—often are neglected. The analysis given below is unique in showing how humor may be used as a *conflict device*—in this instance, between a majority group and a minority group. It may be employed for gaining temporary ascendancy or advantage.

HUMOR AS A TECHNIQUE IN RACE CONFLICT *

John H. Burma

The type of group behavior we call race relations contains many aspects which must be classified as conflict patterns of behavior. In conflict, the involved parties make use of a variety of techniques to gain ascendancy or temporary advantage. Since subtle barbs often strike more telling blows than gratuitous insult or rational argument, not infrequently these techniques include humor, satire, irony and wit.[1]

Humor lends itself particularly well to use as a conflict device because of its almost boundless limits in subject matter, and because its nature is such that it often contains more or less well concealed malice. Jowett has said that every amusing story must of necessity be unkind, untrue, or immoral. Thomas Hobbes believed that humor arises from a conception of superiority in ourselves by comparison with the inferiority of others. Crothers has

* From "Humor as a Technique in Race Conflict," by John H. Burma, *The American Sociological Review*, 1946, Vol. 11, pp. 710-715. Reprinted by permission of the publisher and author.

[1] Burma, John H., "Wit Is a Weapon," *Nation*, 1934, Vol. 939, p. 609.

called it the "frank enjoyment of the imperfect," and more recently James L. Ford has said that humor "is founded on the deathless principle of seeing someone get the worst of it." [2] It is not surprising that humor frequently is used as a conflict technique.

Throughout the history of minority-majority group relations in this country the set of techniques which we may denominate by the general term humor has played a definite role in interpersonal and inter-group relationships. Apparently all minority groups suffer derogation in this manner, and apparently all use the same weapon in return. In the United States, this has been particularly true with reference to Negroes and Jews, but quite noticeable also in connection with Catholics, Mormons, Quakers, Italians, Greeks, Germans, Irish, Chinese, Japanese, Indians, Mexicans and others. Such use of humor may be considered as a universal phenomenon. Valid studies can be made of humor as a conflict technique in connection with any American minority group, but for purposes of cohesion and integration a single minority group, the Negro, will be discussed here.

An obvious division of "race-conscious" humor into four categories immediately presents itself. That is, the joke may be 1) by Negroes and pro-Negroes; 2) by Negroes and anti-white; 3) by whites and pro-white; or 4) by whites and anti-Negro. Types two and four are by all odds the most common and particularly fit the present discussion.

In any conflict it is most gratifying to cause one's adversary to appear ludicrous in his own eyes. Where this is not possible, very considerable satisfaction can be secured by making your opponent appear ludicrous in your eyes. It is exactly this which humor does. It is difficult to the point of impossibility to assign malice a specific role in "race" humor. One person may relate a humorous situation somewhat derogatory to a minority group and do it in all good will; possibly in his own mind taking into account only the situation itself and attaching it to a minority group only because he himself heard it told that way. He may think of himself as a liberal and as having nothing but good will for the mi-

[2] All quoted in Milton Wright, *What's Funny—and Why.* New York: McGraw-Hill Book Company, Inc., 1939, pp. 6-8.

nority involved. In other cases the same situation may be related by a different person. To him the real humor is in the discomfiture of the butt of the joke. He would see nothing of humor in the situation if the butt were of his own group. It should be pointed out further that a given joke may not appear derogatory to the majority who circulate it, but may be deemed scurrilous by the more sensitive minority who are more or less unintentionally involved.

In many instances the bit of humor is in itself merely a tool, and thus may be manipulated as any user sees fit. Thus there are many maliciously humorous situations which are related by whites with the Negro as the butt of the humor and related by Negroes with the white as the recipient of the barb. Many jokes become "race conscious" or "racially humorous" merely by the addition of color to the persons involved. For example, when a *colored* boy could not do his geometry, his *white* teacher says he should be ashamed, for when George Washington was his age he was a surveyor. To which the Negro youth replies, "Yes, and when he was your age he was President." With the simple addition of color, the barb of the humor no longer particularly strikes at teachers (pupil-teacher conflict and "teacher" stereotypes), but now becomes symbolic of the Negro-white conflict and draws its humor from the discomfiture of the stereotyped superior white.

In any event, most Negro-white wit makes one race or the other appear as the butt of the humor. In the case of jokes by whites about Negroes, it is typical that some stereotyped characteristic or supposed characteristic is the point of the humor. Stories about Negroes and chickens, chicken houses, and chicken stealing depend for part or most of their humor on the stereotyped insatiable appetite of the Negro for chicken. To a person who does not have a comparable stereotype, they hold little or no humor.[3] Very much like the above and also very common are stories centering in the thickness and hardness of the Negro's skull and the blackness of his skin.

A high percentage of humor of any type centers in the various

[3] Compare Cohen, David L., "White Folks are Easy to Please," *Saturday Review of Literature*, Nov. 25, 1944, Vol. 27, p. 12.

aspects of sex, and this is true of jokes by whites about Negroes.[4] Given the not uncommon stereotyped conception of the Negro as a sexually uninhibited person, it is not surprising that a myriad of jokes exist which relate to the sexual exploits or delinquencies of the Negro, particularly Negro girls. Some depend upon sex, and some depend almost entirely upon the above mentioned stereotype.[5] A typical example of the latter is the rather lengthy story concerning the Negro man being charged with rape by a Negro girl. He explains his side of the story and concludes by telling the white jurors, "and you know as well as I do that there ain't never been *no* nigger gal raped." This convulses the jury, who immediately free him. Needless to say, without the proper stereotype, such stories are completely humorless.

Another favorite type of humor by whites about Negroes lampoons the pomposity, avarice, ignorance, and emotionalism of the stereotyped "nigger preacher" and his congregation. A large proportion of these situations might be humorous regardless of the racial angle, as is true of many other types of "Negro" jokes. Such, for example, is the case in which the visiting Negro minister catches the chief Deacon abstracting 50¢ from the collection; he remonstrates, and the Deacon replies, "Bless you, Brother, I been leadin' off with that same 50¢ piece for nearly eight years." So, too, the case of the Negro minister raising funds who tells his congregation, "The church has been walking (loud amens); but it ought to run (loud amens); it ought to do more, it ought to fly (loud amens); but to fly it needs money"; (dead silence, then one voice, "Let her walk, Brother, let her walk"). Such humor does not depend wholly on its racial connotations, but the possession of the proper stereotype adds considerably to the enjoyment of the listener.

To most Caucasians the notion of jokes by Negroes lampooning whites comes somewhat as a surprise. Yet as an actuality such humor may out-date its white counterpart. For many decades

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[4] Compare Myrdal, Gunner, *An American Dilemma.* New York: Harper & Brothers, 1944, p. 38.

[5] For a more detailed discussion of Negro-white sexual stereotypes see Dollard, John, *Caste and Class in a Southern Town.* New Haven: Yale University Press, 1937, Chap. VII and pp. 394-98.

Negroes were usually in a position in which their conflict and defense techniques against the whites had to be covert rather than overt. This favored the growth of the more subtle type of humor as a weapon of both offense and defense.[6] Some modern stories still retain this subtlety of derogation; as for example the two Negro maids who were comparing notes:

"At my place I have a terrible time; all day it's 'Yes, Ma'am,' 'Yes, Ma'am,' 'Yes, Ma'am.' "

"Me, too," says the other, "but with me it's 'No, Sir,' 'No, Sir,' 'No, Sir.' "

It must be noted especially in this connection that humor lies primarily in the individual's reaction to a situation, not in the situation itself. Nothing in the whole field of humor is more common than the observation that a situation which is uproariously funny to one person will serve only to amuse someone else mildly, and will leave a third party blank and uncomprehending. An incident concerning a deaf man may be quite humorous to those who hear well, but completely devoid of humor for those who are hard of hearing. Thus it is typical that whites see little if anything of humor in many jokes by Negroes concerning whites, and vice versa. This holds true regardless of whether malice is intended or not. It is to be expected, for example, that the jokes here used as illustrations of anti-white humor will seldom appear humorous to white readers, and vice versa. So marked is the influence of one's viewpoint that an occasional story is told by both Negroes and whites, each thinking it is a joke on the other party. One such example concerns the new Negro foreign language professor who attempts to vote in the Southern town in which his college is located. He must pass a literacy test. He is given a newspaper and asked what it says. He reads from it. He is given in succession Spanish, French, and German papers, from which he reads. Then he is given a Chinese paper and triumphantly asked what it says. Unable to read Chinese, he throws it down saying, "It says Negroes can't vote in——!"

[6] For a discussion of covert types of Negro aggression see Dollard, John, *Caste and Class in a Southern Town.* New Haven: Yale University Press, 1937, Chap. 14, passim, and DuBois, W. E. B., *The Souls of Black Folk,* Chicago: McClurg & Company, 1903, pp. 204-05.

It is unfortunate that many of the most illustrative jokes against whites, like those against Negroes are too crude and obscene for the printed word. In them the real power of the pent-up animosity of the Negro appear most clearly and starkly. These bits of humor very commonly involve "the retort discourteous" by a Negro girl [7] to a white woman or to a white man. Less frequently is a Negro man involved; seldom is the alleged conversation between a Negro man and white woman, except in the case of stories transmitted solely by oral methods. One of the rare exceptions to this is the story of the white woman who enters a street car; a white soldier surrenders his seat which is next to a Negro civilian. She says, "I won't sit next to that 4F nigger."

The Negro calmly asks, "Have you a son in the service?"

"I have two, both overseas."

"Good," says the Negro, "tell them to look for the right arm I left over there."

The lady got off at the next stop.

To the Negro any joke is particularly humorous if it shows Jim-Crow "backfiring" on a Southerner. Rather common is the situation in which a Negro is treated as a "darky" and then is discovered to be the superior of the white in distinction, education or rank. Typical is the situation during the late war in which a Southern officer stationed in England was seated next to a Negro at an official dinner. He completely ignores the Negro until the end of the meal, when he condescends to remark, "Rastus, Ah reckon you-all miss yo' watermelon." It soon develops that the Negro is the guest-of-honor, a renowned Oxford scholar, and a high colonial official who makes a brilliant speech. Naturally the officer fidgets very uncomfortably and when the Negro sits down he says sarcastically to the officer, "Yes, Rastus sho' do miss his watermelon."

A backfiring Jim-Crow story now going the rounds reputedly concerns a high officer in the National Urban League. This Negro wishes to purchase a car in Atlanta. The white salesman greets him warmly, but constantly refers to him as "boy." All is

[7] For a discussion of different standards of caste behavior for Negro men and women, see Dollard, John, *Caste and Class in a Southern Town*. New Haven: Yale University Press, 1937, pp. 288-289.

arranged, but the "boy" says he wishes to wait a day to make the final decision. When he returns he is greeted with "Glad to see you, boy. You'll be proud of this car; not another boy in Atlanta will have a better one."

"Sorry," the Negro replies, "but the deal is off. I read the law last night and it says minors in Georgia cannot purchase cars; and since I am a boy, as you have so frequently reminded me, it would be illegal to buy a car from you." With which he exits.

As often as not the stories of the backfire of Jim-Crow attitudes contain a sort of double bitterness toward the restrictions and toward the attitudes of the whites who impose such restrictions.[8]

As a matter of fact, colored people very commonly laugh at the absurdity of Jim-Crow incidents or the variegated nuances of the color line. They could hardly accept the white world's daily boorishness in any other way and retain their mental equilibrium.[9] This may account for the following story told the author by Negroes in three different areas; in each case it was recounted as an actual incident.

"I went into the store at ——— to get some tobacco. I asked for 'Prince Albert' and the clerk said 'See the man on that can? He's white. Say "Mister Prince Albert." ' I thought for a minute and then said 'No thank you, sir; I believe I'll just take Bull Durham; I don't have to "mister" him.' "

Not infrequently "race" humor has a grim and even macabre quality. Such is the famous cartoon which appeared first in the *People's Voice* of New York after the Detroit riots. It portrayed two small white boys looking at hunting trophies hanging on the wall of father's den. Among them is the mounted head of a Negro. One small boy says proudly, "Dad got that one in Detroit last week." To many whites the idea is devoid of humor; yet many Negroes thought it unusually funny and it was reprinted a number of times.

Langston Hughes attributes another such story to a late college

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[8] Doyle, B. F., *The Etiquette of Race Relations in the South.* Chicago: University of Chicago Press, 1937, p. 163.

[9] Myrdal, Gunner, *An American Dilemma.* New York: Harper & Brothers, 1944, pp. 38-39, and Dollard, John, *Caste and Class in a Southern Town.* New Haven: Yale University Press, 1937, Chap. XIV, passim.

president.[10] In its essentials the incident is that the president was descending the train steps at Atlanta when he heard a scream behind him. A white woman had caught her heel and was falling head first down the steps. The Negro raised his arms to catch her and then quickly dropped them to his sides and let her fall. At this point his Negro audiences usually were swept by gales of laughter, for that was the end of the joke. To them it was funny, for they well knew that in Atlanta something very serious was likely to happen to any Negro who for any reason put his arms around a white woman. She was hurt badly, but it was a good joke on Jim-Crow. Much the same technique was used by Jay Jackson when the Negro hero of his comic strip "Bungleton Green" is unable to make whites believe saboteurs are about to blow up the local war plant. He deliberately trips a white girl and then catches her in his arms. Pursued by the angry lynch-bent mob, he leads them direct to the saboteurs and then explains the necessity for his dangerous action. It is this same hero and his girl friend whose well chosen, sonorous phrases, clear enunciation, and philosophical speeches are constantly contrasted with the poorly enunciated, ungrammatical and illogical speech of the white Southerners.

A refinement of this technique is frequently used by one of the largest Negro magazines. Its page, "The African Way," contains numerous jokes in which the untutored African savage makes a fool of the white man or ridicules satirically the white man's beliefs, actions, or culture. Also, during the war many jokes circulated by Negroes had a double flavor, for the whites involved were designated as German Nazis or Italian Fascists. This enabled the humorist to "kill two birds with one stone," so that such jokes were frequently particularly malicious and especially successful.

It must not be inferred that most jokes told by Negroes are "race conscious" jokes. This is no more true than to infer that all jokes told by whites are for purposes of minority group defamation. What is true is that from the huge welter of humor, wit, and satire which is current today, both written and oral, it is possible to isolate and examine a not inconsequential amount of humor

[10] *The Best of Negro Humor.* Chicago: Negro Digest Publications, 1945, p. 96.

which has as its primary purpose the continuation of race conflict.[11] Even more common is the borderline type; its chief purpose is humor, but it has secondary aspects which definitely can be related to racial competition and conflict and the social and cultural patterns which have arisen from them.

It might be argued that "race conscious" humor is not actually a conflict technique, since much of it is humorous even if not racially applied, and that racial connotations are chiefly fortuitous. This may be true for a given bit of wit, but not for the totality. Any persons or groups who are the butt of jokes thereby suffer discriminatory treatment and are indirectly being relegated to an inferior status. This is, in turn, typical of conflict in general and gives additional support to the fact that humor is one of the mechanisms rather frequently pressed into use in the racial conflicts of America.

[11] Myrdal, Gunner, *An American Dilemma.* New York: Harper & Brothers, 1944, p. 38.

29. GROUP FUNCTIONING

This selection is a portion of a chapter which reports more fully on a program of experimentation on group functioning. The chapter, in turn, is part of a symposium on current trends in social psychology. Several examples are given below of *empirical studies* of group productivity. The material indicates how experimental methods can be used to gain a better understanding of the behavior of groups, and of individuals in groups.

GROUP FUNCTIONING AND PRODUCTIVITY *

Ronald Lippitt

GROUP PRODUCTIVITY AND METHODOLOGY

In various types of groups with differing purposes we must of course vary our operational definitions of productivity. In the industrial work group the units of work output are usually fairly clear cut. In the classroom the measurement of increments of growth in knowledge or skill of the learners is considerably tougher to assess. In the committee we must turn to measures of problem solving efficiency and the quality of the ideas and decisions produced. In the action group the production of certain units of change in the group environment becomes a frame of reference for measuring productivity.

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* From *Current Trends in Social Psychology,* Wayne Dennis (Editor). Pittsburgh: University of Pittsburgh Press, 1948, Chap. 2, "A Program of Experimentation on Group Functioning and Group Productivity," by Ronald Lippitt, pp. 16-29. Copyright, University of Pittsburgh Press. Reprinted by permission of the publisher, editor, and author.

PRODUCTIVITY AS RELATED TO THE PARTICIPATION OF THE GROUP IN GOAL SETTING, DEVELOPMENT OF STANDARDS, AND THE DISCOVERY OF RELEVANT FACTS

One large area of analysis is the study of the nature of participation of group members in the directions which group life will take—and the effect of a particular type of participation on loyalty to group standards, motivation to contribute to the group welfare, and output of effort in the group situation.

Recently Coch and French[1] experimented with three types of member participation in the setting and accepting of new group standards by work groups in a sewing factory. One of the difficult problems in this factory, as in many others, was the problem of change-over of workers to the use of new methods in working on the same or an altered product. Typically there was marked resistance to change, expressed in grievances about the new production standards, high turnover, low efficiency, restriction of output, and marked aggression against management. This is in spite of a liberal and progressive policy of the company in labor relations. Piece rates are set by time study and are expressed in terms of units. One unit is equal to one minute of standard work and thus 60 units per hour is the standard efficiency rating. The average trainee may take 34 weeks to reach that level, and the first few weeks are typically at an efficiency level of 5 to 20 units per hour. When it becomes necessary to change a worker from one type of work to another, a transfer bonus is given, so designed that the changed operator who relearns at an average rate will suffer no loss in earnings after change. An analysis of the after-change "relearning" curves of several hundred experienced operators rating standard or better, prior to change, showed that 38 per cent of the changed operators recovered to the standard unit rating of 60 units per hour in a period of about 8 weeks. The other 62 per cent either became chronically substandard operators (no matter how good they were before change) or quit during the "relearning" period. The fact that the curve of im-

[1] Coch, L., and French, J. R. P., Jr., "Overcoming Resistance to Change," *Human Relations*, 1948, Vol. 1, pp. 512-532.

provement after transfer to a new method is often slower than initial learning on entering the factory, that there are similar recovery rates for skilled and unskilled operators after change, tend to confirm the hypothesis that skill is a minor factor and motivation a major determinant of the rate of recovery. A preliminary theory of resistance to change was developed (which we do not have the time to discuss here) which postulated a combination of individual reaction to goal frustration and strong group-induced forces to meet certain standards. It was derived that certain group methods would be most appropriate for reducing resistance to change. The procedures were as follows:

1. The *control group* went through the usual factory routine when they were changed. The production department modified the job, a new piece rate was set, a group meeting was held in which the work group was told that the change was necessary because of competitive conditions and that a new piece rate had been set. The new piece rate was thoroughly explained by the time-study man, and questions of the workers were answered.

2. *Experimental group 1* was changed in a different manner. Before any changes took place a group meeting was held with all the operators to be changed. The need for the change was presented as dramatically as possible and a group agreement was reached that a change was necessary and that a savings could be effected by removing the "frills" and "fancy" work from the garment. Management then presented a plan to set the new job and piece rate which involved having the workers select several of their group to work on the development of the new methods, having the time study made on them, and then having the trained workers help train the rest of their co-workers in the new methods. These selected representatives were soon referring to the resultants as "our job" and "our rate."

3. In *experimental groups 2 and 3* the same type of plan was followed except that the groups were smaller and all workers in each group were the "special" operators who participated in designing the new job and being studied by the time-study man.

After their drop at the time of change the control group improved very little. Resistance developed almost immediately after the change occurred. Marked expressions of aggression against

management occurred; there were 17 per cent quits in the first 40 days; and grievances were filed about the piece rate. By contrast, *experimental group 1,* which dropped below the *control group* at the time of change-over, showed an unusually good recovery curve. At the end of 14 days the group averaged 61 units per hour. They worked very well with the methods' engineer, the training staff, and the supervisor (the same supervisor as for the *control group*), and there were no quits in the first 40 days. *Experimental groups 2 and 3* dropped less and recovered faster than *group 1.* The efficiency ratings returned almost immediately to the pre-change level and showed sustained progress to a level about 14 per cent higher than before.

At the present time[2] we are analyzing the data from a number of discussion groups where evaluation sessions of group efficiency were presented at the end of each meeting, pointing out inefficiencies in the functional roles of the various members as they participated in problem solving. A permissive atmosphere was created in which members spontaneously arrived at decisions to change their behavior patterns at future meetings. It is possible to make quantitative analyses of the effect of these decisions on role changes in group functioning.

Also on our list of laboratory experiments is a study of the effects of various types of group decision procedures ranging from differing rules for compromise to group codes requiring unanimity.

Another type of group participation which we are studying is the co-operation of group members in data collection about their own functioning in relation to production goals. For example, a particular youth-serving organization had as its production goal the providing of effective growth experiences to youth through a specified pattern of democratic adult-youth relationships. The discovery of the undemocratic state of affairs that existed led to strong resistance to acceptance of the facts or their implications when the studies were made by a research group "from outside," but when the outsiders (research social scientists) involved the organizational leaders in developing the research

[2] Bradford, L., and French, J. R. P., Jr. (Editors), "The Dynamics of the Discussion Group," *Journal of Social Issues,* 1948, Vol. 4, No. 2.

objectives and instruments, and then trained "insiders" as the interviewers, the same critical data were discovered and accepted as "our own to do something about." The steps in this type of action-research participation have been described by Lippitt and Radke.[3]

Perhaps a word should be said at this point about one problem of experimental procedure. The process of successfully inducing change in a controlled way, with standardization from one group to another of the experimental variable or set of variables demands a high order of applied group psychological skills. One of the experimenters in the factory studies had a professional degree in group work as well as in social psychology, and the other received skill training at the National Training Laboratory in Group Development, sponsored by the Research Center for Group Dynamics and the National Educational Association. It is imperative that graduate students being trained to contribute to experimental social psychology receive rigorous training in the human relations skills necessary for the controlled manipulation of social psychological phenomena.

GROUP STANDARDS AND ROLE EXPECTATIONS AS RESTRAINING FORCES ON PRODUCTIVITY

As Lewin and Grabbe[4] have so effectively pointed out in their analysis of the group factors in re-education, the need for and acceptance of membership character in a given group results in the acceptance, sometimes internalized and sometimes not, of group standards which may be quite at variance with other attitudes and needs of the "nongroup-member" parts of the person. That these forces can have a powerful effect on production is indicated in the production record of one worker during a period of the 40 days indicated in Figure 1.[5] We see the day-by-day production curve of a girl belonging to a work group with a group

[3] Lippitt, R., and Radke, M., "New Trends in the Investigation of Social Prejudice," *The Annals of the American Academy of Political and Social Science*, 1946, Vol. 244, pp. 167-176.

[4] Lewin, K., and Grabbe, P. (Editors), "Problems of Re-education," *Journal of Social Issues*, 1945, Vol. 1, No. 3.

[5] Coch, L., and French, J. R. P., Jr., "Overcoming Resistance to Change," *Human Relations*, 1948, Vol. 1, pp. 512-532.

production level of 50 units per hour represented by the dotted line. On the 11th and 12th days her production began to rise noticeably above the group standard and when she, on the 13th day, hit standard production of 60 (a psychologically very important deviation for the other members) she became a scapegoat of the group with a great deal of social aggression directed toward her. Under this pressure her production decreased toward the level of the other group members. After 20 days the work group had to be broken up and the members transferred to various other units. The scapegoated operator remained on the same

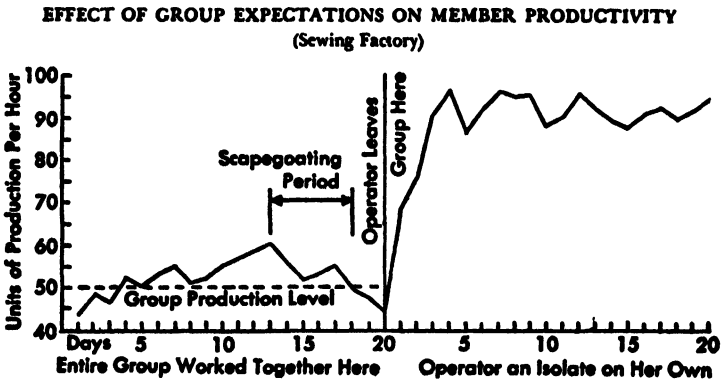


FIGURE 1

job, alone. As can be seen, her production shot up from 45 to 96 units per hour in a period of 4 days. Her production stabilized at a level of about 92 and stayed there for the remainder of the 20 days. Clearly the induced forces on behavior from a strong subgroup may be more powerful than those induced by a progressive friendly management, and by personal needs for economic reward.

In a carefully controlled experiment, reported by Festinger[6] in *Human Relations,* evenly mixed groups of Catholic and Jewish girls were placed in group situations where part of the time they were anonymous and part of the time they were perceived by the other group members as Jewish or Catholic at the time they

[6] Festinger, L., "The Role of Group Belongingness in a Voting Situation," *Human Relations,* 1947, Vol. 1, pp. 154-180.

were called upon to cast votes for Catholic or Jewish members for leadership of the group. When all group members perceived themselves as anonymous and therefore free from any social expectations relevant to their religious indentification, they were equally free in voting for members of their own particular religious group. But when they perceived themselves as identified by the other members of the group the Jewish members reacted to their perceptions of their minority role by inhibiting themselves from showing preference for Jewish candidates, although the balloting was secret. The Catholic members did not show this type of sensitivity, continuing to choose preferentially from their own religious group. The post-experiment interview explorations indicated that most of the members were not conscious of the influence on their behavior of this perception of social expectation.

In a study now being completed,[7] a population of teachers, parents, and children related to each other were interviewed to get at their expectations for each other's behavior and their perceptions of the expectations of others for their behavior. The analysis reveals many restraints on creative, productive activity resulting from perceptions, often incorrect, of the expectations of others. For example, the parents perceive they are expected to keep at a distance as far as consulting co-operatively with the teachers in planning for the educational growth of the student. This perception is quite incorrect. As a matter of fact one of the most frequent desires of the teachers for parent behavior is more contact and opportunities for mutual interpretation. Because of our interest in the social psychology of change, the analysis in this project is identifying the differing leverage points for change that exist in various combinations of expectations and perceptions of expectations. A series of controlled laboratory experiments is planned in which the range of effects on member attitudes and behavior of systematic variation of the perception of role expectations emanating from the group or from specific group members will be studied.

[7] Jenkins, D., and Lippitt, R., "Social Perception and Self-Perception of Teachers, Students, and Parents," (manuscript in preparation, to be published by the National Association, Division of Adult Education).

Other insights on the nature and effects of social expectations are emerging from some of our studies of the effects of various types of training process. We find, for example, that a supervisor may learn in the training situation with other co-supervisors new ways of handling a worker grievance more effectively, even practicing the behavior change through psychodramatic techniques. But in the actual on the job situation these new behavior patterns may never appear. Investigation reveals that the supervisor feels that the expectations of the worker, and of "those upstairs," is for him to keep on being what they have come to expect and accept him to be. There is a strong feeling that any change in behavior would be "sticking out one's neck." When the three levels have been worked with simultaneously and the changes in expectation have been communicated up and down, these restraining forces to new more productive performance are reduced remarkably—and driving forces toward change are introduced.

30. CROWD BEHAVIOR

A great deal has been written about crowd behavior, but the following is one of the very few accounts of an *actual experiment* attempted on the subject. A second experiment, not reported here, was also tried by the same authors. In both instances, by a pseudo-crime method of incitation, situations were created that for the most part were assumed as genuine. In summary of the two studies, the authors point out that "in the crowd setting the individual will behave in accord with the dominance of previously established habits, attitudes, and behavior patterns, but . . . the action itself will be to some degree conditioned by the nature of the situation."

AN EXPERIMENTAL APPROACH TO THE STUDY OF MOB BEHAVIOR *

Norman C. Meier, G. H. Mennenga, and H. J. Stoltz

While experimental attack on the more violent types of crowd behavior, as exemplified in the lynching mob, presents almost insuperable difficulties, modifications of experimental procedure may be contrived which are likely to yield findings of considerable scientific value. The obvious difficulties in any study of crowd behavior are chiefly those of recording a reliable response under the stress of fast-moving events, and of being able to anticipate an actual mob event. The use of motion pictures offers an objective and descriptive tech-

* From "An Experimental Approach to the Study of Mob Behavior," by Norman C. Meier, G. H. Mennenga, and H. J. Stoltz, *The Journal of Abnormal and Social Psychology*, 1941, Vol. 36, pp. 506-524. Reprinted by permission of the publisher and authors.

nique, but provides little information regarding the motivation of specific individuals.[1] The technique is also deficient in that it cannot offer much if any real data on the antecedent motivation of the individual—which, in the writers' belief, is fundamentally necessary for any understanding of a crowd episode.

It was believed feasible, however, to simulate a crowd situation with such fidelity to detail as to produce in the subjects a genuine emotional reaction of such depth as to permit immediate investigation of response-dispositions and motives in each subject before he should begin to suspect the true character of the event. If such an attempt could be carried out successfully, the procedure should disclose valuable data on probable individual participation in mob activity and on the usual motives functioning in each particular type of reaction.

Based somewhat on a plan devised by one of the authors earlier,[2] a schema was first devised to anticipate all the normally possible reactions likely to be disclosed and also, from a study of voluminous accounts of mob behavior in various parts of the United States, to reconstruct a motivation-schedule to fit each of the separate categories of response. The approach then would be to synchronize the events of the crime with local persons, places, and establishments in such manner that all the events would have reached their culmination at the time the subjects were assembled. The actual incitation would then take the form of the "leader's" appearing unexpectedly, greatly excited, with information about the "crime" in the form of either a sheaf of news bulletins which he had just secured at the news office (first experiment), or a newspaper extra (second experiment) which he would immediately read to the assembled subjects, having previously prepared himself to deliver the information in the most dramatic (astounded, deeply moved) fashion. Not only would every device be employed to invest the simulated crime with appearance of reality, but the "criminals" would supposedly be brought within easy reach of the assembled subjects. At this point, there would

[1] Those in news shorts are too abbreviated, while those acted out tend to be artificial.

[2] Meier, Norman C., "Motives in Voting: A Study in Public Opinion," *American Journal of Sociology*, 1925, Vol. 31, pp. 199-212.

be introduced the recording device heretofore concealed and sealed against inspection, with a plausible reason assigned for its introduction; and the response then would be drained off within a brief moment, after which the subjects would be disillusioned.

A preliminary study of individuals participating in mob action was made by scrutinizing press accounts and the literature descriptive of recent mob action in various parts of the country.[8] This material was supplemented by contacts with mob participants in a lynching which had just occurred near Maryville, Missouri. In an attempt to ascertain motivating incentives and past attitudes toward Negroes, as well as other pertinent considerations in the motivating complex of each individual, Mr. Mennenga interviewed scores of persons in all walks of life who had been present, including actual participants. He also interviewed influential individuals in the community who were not spectators or participants, in order to derive some estimate of the social milieu of the particular locality. There was also obtained by the director of the study a documentary account, through cooperation of the Department of Sociology of the University of Missouri, of a lynching on the outskirts of Columbia, Missouri, shortly after the event.

From these data it was decided that it would be possible to construct an imaginary kidnaping episode, beginning in nearby Des Moines and terminating in Pella, Iowa, which, in its final form, should be reduced to a series of news dispatches reported to have been received at that moment in a local office of a Des Moines newspaper, together with information just obtained from the Police Department.

In order to vary the conditions of the experiment, it was decided to use three groups, all normally meeting the same evening in successive order, and to vary the details of the kidnaping in such manner as to produce: (1) the detailed account of the kidnaping, the flight of the kidnapers toward Pella, their apprehension in Pella, with the terminating condition that the evidence was entirely circumstantial; (2) the events as in (1), with the

[8] While planned in Iowa City, the actual events of this experiment were carried out in Pella, Iowa, with the cooperation of the faculty and students of Central College, arranged by Mr. Mennenga.

additional increments of strong evidence, but still chiefly circumstantial; and (3) the events as in (1) and (2), but with positive evidence, including confession, of the identity and guilt of the culprits.

The motivation-analysis form was prepared in mimeograph in six pages, only three of which were to be used by any subject. Page 1 simply listed four courses of action for the individual to select one, as follows:

( ) 1. I would join the crowd immediately.
(Now turn immediately to page 2)
( ) 2. I would be unwilling to be actually involved but would go along to assist the others.
(Now turn immediately to page 3)
( ) 3. I would not participate in any way.
(Now turn immediately to page 4)
( ) 4. I would attempt to reason with the mob to avoid hasty action.
(Now turn immediately to page 5)

After the person had checked the course of action which he was at that moment about to take, he then turned to the appropriate section indicated, where were listed all of the normally motivating impulses which would urge him to do what he was about to do. For example, in connection with the choice of action number one, several of the motivating incentives were as follows:

Yes No 1. I would help, thinking that the law might not convict them.
Yes No 2. I would help so as to make this case an example for all potential criminals of this sort.
Yes No 3. I would help because if this crime should go unpunished innocent children would be unsafe everywhere.

In the event the person selected course number three (no participation), he might check such reasons as these:

Yes No 1. I would not participate because it would mean a "blot on the community" to have someone lynched.
Yes No 2. I would not participate because violence nauseates me.

Yes No 3. I would refuse to participate since there is always the possibility of becoming involved in legal proceedings as an accessory or a witness.

When he had checked his reasons, the person then responded to questions in a final section, which were designed to register the emotional reactions of the individual as near as possible to the state he was in when the procedure was interrupted; also information of earlier contacts, if any, with mobs, and considerable information on such matters as religious affiliations, nationality, home state, and considerations not listed, but present.

The three groups of approximately 40 each met at 7 P.M., 8 P.M., and at 9 P.M. on the same evening. All subjects were in total ignorance of the experiment. The recording forms, sealed with a covering blank sheet, had been distributed around the room earlier, with a simple instruction that they were not to be used until instruction was given. Since these groups normally participated in exercises of various kinds, there was no reason to believe that this procedure created any untoward curiosity.

Theoretically the procedure had the following potentialities of the crowd situation:

(1) The presence of a leader who, by dynamic manner and emotionally charged language, would secure and hold the attention of the group.
(2) A focalization of attention comparable to the unanimity of crowd rapport.
(3) Exceedingly high interest value in the subject matter, identical with actual possible content.
(4) The possibility for various accompanying crowd phenomena, such as circularity, social projection, etc.

In actual practice it lacked several important aspects:

(1) The subjects were all of average or above average intelligence.
(2) There was lacking the emotionally unstable, the illiterate, and the individual highly impregnated with attitudes making him readily amenable to mob violence.
(3) The experiment is dependent upon persistence of genuine crowd

emotionality for adequate recording to take place, in order to yield a trustworthy register of the actual emotionality.[4]

(4) There was presumably some variation in the degree of sincerity and candor in the response.[5]

There were 124 subjects, 79 men and 45 women, all college students, with a mean age of 20.39 and an age range from 17 to 28.

The experiment yielded three types of data: (a) quantitative breakdowns of the response about to be undertaken under varia-

TABLE 1

SUBJECTS' ABORTED RESPONSE UNDER DIFFERENT CONDITIONS OF INCITATION

RESPONSE (OPTIONS)	N	CHARACTER OF EVIDENCE		
		UNCERTAINTY	FAIR CERT.	ABSOLUTE CERT.
1.... join immediately	19	2	3	14
2.... go along	19	8	4	7
3.... stay away	41	14	16	11
4.... prevent	45	20	16	9
Totals	124	44	39	41

TABLE 1-A

ANALYSIS OF REACTIONS ACCORDING TO ADVANCEMENT IN COLLEGE TRAINING

		OPTION															
		I (JOIN)				II (OBSERVE)				III (AVOID)				IV (DETER)			
CLASS	N	A[1]	B[2]	C[3]	T[4]	A	B	C	T	A	B	C	T	A	B	C	T
Fr.	46	2	2	6	*10*	2	2	3	7	5	5	4	*14*	6	6	3	*15*
So.	24	0	1	2	*3*	3	1	2	*6*	2	3	1	*6*	4	4	1	*9*
Jr.	31	0	0	4	*4*	1	0	1	*2*	5	3	4	*12*	6	4	3	*13*
Sr.	23	0	0	2	*2*	2	1	1	*4*	2	5	2	*9*	4	2	2	*8*

[1] Uncertainty regarding guilt.
[2] Fair certainty.
[3] Absolute certainty.
[4] Total.

[4] This aspect was checked carefully in the second experiment.

[5] This was provided for in some measure by anonymity and assurances as to the confidential nature of the record.

TABLE 1-B

REACTIONS BY SEX

	N	OPTION			
		1	*2*	*3*	*4*
Men	79	14	11	18	36
Women	45	5	8	23	9

tions of the incitation materials, (b) indication of the functioning of incentives, and (c) retrospective evaluations and information.

It is evident that freshmen as a class and men tend toward participation out of proportion to their numbers, compared to other classes and to women, respectively. The numbers are too small, however, to warrant further statistical treatment.

PRIMARY MOTIVATIONS

For Option 1 (Join Immediately). In the case of the two subjects "set" to join in spite of the fact that only meager evidence has been established against the culprits, there was evident all through their detailed responses a very decided attitude to let nothing prevent their doing violence to the abductors; almost every conceivable reason was checked by both men. The same is true of the three who would join when fair certainty of the guilt had been established. They wished to help make other children safe, fearing that if the abductors were not removed, they might again be at large in society.

Of the 14 ready to join the group immediately upon absolute evidence, the two primary motives are, first, that, should these abductors go unpunished, children everywhere would be unsafe; and, secondly, that the miscreants might even kidnap another person, possibly a near relative.

For Option 2 (Reluctant to participate but would go along). These individuals would hesitate because of the following considerations: fear of not having the right persons; the belief that it is wrong for a crowd to take the law into its own hands; a distaste for taking human life based upon their conception of the

sacredness of life. The last-named motive was also evident in the fair-certainty situation. Those who were exposed to the absolute-certainty version of the episode assigned their reluctance to a feeling that lynching would be committing murder. Supporting this view also appeared distaste for taking human life, viewing life as sacred.

For Option 3 (Non-participation). Those who, in the face of uncertain evidence, would not participate in any way were motivated by the idea that as American citizens the abductors ought to be given a fair trial by jury. Furthermore, the majority of these subjects would attempt either to persuade the crowd to abandon the attempt or to aid in some way to bolster up the officers of the law. They felt also that drastic action was contrary to American institutions as well as against their religious convictions.

In the fair-certainty situation again the majority wanted to have the suspects given a fair trial by jury as American citizens. These, too, would attempt to discourage the crowd or otherwise prevent violent action because of their ideal of law and order, their respect for legal institutions, and their distaste for taking human life. The same attitudes were evident for the group confronted with the absolute-certainty situation. Here again was an insistence upon the right of trial by jury as well as an emphasis upon that attitude toward life formed through previous training.

For Option 4 (Attempt to reason with the crowd to avert hasty action). All responses ranged high in situations of uncertainty and fair certainty. In fact, the only response not much in evidence was in connection with the statement that the law would take its normal course and bring those guilty to justice. In other words, the individual would appeal to every possible logical argument to avert hasty action. Motives having reference to the injustice and unfairness of the impending action were frequently checked, along with the conception of law and order and the aversion to taking human life.

Where absolute evidence had been introduced, nine subjects indicated a definite attitude against the proposed action based on the terrible disadvantage in which the culprits find themselves,

together with the flavor of illegality of the whole procedure and respect for the sacredness of human life.

Personal Reactions Following Initial Reaction: Social Facilitation, etc. According to their own report, subjects were affected by those about them as follows: tense breathing, 85 per cent; fear, 6 per cent; anger, 3 per cent. Six per cent were unable to report definitely.

Eighty-three per cent of the subjects felt that their election of options would not have been materially different had they been by themselves rather than with a group. Eleven per cent felt that their election might have been different; 6 per cent were noncommittal.

Only four of the subjects had ever witnessed a mob (one each in Omaha and Des Moines; two in Chicago).

None had ever participated in a mob. Invariably childhood was indicated as the time when such cases were first heard of, but most of the subjects had engaged in discussion concerning mobs on various occasions; none had, however, ever contemplated being involved in a mob at any time.

Eighty-four per cent of the subjects thought that others in the crowd felt exactly the same as they (social projection); 7 per cent similarly; and 3 per cent that some of the others felt the same.

Training and Background. Of those indicating immediate participation in the mob, seven had no definite religious affiliations, whereas six had; two others indicated a loose affiliation; four were noncommittal. Those electing courses of action 2, 3, and 4 indicated their affiliations as follows: 98 with definite affiliations were of the opinion that to such training they might attribute their reactions; three with definite religious affiliations saw no connection between their non-participation and their training; four believed their motives to be more a matter of respect for American institutions, law and order, fair play, and clean sport.

Most of the subjects were of Dutch, English, or German extraction; all were native to Iowa or states contiguous thereto.

The following selection is only a portion of a discussion of conditions of suggestibility. The fuller passage is worth additional consideration. (Also see Selection 26, *Suggestion,* pages 257-269.) The excerpt below, however, gives some basis for understanding *rioting, panics,* and related forms of *mob behavior.*

The newspaper selection that is included gives an interesting comparison of human behavior in Ecuador in 1949 and in the United States in 1938. In both instances crowds of people responded to supposedly authoritative radio reports by unusual and panicky reactions. A much fuller account of the problem is presented in *The Invasion from Mars,* by Hadley Cantril, Hazel Gaudet, and Herta Herzog (Princeton University Press, 1940).

CONDITIONS OF SUGGESTIBILITY *

Hadley Cantril

Consider the situation where *an individual not only lacks an adequate frame of reference or standard of judgment by means of which he may orient himself but he also lacks even the awareness that he needs and is seeking a new frame of reference.* In such instances it never occurs to the individual to evaluate the alternative solutions offered, to question the notion that a proposed explanation or a course of action might not be the only one possible. Whatever solution is proposed, whatever interpretation first "occurs" to the individual, will be unhesitatingly accepted and acted upon. In this extreme condition, created by the lack of any internal structuration, the law

* From *The Psychology of Social Movements,* by Hadley Cantril. New York: John Wiley & Sons, Inc., 1941, Chap. 3, "The Individual's Pursuit of Meaning," pp. 69-71. Copyright, by Hadley Cantril. Reprinted by permission of the publisher and author.

of primacy may be considered operative: the interpretation accepted is the interpretation the individual is first aware of. The interpretation may not be held for any great length of time but it at least furnishes a temporary orientation.

There are various reasons why an individual may react in this irrational fashion. All may be illustrated from evidence obtained in the study of a Hallowe'en broadcast, purporting to describe an invasion from Mars, which frightened so many people in this country in 1938.[1] For some persons, the situation portrayed by the radio drama appeared so immediate and so urgent that their first thought was to escape or to prepare to deal with the monsters. "We'd better do something instead of just listen," said one woman. So she started to pack. Another woman reported, "I wasn't frightened until they said the gas was within a few miles of us." Other people immediately resigned themselves to the situation so that any attempt to check the program, like any other possible course of action, seemed pointless. "What difference does it make?" reflected a high-school girl. Others were so overwhelmed by environmental pressures that they lapsed from their normal skepticism. Frightened relatives or friends telephoned or rushed into the homes of uninformed persons who promptly turned on their radios only to have the harrowing reports confirmed. Still others were extremely susceptible because of a pattern of personality characteristics. People who felt insecure, who constantly worried, who lacked self-confidence, who were fatalistic were more readily frightened than others.

[Consider next the situation where] *an individual's mental context fails to provide him with a needed interpretation or with any reliable standards by means of which he can make a desired check on alternative interpretations offered.* This condition differs markedly from the one just mentioned. For in this instance the individual is not only aware that he is trying to select a new interpretation but also he further realizes that, because none of his present frames or standards are completely relevant, he should try to validate new interpretations before accepting them as the basis for orientation. But for any one of

[1] Cantril, Hadley, Gaudet, Hazel, and Herzog, Herta, *The Invasion from Mars.* Princeton: Princeton University Press, 1940.

several reasons, he fails to make a thorough check and finally he accepts the general frame of reference or specific standard of judgment offered.

These reasons may also be illustrated from the panic resulting from the supposed Martian invasion. Some people attempted to check their own interpretation against data which were themselves already influenced by the interpretation they were trying to check. Thus certain people who were moderately disturbed by the news telephoned friends, who were also disturbed, to ask them what they thought. Other people tried to verify their interpretation by making certain observations which they then proceeded, however, to rationalize as consistent with the interpretation they thought they were checking. Thus, while one person would look out the window, see no cars on the street, and conclude that they had all been destroyed, a second person would look out the window, see the street full of cars and conclude that everyone was driving to safety. Still other people very genuinely sought to validate the interpretation presented but simply did not have sufficiently rich and well-grounded standards of judgment to know whether or not the evidence they uncovered was reliable. When they turned their dials to other stations they thought the other stations might not yet know about the disaster; when they saw the program listed as a drama in the newspaper, they thought it was not the same program. How, for example, can the average citizen, no matter how sincere his motives, conclusively prove one way or the other who sunk the *Athenia* or which belligerent power first violated Norwegian territorial neutrality in the second World War?

'MARS RAIDERS' CAUSE QUITO PANIC;

Mob Burns Radio Plant, Kills 15 *

By The Associated Press

QUITO, Ecuador, Feb. 13—An enraged mob that hurled gasoline and flaming balls of paper took fatal vengeance here last night for a panic caused by an Orson Welles-type radio dramatiza-

* From *The New York Times*, Feb. 14, 1949, pp. 1, 7.

tion of an "invasion from Mars." The mob attacked and burned the building of the newspaper, Comercio, which housed the radio station, and killed fifteen persons and injured fifteen others.

Army troops were called out and used tanks and tear gas to restore order.

The mob wrecked the newspaper building, its equipment and the radio station. Damage was estimated at more than $350,000.

Indictments were drawn against Leonardo Paez, director of art at the station, known as Radio Quito, and Eduardo Alcaras, a Chilean who is the station's dramatic director. Heads of the station said the two men prepared and directed the dramatization without their knowledge.

Police detained ten suspects and more arrests were ordered. The Government appointed Diaz Granados, Minister of Defense, to investigate the rioting.

As in the Orson Welles broadcast that caused panic in the United States in 1938, the populace had been terrified by a radio dramatization of H. G. Wells' fantastic novel, "The War of the Worlds," localized to describe strange creatures from Mars landing near by and heading for Quito.

Hysteria drove most of the population of Quito into the streets before the program directors learned how much consternation they had caused. Frantically they appealed to the people to be calm, and assured them it was all fictional.

When the people finally were convinced, they swept upon the Comercio Building, which housed Ecuador's principal newspaper, showering it with stones and driving occupants to the upper floors.

Groups set fire to the building at various points, and some of the occupants leaped from the third-story windows as the flames trapped them.

Witnesses said about a hundred persons were in the building when the mob formed in front, crashing in windows with stones. A number of the occupants escaped through a rear door, but others were forced upstairs by the rampaging mob.

As the flames cut off escape, occupants formed a human chain from balconies and windows. Some were dashed to the ground when the "chain" broke. Others leaped.

Police aid was slow to rally because mobile police units had been sent to nearby Cotocallao, scene of the radio-reported "invasion," to investigate. Police officials said they thought Cotocallao was the scene of the broadcast, which gave realistic witness accounts.

The broadcast mentioned well-known Government officials and newsmen as being at the scene of the Martian landings, and an actor impersonated the Minister of Interior in an appeal to the people.

The people, many of them only half clad, fled into the streets in wild displays of terror—and when they learned it was a hoax, they were just as wild in their wrath.

It took tanks and tear gas to clear a way for fire apparatus to reach the flaming building. The fire spread to some near-by buildings, including the Government Communications Building.

Damage to other buildings was not serious, but only the front of the Comercio building was left standing. Its presses and other equipment were wrecked and its files destroyed. It is the city's oldest newspaper, founded Jan. 1, 1906.

The newspaper, an independent daily, had backed President Galo Plaza in the last election campaign.

Several Quito and Guayaquil newspapers have volunteered to help the Comercio carry on through makeshift arrangements. It is owned and managed by Carlos Mantilla.

Orson Welles, in his 1938 broadcast, spread terror in the United States with his dramatic description of weird Martian creatures landing in New Jersey. There were angry—but strictly vocal—protests when people learned it was just another radio show.

This is how the show was staged over Radio Quito:

The usual musical program was interrupted by an announcer saying, "Here is an urgent piece of late news."

This was followed by a vivid description of an invasion by an enemy that approached Quito in the shape of a cloud after destroying the neighboring town of Latacunga, twenty miles to the south.

Then the announcer said:

"The air base of Mariscal Sucre has been taken by the enemy and it is being destroyed. There are many dead and wounded. It is about to be wiped out."

The voice personifying the Government Minister asked the citizens to be calm "in order to be able to organize the defense and evacuation of the city."

At this point the "Mayor" arrived. He said: "People of Quito, let us defend our city. Our women and children must go out into the surrounding heights to leave the men free for action and combat."

The voice of a priest begging for divine mercy in the catastrophe was heard.

A recording of the church bells of Quito sounding an alarm was played. The announcer said that from microphones set up in the tower of La Previsora, tallest building in Quito, he could see a monster approaching from the north engulfed in fire and smoke.

That was the high point of the broadcast. People began fleeing from their homes and running through the streets. Many were clad only in night clothing.

32. AUDIENCE BEHAVIOR

This is a useful analysis of audience techniques, and *types of audience.* Insight into the principles below will be of practical use in public speaking, with various kinds of audiences. Further empirical investigations are needed, of course, in this important area of social psychology. For another aspect of audience behavior, see Selection 33, *Remembering,* pages 315-326.

THE PSYCHOLOGY OF THE AUDIENCE *

H. L. Hollingworth

THE FIVE FUNDAMENTAL TASKS

Analysis shows that there are five tasks which the complete advertisement undertakes,—namely, to Catch, Hold, Impress, Convince, and Direct the prospect. The reader's ATTENTION must be caught; that is, diverted from its present object to the general field or space occupied by the appeal. His INTEREST must be held long enough for the appeal to impress his MEMORY with the significant details. These details must carry sufficient CONVICTION or PERSUASION so that the reader will be led to some specific ACTION to which the appeal directs him. He writes for information, purchases, recommends, or makes a memorandum.

But not all advertisements attempt all five of these tasks. Only the *complete* appeal is so ambitious. The *publicity* appeal un-

* From *The Psychology of the Audience,* by H. L. Hollingworth. New York: American Book Company, 1935, Chap. 2, "Preliminary Analysis," pp. 12-14, and Chap. 3, "Types of Audiences," pp. 21-26. Copyright, American Book Company. Reprinted by permission of the publisher and author.

dertakes the first three tasks, leaving the remaining two to be accomplished in other ways. The *classified* appeal assumes the first two tasks as already accomplished, and the third as able to take care of itself; it directs itself only to the last two of the five tasks. Each variety is "winning the reader," but the different types begin or cease operation at different points in the process.

Now the task of winning an audience, as undertaken by the speaker, is also complex and involves much the same array of tasks. But in a given case the process begins or ceases at a particular point, and only in certain instances does it involve the whole series of tasks. Where it begins and where it ends depend in part, of course, on the purpose of the speaker, but most of all on the types of audience. The speaker is chosen for a given occasion, and it is the presence and the type of the audience that constitutes the occasion.

Consideration of the numerous occasions for assembly, other than that of listening to a speaker, will show clearly that these five primary tasks are not all involved in every audience situation. The antics of children and the parading of Easter garments are, in the main, directed to an audience. But here the mere attracting of attention suffices, since prolonged interest, memory, persuasion, and specific action touch no part of the exhibitionist craving.

The vaudeville performance, the circus, the concert, and the motion picture, however, endeavor to go one step further. They seek, that is, not only to attract initial attention but also to hold interest. Retention, conviction, and decision, however, are beyond their usual aim. The ordinary schoolroom affords a familiar example of the inclusion of the third task,—that of effecting permanent retention. Any deliberative assembly, as a committee meeting, a caucus, a session of the legislature, shows the inclusion of the fourth task, that of persuasion or conviction. If votes are to be cast, policies determined, wares sold, or deeds of violence committed, then the fifth task, involving specific and overt action, comes clearly into consideration.

We may then with profit consider the following as the chief types of audiences.

1. THE PEDESTRIAN AUDIENCE

The lowest degree of orientation is represented by such a transient audience as the pedestrians on a busy street, before whom the street-corner orator sets up his box. Each individual is intent upon his special destination and business, and there exist no common ties or lines of communication between the members of the audience nor between the members and the speaker. The task of winning the audience in this case is similar to that of the show window. It involves the very first of the five steps,—catching or diverting the attention, and at least the second,—that of holding interest. Whether or not it goes further depends on the purpose of the speaker. If he is determined to influence votes or to dispose of wares, he must effectively perform the whole series of five tasks.

2. THE DISCUSSION GROUP AND PASSIVE AUDIENCE

With the discussion group we find the first signs of preliminary orientation toward a speaker. When people enter an auditorium, their first polarization is toward the room itself. If they could all be placed in the room at the same moment, we might say that the audience was oriented toward the physical environment. The size of the room, its arrangement, the location of the platform, the decorations, the exits, the seating arrangements and possibilities, the lighting fixtures, etc., command first attention. Ordinarily this orientation readily shifts, and is replaced by polarization of the members of the audience to each other. Each individual becomes conscious of himself as an object of regard by his neghbors, and is in turn prompted to scrutinize other individuals with curiosity and interest. The self-consciousness arising out of this rather formal social situation is indicated externally by the formal posture and bearing of each individual. Each chair is occupied by a self-conscious individual, sitting erect, observing the usual proprieties, glancing covertly at more conspicuous individuals, adjusting wearing apparel to its conventional position, and tending to inhibit such acts as will call attention to one's self. Gradually acquaintances are discovered, signs of recognition are given, comments are exchanged with companions, usually concerning the personnel of the audience. When this second phase of orientation

ultimately gives way in favor of polarization toward the speaker, there will be equally obvious signs in the audience. Individuals will slouch in their seats, will ignore apparel that is awry, will cough more freely, and will assume a general attitude of restfulness rather than this one of alertness.

Now in the discussion group, where each member may in turn be speaker, the audience is very transient and unstable. Each member does not usually get his turn, unless special arbitrary rules are enforced to secure this result. Some members have a way of getting the audience related to them more easily, definitely, and frequently than do others. The initial task of diverting the attention is not so conspicuous as in the case of the street audience, nor the related case of the show window. The situation is more like that of the advertisements in a magazine, which are all placed together in an advertising section and segregated from the reading matter. Individuals compete with one another in determining the direction of orientation, although a loosely organized attitude favorable to speakers, in the one case, and to advertisements in the other, remains established in general throughout.

A similar type of audience, so far as its orientation is concerned, is represented by the miscellaneous group, assembled for some common but passive purpose, such as that of being entertained by music or drama, listening to a lecture or debate, or witnessing some performance or spectacle. Amateur night at a vaudeville house is a rather extreme case of this type of audience. The courtesy of the common purpose gives the speaker or performer his chance, and guarantees initial attention. The task of winning the audience does not begin with the first of the five tasks we have indicated, but begins at a point well along in the total process. Maintenance of interest is here the first step, and the process continues to a point determined only by the purpose or the success of the performer. The task here resembles that to be found in the sales letter, personally addressed to one.

3. THE SELECTED AUDIENCE

A further degree of polarization, upon which the speaker can build, is present in the selected audience, assembled for some common purpose of a more active sort, but not all sympathetic

one with another or with the speaker's point of view or aim. A meeting of labor delegates, the deliberations of a jury, a session of Congress illustrate this type of orientation. The rules of order and the sincerity of the common purpose take care of the first two steps, in the main. Impression, persuasion, and direction, the last three of the five tasks, characterize the speaker's undertaking here. The task is comparable to that of the catalogue description of an article, which seeks to determine only which variety or brand of a commodity will be purchased by the individual who is already influenced to buy one or other of several competing wares.

4. THE CONCERTED AUDIENCE

When the audience assembles with a concerted, active purpose, with sympathetic interest in a mutual enterprise, but with no clear division of labor or rigid organization of authority, the degree of polarization is already almost complete but facile. A college class, intent upon the consideration of an economic, scientific, or literary point, a graduate seminar where mutual inquiry and joint contribution are the object, represent instances. Those not inclined to attend and not interested are either eliminated beforehand or are ignored. The fixing of impressions is taken care of by the device of taking notes, assembling outlines, or utilizing other varieties of memoranda. The main tasks are those of convincing and directing action or thought.

5. THE ORGANIZED AUDIENCE

Complete although perhaps superficial polarization of the audience toward a speaker is illustrated in a team or a company, a military unit or a gymnasium class, organized with a rigid division of labor and authority, supported by specific common purpose and interest, with tasks well learned, and already persuaded to the authority of the leader. A scout leader or a football captain has this perfect polarization of his immediate audience. Nothing remains but the last of the five tasks, the direction of specific action. The relation is like that sustained to a price list, a guide post, or a bill from the dentist.

The characteristics of these five types of audiences may be schematically indicated by the following outline. In each case

there is shown, according to the foregoing analysis, the point at which the performer's task commonly begins, and the processes still to be undertaken if the typical tasks are carried to completion.

Pedestrian Audience	Discussion and Passive Audience	Selected Audience	Concerted Audience	Organized Audience
Attention	.....	.....	.....	.....
Interest	Interest	.....	.....	.....
Impression	Impression	Impression	.....	.....
Conviction	Conviction	Conviction	Conviction	.....
Direction	Direction	Direction	Direction	Direction

6. THE ABSENT AUDIENCE

It may be well to call attention to another use of the word "audience," to indicate a type of situation which does not properly come into our present discussion. The writer is accustomed to refer to his audience, as is also the editor, the publisher, the artist, and perhaps even the architect. In this connection the word "audience" is merely a collective term, used to indicate the absent and isolated individuals who will at some time or usually at different times be the observers of the produced work. There is of course usually no aggregation or congregation of people involved, and hence the group phenomena which an assembled audience may display will be missing. Nevertheless the existence of these "patrons," as they might better be called, exercises its influence on the performer; and to some extent the knowledge on the part of each patron that others will sometime view the product and be influenced individually by it, may have some influence on the reactions of each. But this group of patrons does not constitute an audience in our present sense of that word. It lacks the essential characteristic of a strictly *social* situation, in which the individuals must be influenced not only by a common stimulus but also by one another.

The special characteristic of such a group of patrons is the fact that the appeal is presented to them through but one of the various avenues of perception,—as the visual, the auditory, usually. The modern radio audience is a good illustration of such a

group. Only the auditory sense is appealed to by the performance or even by relevant features of the surroundings. Stimuli to the other senses may be distracting and irrelevant. The listener's neighbors may be intent upon other subjects; his fellow listeners are remote in space, as is the performer also. There is therefore little of the orientation process in such a case, and although the performer may find numerous psychological problems in addressing such a scattered group, there is little to be said with respect to the audience as a phenomenon. There is indeed no essential difference between this type of audience and that of the writer, publisher, or artist.

33. REMEMBERING

As was stated in the case of Selection 17, *Perception,* pages 156-167, the process of remembering is markedly affected by group or *social* factors. The following experiment shows quite clearly the facilitating effect that an audience may have on remembering. This is indicated through detailed analysis of words and ideas employed. Selection 32, *Audience Behavior,* pages 308-314, deals with some other aspects of audiences.

THE EFFECT OF AN AUDIENCE ON REMEMBERING *

Nelson G. Hanawalt
and
Katherine Ford Ruttiger

A. THE PROBLEM

In the relatively few experiments which have been made on the effect of an audience, remembering has not been investigated. It is our purpose to compare the performance of *O*'s in retelling a story before a small passive audience, with the performance before *E* alone. Does the audience have a facilitating effect? From related studies we might predict that *O* will use more words in telling his story before the audience but that the quality of the reproduction will suffer. Furthermore, we are interested in following up Bartlett's[1]

* From "The Effect of an Audience on Remembering," by Nelson G. Hanawalt and Katherine Ford Ruttiger, *Journal of Social Psychology,* 1944, Vol. 19, pp. 259-272. Reprinted by permission of the publisher and authors. The authors are indebted to Miss Frances Hillers for assistance in taking data and in various other phases of the study.

[1] Bartlett, F. C., *Remembering: A Study in Experimental and Social Psychology.* New York: The Macmillan Company, 1932, Chap. 7, p. 174.

suggestion that perhaps an audience is an important factor in the acquisition of new social characteristics by material which passes from group to group. Does the audience lead the *O* to greater elaboration? Will he show more invention before the audience? Will he use more transitional and descriptive phrases? Will he make more effort to explain? Bartlett suggests that perhaps the great condensation noted in serial production of stories is due to the experimental situation. An opposite trend might appear if the experimental situation more nearly resembled real life where tales pass freely in social situations.

B. MATERIALS, SUBJECTS, AND PROCEDURE

1. MATERIALS

A story which Bartlett had selected for use in one of his series of reproductions is used in this experiment.

The War of the Ghosts

One night two young men from Egulac went down to the river to hunt seals, and while they were there it became foggy and calm. Then they heard war-cries, and they thought: "Maybe this is a war-party." They escaped to the shore, and hid behind a log. Now canoes came up, and they heard the noise of paddles, and saw one canoe coming up to them. There were five men in the canoe, and they said:

"What do you think? We wish to take you along. We are going up the river to make war on the people."

One of the young men said: "I have no arrows."

"Arrows are in the canoe," they said.

"I will not go along. I might be killed. My relatives do not know where I have gone. But you," he said, turning to the other, "may go with them."

So one of the young men went, but the other returned home.

And the warriors went on up the river to a town on the other side of Kalama. The people came down to the water, and they began to fight, and many were killed. But presently the young man heard one of the warriors say: "Quick, let us go home: that Indian has been hit." Now he thought: "Oh, they are ghosts." He did not feel sick, but they said he had been shot.

So the canoes went back to Egulac, and the young man went ashore

to his house, and made a fire. And he told everybody and said: "Behold, I accompanied the ghosts, and we went to fight. Many of our fellows were killed, and many of those who attacked us were killed. They said I was hit, and I did not feel sick."

He told it all, and then he became quiet. When the sun rose he fell down. Something black came out of his mouth. His face became contorted. The people jumped up and cried.

He was dead.

2. SUBJECTS AND AUDIENCE

The *O*'s are 20 upperclass students at New Jersey College for Women, picked at random from students who were free to serve at the time needed. They range in age from 18 to 21 years. The audience consisted of 10 to 12 persons of a class in experimental psychology (juniors and seniors), the instructor of the class, and a few visitors. We did a little preliminary work in the evening with a few persons sitting to form a group, but the subjects were tired, anxious to get it over, and the group was not at all convincing as an audience. After working out the method, evening work was abandoned and a regular morning hour class was used as the audience. Under these conditions the coöperation of the *O*'s was improved and the audience was taken more seriously. It should be noted that the *O*'s were not members of the class and were not aware of the fact that other *O*'s had told the story to the same audience. The audience listened attentively to each *O*. It was very interesting to the class to compare the story as told by each *O* for they had been working on a memory project of the serial reproduction type.

3. PROCEDURE

Four rooms were used in the experiment. There was the subject room where four or five *O*'s were stationed at the beginning of the hour. At no time did a subject know the nature of the experiment, nor did a subject ever return to the subject room. There was another room in which the subject was taken to listen to the story. The same *E* read the story to each *O*, using similar tone and expression in all cases. The *O*'s were merely told to "listen carefully to this story and see what you make of it." Between

this room and the class room is a small room equipped with a one-way screen. Half of the *O*'s stopped in this room and were asked to tell the story to the second *E*. The first *E* in the meantime had entered the chamber behind the screen and took the story in shorthand as it was told to the second *E*. Immediately following this they were taken to the class room and asked to tell the story to the class. They sat at the desk in front of the room. The first *E* sat in the last row fairly well screened from the *O* at the desk and recorded the story in short-hand. The other half of the *O's* followed the same procedure excepting that they told the story first to the class and then to the second *E* in the one-way screen room. Before each telling of the story the *O* was cautioned by the second *E* to talk slowly and distinctly.

In an experiment of this sort it is very difficult to limit the number of variables which enter the experimental situation. We had each *O* tell the story twice in order to eliminate individual differences. It would be difficult to get two matched groups, and certainly involve using many more subjects. By having half of the *O*'s tell the story alone to *E* first and the other half to the audience first, it is possible to cancel out the effect of telling the story twice. We hardly knew beforehand what the effect of telling the story twice would be. From Bartlett's experience with serial reproduction we might expect that the second telling would show condensation, less accuracy, etc. From the studies on reminiscence we might expect that the second reproduction would be better. Since the second recall took place a minute or so after the first, there is little opportunity for either of the above tendencies to operate. At any rate, by combining the groups our procedure would appear to cancel the effect whatever it might be. Another procedure would be to have all of the *O*'s tell the story to *E* alone first and then have half of them tell it a second time to *E* and the other half tell it to the class. Although this method has certain advantages, it cuts the subjects in half for actual treatment of results and does not take care of the problem of individual differences as well as the adopted method. Furthermore, such a method would eliminate the valuable measure of the effect of the audience on the first recall.

C. RESULTS

The results are presented both in terms of mean differences (Table 1) and in terms of the number of *O*'s showing a positive, negative, or no audience effect (Table 2). In Table 2 we also present the range of the differences and the mean differences for the two sub-conditions: to *E* first and to the group first. In this way we are able to show to some extent the effect of the second recall.

TABLE 1

MEANS, STANDARD DEVIATIONS, AND RELIABILITY OF DIFFERENCES BETWEEN THE MEANS ON VARIOUS MEASURES IN RETELLING THE STORY TO *E* AND TO THE GROUP

MEASURE	TO *E*		TO GROUP		*D*	$SE_{dif.}$	*CR*	*r*	*N*	*t*
	MEAN	*SD*	MEAN	*SD*						
No. of words	233.25	50.13	258.45	56.64	25.20	7.28	3.46	.83	20	4.429*
No. of facts	25.25	5.77	27.25	5.77	2.00	.54	3.70	.92	20	3.077*
Transitional, explanatory words and phrases	5.70	2.30	7.94	2.82	1.90	.41	4.63	.78	20	5.000*
Inventions	3.25	2.14	4.10	2.38	.85	.44	1.93	.64	20	1.889
No. of words to explain ghosts	45.69	12.75	50.92	19.74	5.23	2.37	2.21	.94	13	5.753†
Non-overlapping ideas	8.55	3.80	13.90	5.79	5.35	.99	5.40	.67	20	5.753*

* Significant at 1 per cent level.
† Significant at 5 per cent level.

The easiest and most objective of our measures is the number of words used in retelling the story under the two conditions. There are 330 words in the original. We find that there is a mean difference of 25.20 words in favor of the audience situation (see Table 1). This is found to be a reliable difference both in terms of critical ratio and in terms of *t*.[2] It will be noted (Table 2)

[2] We first calculated the reliability of our differences in terms of critical ratio and then calculated them again in terms of *t* since we were not sure that we could assume a normal distribution. It makes no difference which way they are calculated. We publish both measures in Table 1 for the benefit of those who prefer the use of *t*. These latter values have been calculated according to the method described by Lindquist, E. F., *Statistical Analysis in Educational Research*. Boston: Houghton Mifflin Company, 1940, Chap. 3, p. 59.

TABLE 2

THE GROUP EFFECT IN TERMS OF THE INDIVIDUAL *O*'S WITH A BREAKDOWN OF THE DATA DEPENDING ON WHETHER THE FIRST RETELLING OF THE STORY WAS TO *E* OR TO THE GROUP

MEASURE	STORY RETOLD TO *E* FIRST OR TO GROUP (*G*) FIRST	NO. OF *O*'S EFFECTED OR NOT EFFECTED BY GROUP +	−	=	MEAN DIFF. BETWEEN THE 2 RECALLS	RANGE OF DIFF. BETWEEN THE 2 RECALLS
No. of words	To *E* first (A)	8	1	1	29.5	+64 to −1
	To *G* first (B)	8	2	0	20.9	+80 to −15
No. of facts	*E*	8	2	0	1.4	+6 to −5
	G	8	2	0	2.6	+7 to −2
Transitional explanatory words and phrases	*E*	9	1	0	2.0	+6 to −1
	G	7	0	3	1.8	+6 to −1
Inventions	*E*	7	1	2	1.5	+5 to −2
	G	3	2	5	.2	+3 to −4
No. of words to explain ghosts	*E*	6	0	0	8.83	+14 to +1
	G	4	3	0	2.14	+12 to −5
Non-overlapping ideas	*E*	10	0	0	7.3	+14 to +3
	G	8	2	0	3.4	+10 to −2

Note: This table reads as follows: of the 10 subjects who told the story first to *E* and then to the Group, 8 used more words before the group, one less, and one the same number as in the Alone to *E* situation. The mean difference and the range follows. Of the other 10 subjects who told the story first to the Group and then to *E*, 8 used more words before the group and two fewer words. It will be noted in the difference column that all of the values are positive, though for all but one measure there is a greater difference when the performance before the group is the second telling.

that more words are used before the audience regardless of whether or not it is the first or second recall, but that there is a larger difference when the second recall is before the audience. It is interesting to note here that one of our *O*'s used more words than are in the original story in both her recalls (but more before the group) and two other *O*'s use more words than are in the original story in their recalls before the group.

Subject 4 *A*, for instance, uses 64 more words before the group than to *E* alone though she adds only two more main ideas of the

story. Most of the additional words may be accounted for as follows: (*a*) Numerous explanatory phrases: They didn't see anything; It was still dark; They became frightened and they went and hid in the bushes; The bushes were by the river so they could hide in them; You can go. No one will worry about you; He knew they were ghosts because he didn't feel anything; They went to bed because it was getting late. (*b*) Repetition for emphasis, such as: But he didn't feel anything; He didn't know he had been shot; He didn't feel in the least sick. (*c*) Transitional phrases which make the story smoother: The war-party continued up the river; When they saw that he was shot. The subject justifies her statement, makes sure it sounds logical, and that the sequence is followed by the audience. Incidentally, this subject has an avid interest in human affairs, is interested in literature, and writes stories herself. Her reproduction before the group contained 52 words more than the original story.

Not only do our *O*'s use more words before the audience but they also recall more of the facts. The story was broken up into 48 facts. The number of these recalled for each *O* in the two recalls was tabulated. It is found that there is a difference of 2.0 facts in favor of the audience situation which is also a reliable difference (Table 1). In Table 2 we note that 16 of the *O*'s recall more facts under the audience situation and that it makes no difference whether the first recall is to *E* or to the group. This measure stands out as being the only one where the average difference is greater when the first recall is before the group.

The next measure, Transitional and Explanatory Words and Phrases, was made in response to a question raised by Bartlett.[3]

> It is a question of great interest whether occurrences of explicit explanatory forms—the use of terms such as "thus," "therefore," "because," "for this reason," and the like—marks a response as social in its determination and expression as, say, that of comradeship, or whether it should rather be set down to the influence of individual character upon the tales. There seems strikingly little data for an answer to this question.

[3] Bartlett, F. C., *Psychology and Primitive Culture.* New York: Macmillan, 1923, Chap. 3, p. 101.

We find a significant difference in favor of the audience situation in the number of such words and phrases (Table 1). It is interesting that only one *O* of the 20 (Table 2) shows less of such words and phrases before the group. This would seem to give pretty definite evidence that in our situation at least the use of such terms is facilitated by an audience and that nearly all are affected but some more than others.

We were interested to test the influence of the audience on the number of inventions, or ideas not present in the original story, which are put into the tale. Our conditions are not especially favorable for such changes for our *O*'s were striving first of all to make an accurate recall of the story rather than to entertain the audience by telling a tale. Our *O*'s do show a difference in favor of the group situation but it is unreliable. Half of them show more inventions before the group as compared with three who show fewer and seven who show no difference at all (Table 2). The difference in the number who show the influence depending upon whether the first recall is to the Group or to *E* alone may indicate an important fact concerning the facilitating effect of the group upon the accuracy of recall. It is altogether possible that there is a relationship between accuracy and the fact that the story is recalled first to the audience, for the difference in the number of inventions before the group is significantly less for this group (*t* significant at 1 per cent level).

The idea of ghosts in the story is very vague. It is difficult to tell just who is a ghost. We thought it would be worth while to compare the explanations of the ghost idea under the Alone to *E* and the Group situations. One objective method is to count the number of words used to explain the idea under the two conditions of the experiment. In the first place only 13 of our 20 *O*'s mention the word in both recalls. One *O* mentions it before the group but not to *E*, and one to *E* but not before the group. Thus we can use only 13 of our *O*'s in this comparison. Six of these are in the group which tell the tale to *E* alone first. There does appear to be a tendency for the *O*'s to put more effort into an explanation of the idea before the group. The critical ratio is only 2.21 but *t* is significant at the 5 per cent level. It will be noted that 10 of the 13 subjects use more words before the group. This is another in-

stance where those who tell the story first to *E* and then to the group show a substantial advantage in the Difference Column (Table 2) over those who report in the reverse order. The extra words, for the most part, are used in elaboration of the evidence for the ghost theory. The subject himself has had difficulty in deciding just who was a ghost (and they do not all agree); consequently he tries to make sure that the audience gets the idea. Saying the same thing over in different words appears to be the most frequent means to this end. An idea of this process can be gained from the sample of report given above and also in that of Subject 1 *B* below. Apparently the *O* does not put forth the some effort to explain to one person.

The last measure in the tables is the number of Non-Overlapping Ideas. This is more or less an omnibus measure and overlaps to some extent with the measures above. After working out the other measures we felt the need of an over-all comparison of the two recalls. In a sense this measure can be considered as a check upon the other measures for it involves a different method of approach. We went through the two recalls for each *O* and underlined the ideas which were essentially the same. After this was done we listed for each recall the ideas expressed in one but not in the other. In Table 1 we find that the difference in the number of such Non-Overlapping Ideas in favor of the group situation is our most reliable difference. In Table 2 we find that 18 of the 20 subjects produce more ideas before the group. We also note that a greater difference exists if the second recall comes before the group.

Upon analysis of these non-overlapping ideas we find that they can be classified to some extent. It should be pointed out, however, that the differences are quantitative. In every category we find instances in both the audience and the alone situations. The difference is in the number of examples. Such a classification is likely to be quite subjective, but it is clear that before the audience there are many more identifications of time, place, and person; more repetition for clarity; more dramatic forms, more explanation and parenthetical expressions, more detailed description and atmosphere. On the other hand there appears to be very little difference in the amount of doubt or uncertainty, al-

though there does seem to be more expressed in the first recall, disregarding the group and the alone situations. A few comparisons of sections of the reports will illustrate the classifications listed above. The statement before *E* alone and to the group will be listed in the order of the actual recalls. Group *A* told the story first to *E* and then to the group while Group *B* reversed this order.

1 *A*

(This sample illustrates additional explanation, repetition, and parenthetical expression before the group.)

To E: He told them that there were many people on both sides killed and that he was hurt but that he never got sick. He never knew that he was hit.

To Group: He told how he went down the river, how men were killed on both sides, and how he was hit. He did not feel sick so they must have been ghosts. (Incidentally, the story was called the "War of the Ghosts.")

2 *A*

(Atmosphere and explanation before the group.)

To E: It seems that there were two young men who went down the river. . . .

To Group: This seems to be a story that is about two young men who evidently lived in centuries past from this one because it doesn't seem to have a present day setting. They went down the river. . . .

7 *A*

(Added detail and identification of place and person.)

To E: Five canoes came up. . . . He went along with them and they reached the town and many were killed.

To Group: Five canoes came up with warriors in them. . . . They went up the river to the town there and fought. Some were hurt badly and some were killed.

10 *A*

(Identification of person and dramatic form.)

To E: The young man heard someone say. . . . I was shot but I didn't feel sick.

To Group: The young man who had come with the warriors heard someone say . . . "Behold, I was shot and I was not sick."

1 *B*

(Identification of person, repetition of ideas, additional ideas recalled.)

To Group: The young man who accompanied the original men in the canoes was hit but he didn't realize it. He thought everyone else was dead. Everybody kept insisting that he was dead but he didn't feel anything. Finally he came home when the war was over and built a fire. He told everybody about his experiences.

To E: After a while the war was over. After a while they went home. The young man built a fire and told his experiences.

4 *B*

(Identification of person and place, and atmosphere.)

To Group: So the ghosts retreated from the town, so he went home and made a fire in the house. It was still night. But when dawn came he fell down. . . .

To E: So they retreated and went back to the town. When they were back there, he fell down. . . .

5 *B*

(Additional description and action, identification of time and person.)

To Group: He became pale and quiet, and fell down, and the next morning something black came out of his mouth. The people looked at him and he was dead.

To E: He became quiet, and something black came out of his mouth, and he was dead.

6 *B*

(Additional explanation.)

To Group: They were afraid because they didn't know what was coming.

To E: They were a little frightened.

D. DISCUSSION

The story as told to the audience does not appear to contain any more "ands" and other meaningless and hesitating phrases than does the story to *E* alone. Such words are characteristic of

verbal production, and are somewhat more evident in the first reproduction than in the second. Once the story has been told and the main form established to the satisfaction of *O*, there is little variation in the structure in the second recall. When the second recall is to the audience (Group *A*), we find various forms of elaboration of the first recall as a result of the presence of the audience; but when the first recall is to the audience (Group *B*), there is a dropping out of similar characteristics on the second recall, apparently because of the decreased motivation furnished by *E* alone. The important point here is that not as much is dropped in the latter as is added in the former. It is now clear why there is less evidence for audience facilitation in Group *B:* both of Group *B*'s recalls are better than Group *A*'s. Apparently reconstructing the story before an audience results in a better reproduction, and furthermore, the benefits are passed on to subsequent recalls. Our *O*'s were assigned to Group *A* or Group *B* at random. Group *B*, however, recalled on the average 3.7 more facts from the story before the audience than Group *A*. This difference gives a *t* value which is significant at the 2 per cent level. Group *B*'s recall to *E* alone also contains more facts than Group *A*'s recall before the audience, both of these being second recalls. It seems clear now that Group *B* was facilitated as much, if not more, than Group *A*. The apparent difference, as reproduced in Table 2, would appear to be an artifact of the method of comparison. It has already been pointed out that recalling the story first to the audience results in significantly less invention. The facilitating effect of an audience on the first recall, as far as concerns the completeness and accuracy of recall, deserves further study in its own right. At any rate the above hypothesis appears to fit the facts better than the more obvious one of the beneficial effect of a second recall. If there are such benefits, they are masked by the facilitating effect of the audience.

34. SOCIAL NORMS (FRAMES OF REFERENCE)

The experiment reported below is regarded as a "classic" in the development of social psychology. It demonstrates empirically how essential is the concept of a *frame of reference* to an understanding of social behavior. From the laboratory experiment described here, a better understanding has resulted of how our perception of the world and the society about us is molded by our own social habits. As Gardner Murphy says in the Introduction to the book from which the excerpts below are taken, "A rigorously controlled, highly sensitive, and accurately measurable laboratory phenomenon has been found, the study of which has proved to lead to all sorts of new insights in the sphere of social psychology." The experiment is another example of *social* influences in perception—compare Selection 17, *Perception,* pages 156-167. Also, see Selection 26, *Suggestion,* pages 257-269.

THE FORMATION OF A NORM IN A GROUP SITUATION *

Muzafer Sherif

SITUATIONS CONDUCIVE TO THE STANDARDIZATION OF NEW NORMS

In our experiments we tried to apply to the social field the concept of frame of reference as a general psychological phenomenon revealed in many experiments in diverse fields of psychology. Our experiments are reported because they definitely suggest that the frame-of-reference notion is essential in the approach to any study of norms. The point that

* From *The Psychology of Social Norms,* by Muzafer Sherif. New York: Harper & Brothers, 1936, Chap. 6, "The Formation of a Norm in a Group Situation," pp. 89-107. Copyright, Harper & Brothers. Reprinted by permission of the publisher and author.

makes us venture to postulate that the psychological phenomenon revealed in the results of our experiments is the prototype of the phenomenon involved in the formation and operation of norms in actual social life, is the fact that these experiments are based, in their very conception, on a general psychological tendency that persistently shows itself in experiments from so many different fields of psychology. The experiments to be reported in this chapter aim to justify the extension of this psychological principle to the social level.

HYPOTHESIS TO BE TESTED

We have seen that if a reference point is lacking in the external field of stimulation, it is established internally as the temporal sequence of presentation of stimuli goes on.

Accordingly we raise the problem: What will an individual do when he is placed in an objectively unstable situation in which all basis of comparison, as far as the external field of stimulation is concerned, is absent? In other words, what will he do when the external frame of reference is eliminated, in so far as the aspect in which we are interested is concerned? Will he give a hodgepodge of erratic judgments? Or will he establish a point of reference of his own? *Consistent* results in this situation may be taken as the index of a subjectively evolved frame of reference.

Coming to the social level we can push our problem further. What will a group of people do in the same unstable situation? Will the different individuals in the group give a hodgepodge of judgments? Or will they establish a collective frame of reference? If so, of what sort? If every person establishes a norm, will it be his own norm and different from the norms of others in the group? Or will there be established a common norm peculiar to the particular group situation and depending upon the presence of these individuals together and their influence upon one another? If they in time come to perceive the uncertain and unstable situation which they face in common in such a way as to give it some sort of order, perceiving it as ordered by a frame of reference developed among them in the course of the experiment, and if this frame of reference is peculiar to the group, then we may say

that we have at least the prototype of the psychological process involved in the formation of a norm in a group.

THE AUTOKINETIC EFFECT, ITS POSSIBILITIES FOR OUR PROBLEM

With these considerations clearly in mind, our first task has been to find objectively unstable situations that would permit themselves to be structured in several ways, depending on the character of the subjectively established reference points.

The conditions that produce the autokinetic effect afford an excellent experimental situation to test our hypothesis. We can easily get the autokinetic effect. In complete darkness, such as is found in a closed room that is not illuminated, or on a cloudy night in the open when there are no other lights visible, a single small light seems to move, and it may appear to move erratically in all directions. If you present the point of light repeatedly to a person, he may see the light appearing at different places in the room each time, especially if he does not know the distance between himself and the light. The experimental production of the autokinetic effect is very easy and works without any exceptions, provided, of course, that the person does not use special devices to destroy the effect. For in a completely dark room a single point of light *cannot* be localized definitely, because there is nothing in reference to which you can locate it. The effect takes place even when the person looking at the light knows perfectly well that the light is not moving. These are facts which are not subject to controversy; anyone can easily test them for himself. In this situation not only does the stimulating light appear erratic and irregular to the subject, but at times the person himself feels insecure about his spatial bearing. This comes out in an especially striking way if he is seated in a chair without a back and is unfamiliar with the position of the experimental room in the building. Under these conditions some subjects report that they are not only confused about the location of the point of light; they are even confused about the stability of their own position.

The autokinetic effect is not a new artificial phenomenon invented by the psychologists. It is older than experimental psy-

chology. Since it sometimes appears in the observation of the heavenly bodies, the astronomers[1] had already noticed it and offered theories to explain it.[2]

We have studied the influence of such social factors as *suggestion* and the *group situation* on the extent and direction of the experimental movement. The study of the extent of the experienced movement permits a quantitative study for the approach to the formation of norms. We shall therefore report on the extent of movement.

PROCEDURE

We have studied the extent of the movement experienced in two situations.

1. When alone, except for the experimenter (in order to get the reaction of the individual unaffected by other experimentally introduced social factors, and thus to gain a basic notion about the perceptual process under the circumstances).

2. When the individual is in a group situation (in order to discover modifications brought about by membership in the group).

The subject was introduced into the group situation in two ways:

a. He was brought into a group situation after being experimented upon when alone. This was done to find out the influence of the group situation after he had an opportunity to react to the situation first in accordance with his own tendencies and had ordered it subjectively in his own way.

b. He was first introduced to the situation in the group, having no previous familiarity with the situation at all, and afterwards experimented upon individually. This was done to find out whether the perceptual order or norm that might be established

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[1] For a concise history of the autokinetic effect as a scientific problem, see Adams, H. F., Autokinetic Sensations, *Psychological Monographs*, July, 1912, No. 59, 32-44.

[2] Several theories have also been advanced by psychologists to explain the nature of the autokinetic effect. These are immaterial for our present problem. The important fact for us to remember is that the autokinetic effect is produced whenever a visual stimulus object lacks a spatial frame of reference.

in the group situation would continue to determine his reaction to the same situation when he faced it alone. This last point is crucial for our problem. The others lead up to it and clarify its implications.

The subjects, apparatus and procedures used will be only briefly outlined here. They are reported in full elsewhere.[3]

The experiments were carried on in dark rooms in the Columbia psychological laboratory. The subjects were graduate and undergraduate male students at Columbia University and New York University. They were not majoring in psychology. They did not know anything about the physical stimulus set-up, or the purpose of the experiment. There were 19 subjects in the individual experiment; 40 subjects took part in the group experiments.

INDIVIDUAL EXPERIMENTS

The stimulus light was a tiny point of light seen through a small hole in a metal box. The light was exposed to the subject by the opening of a suitable shutter controlled by the experimenter. The distance between the subject and the light was five meters. The observer was seated at a table on which was a telegraph key. The following instructions were given in written form: "When the room is completely dark, I shall give you the signal READY, and then show you a point of light. After a short time the light will start to move. As soon as you see it move, press the key. A few seconds later the light will disappear. Then tell me the distance it moved. Try to make your estimates as accurate as possible."

These instructions summarize the general procedure of the experiment. A short time after the light was exposed following the READY signal, the subject pressed the key; this produced a faint but audible ticking in the timing apparatus indicating that the subject had perceived the (autokinetic) movement. The exposure time, after the subject pressed the key to indicate that he had begun to experience the movement, was two seconds in all cases.

[3] Sherif, M., A Study of Some Social Factors in Perception, *Archives of Psychology*, 1935, No. 187.

The light was physically stationary during the entire time and was not moved at all during any of the experiments.

After the light had disappeared, the subject reported orally the distance through which it had moved as he experienced it. The experimenter recorded each judgment as soon as it was spoken by the subject, writing each one on a separate sheet of a small paper pad. One hundred judgments were obtained from each subject. The subjects reported their estimates in inches (or fractions of inches).

The quantitative results are reported elsewhere.[4] Here we shall present only the conclusions reached on the basis of these quantitative results, and give some important introspections that clarify these conclusions further.

The results unequivocally indicate that when individuals perceive movements which lack any other standard of comparison, *they subjectively establish a range of extent and a point (a standard or norm) within that range which is peculiar to the individual,* that may differ from the range and point (standard or norm) established by other individuals. In other words, when individuals repeatedly perceive movement which offers no objective basis for gauging the extent of movement, there develops within them, in the course of a succession of presentations, a standard (a norm or reference point). This subjectively established standard or norm serves as a reference point with which each successive experienced movement is compared and judged to be short, long, or medium—within the range peculiar to the subject.

To express the point more generally, we conclude that in the absence of an objective range or scale of stimuli and an externally given reference point or standard, each individual builds up a range of his own and an internal (subjective) reference point within that range, and each successive judgment is given within that range and in relation to that reference point. The range and reference point established by each individual are peculiar to himself when he is experimented upon alone.

In the second series of the individual experiments, it was found that once a *range,* and point of reference within that range,

[4] Sherif, M., A Study of Some Social Factors in Perception, *Archives of Psychology,* 1935, No. 24, 34-41.

is established by an individual, there is a tendency to preserve these in the experiments on subsequent days. A second and third series of 100 judgments each show a median score for a given subject which is very similar to that found in the first series, but with a reduced variability.

GROUP EXPERIMENTS

On the basis of the results given, the problem which we must study in the group situation becomes self-evident. The individual experiences the external field of stimulation in relation to a frame of reference. When a frame of reference is given in the objective situation, this will usually determine in an important way the structural relationships of the experience; in such cases all other parts will be organized as determined or modified by it. But at times such an objective frame of reference is lacking—the field of stimulation is unstable, vague and not well structured. In this case the individual perceives the situation as shaped by his own internally evolved frame of reference. The questions that arise for the experiment in the group situation, then, are the following:

How will an individual who is found in the group situation perceive the stimulus field? Will there evolve in him again a range and a standard (norm) within that range that will be peculiar to him, as was the case when individuals were experimented on alone?

Or will group influences prevent him from establishing any well-defined range and reference point within that range, and thus spoil his capacity to perceive the uncertain situation in any sort of order?

Or will the individuals in the group act together to establish a range, and a reference point within that range, which are peculiar to the group?

If such a range and reference point are established, what will be the influence of such a group product on the individual member when he subsequently faces the same stimulus situation alone?

The questions outlined above represent more or less pure cases. There are, of course, other possibilities that lie between these pure cases.

With these questions we face directly the psychological basis of social norms. We must admit that we have reduced the process to a very simple form. But the first fundamental psychological problem is the way an individual perceives a stimulus situation. The behavior follows upon this perception rather than upon the bald physical presence of the stimulus. There is no direct and simple correlation between the stimulus and the subsequent behavior, especially on the level of behavior with which we are dealing. A simple perceptual situation is the first requirement for experimental analysis of the problem.

We studied the differences between the reactions (a) when the individuals first faced our stimulus situation in the group, and (b) when they faced the group situation after first establishing their individual ranges and norms in the individual situation. Accordingly, twenty of the subjects began with the individual situation and were then put into groups in subsequent experimental sessions; the other twenty started with group sessions and ended with individual sessions.

This rotation technique enabled us to draw conclusions regarding the following important questions:

How much does the individual carry over from his individually established way of reacting to a later situation when facing the same stimulus in the group? How much will he be influenced by his membership in the group after once his range and norm have been established individually when alone?

How will he experience the situation when alone, after a common range and norm have been established peculiar to the group of which he is a member? In short, will the common product developed in the group serve as a determining factor when he subsequently faces the same situation *alone*?

The experimental setting was in general the same as in previous experiments. Of course, additional techniques were necessary to handle two or more members of a group at the same time. One major addition was the use of signal lights. As the subjects were new to the experimenter, he could not tell from the voice alone who was giving a judgment. So as each subject gave his judgment aloud, he pressed a push button connected with a dim signal

light of a particular color by which the experimenter might know who the speaker was.

There were eight groups of two subjects each and eight groups of three subjects each. Four groups in each of the two categories started with the individual situation (one whole session for each individual), and then functioned as groups. Four groups in each category started in group situations for the first three sessions on three different days (all subjects of the group being present), and were then broken up and studied in the individual situation.

In order to make the relation of individual members to one another as natural as possible, within the limits of the experimental setting, the subjects were left free as to the order in which they would give their judgments. In fact, they were told at the start to give their judgments in random order as they pleased. Whether the judgments of the person who utters his first have more influence than the others becomes a study in leadership, which is a further interesting problem. Perhaps such studies will give us an insight into the effect of polarization on the production of norms in a group situation. But from the examination of our results, we can say that the reporting of the judgments has a gradual cumulative effect; aside from whatever influence the first judgment may have on the second or third at a given moment, the judgments of the third individual at a given presentation are not without effect on the subsequent judgments of the first subject in the round of presentations following. Thus the production of an established group influence is largely a temporal affair and not the outcome of this or that single presentation. We shall refer to this point again later.

Besides the quantitative judgments obtained during the experiments, the subjects were asked at the end of each experimental session to write down their introspections. Questions were asked which aimed at finding whether they became conscious of the range and norm they were establishing subjectively. These questions were: "Between what maximum and minimum did the distances vary?" "What was the most frequent distance that the light moved?"

Certain facts stand out clearly from our results. We may summarize these facts in a few paragraphs.

When an individual faces this stimulus situation, which is unstable and not structured in itself, he establishes a range and norm (a reference point) within that range. The range and norm that are developed in each individual are peculiar to that individual. They may vary from the ranges and norms developed in other individuals in different degrees, revealing consistent and stable individual differences. The causes of these individual differences are difficult problems in themselves, the understanding of which may prove to be basic to a satisfactory understanding of our problem. But for the time being it may be worth while to work on our main theme.

When the individual, in whom a range and a norm within that range are first developed in the individual situation, is put into a group situation, together with other individuals who also come into the situation with their own ranges and norms established in their own individual sessions, the ranges and norms tend to converge. But the convergence is not so close as when they first work in the group situation, having less opportunity to set up stable individual norms.

When individuals face the same unstable, unstructured situation as members of a group for the first time, a range and a norm (standard) within that range are established, which are peculiar to the group. If, for the group, there is a rise or fall in the norms established in successive sessions, it is a group effect; the norms of the individual members rise and fall toward a common norm in each session. To this the objection may be raised that one subject may lead, and be uninfluenced by other members of the group; the group norm is simply the leader's norm. To this the only possible empirical reply is that in our experiments the leaders were constantly observed to be influenced by their followers—if not at the moment, then later in the series and in subsequent series. Even if the objection has occasional force, the statement regarding group norms is in general true. Even if the group norm gravitates toward a dominating person, the leader represents a polarization in the situation, having a definite relationship toward others which he cannot change at will. If the leader changes his norm after the group norm is *settled* he may *cease thereupon to be followed,* as occurred several times strikingly in our experi-

ments. In general, such cases of complete polarization are, however, exceptional.

DISCUSSION OF RESULTS

The experiments, then, constitute a study of the formation of a norm in a simple laboratory situation. They show in a simple way the basic psychological process involved in the establishment of social norms. They are an extension into the social field of a general psychological phenomenon that we found in perception and in many other psychological fields, namely, that our experience is organized around or modified by frames of reference participating as factors in any given stimulus situation.

On the basis of this general principle considered in relation to our experimental results, we shall venture to generalize. The psychological basis of the established social norms, such as stereotypes, fashions, conventions, customs and values, is the formation of common frames of reference as a product of the contact of individuals. Once such frames of reference are established and incorporated in the individual, they enter as important factors to determine or modify his reactions to the situations that he will face later—social, and even non-social, at times, especially if the stimulus field is not well structured.

Of course this is a very general statement. It gives us only the broad basic principle with which we can approach any specific social norm. In each instance we have to take into consideration particular factors that participate in its production. We have also lumped stereotypes, fashions, conventions, customs and values together, without considering the distinguishing mark of each one of them. We brought them together because of a basic psychological characteristic that they all have in common, namely, that they all serve as frames of reference in their proper realms. Some are more firmly established, surviving many generations; some are temporary, with varying lengths of duration, from one season to a few years. Though all are related to the broad principle that we have reached, each one of these types of norms, its mode of origin and its effectiveness while it exists, is a specific problem in itself. We shall touch upon some of these more specifically in subsequent chapters.

Our experiments merely show the formation of a specific frame of reference in a group situation. Our experimental situation, we must say, does not represent a pressing social situation such as is found in the reality of everyday life with its intense hunger, sex, and ego factors. It is simply one unstable, unstructured situation that is new for the subjects participating in the experiments. They have no set norms of reaction to it. The situation, therefore, is plastic enough to be structured by the effect of experimentally introduced social factors such as suggestion, prestige, and other group influences.

35. FADS AND FASHIONS

This is a unique little study of the spread of clothing fads in a college community. For the population observed, there is little indication that fads occurred in a random manner. Instead there is considerable evidence that the fads tended to occur in *patterns,* and that the spread of fads had a direct relation to the psychology of *leadership.*

FAD AND FASHION LEADERSHIP AMONG UNDERGRADUATE WOMEN *

J. E. Janney

The purpose of this exploratory study is to test the tacit assumption found in many textbooks of social psychology that fads occur in a random manner.

We shall endeavor to answer the following questions: (1) What social position do the initiators of fads occupy among their fellows? (2) Are differing types of fads initiated by differing persons? (3) Is any differential classification possible among those who do not initiate but who follow fads? (4) What social position do those who are insensitive to fads occupy among their fellows?

PROCEDURE

For two successive academic years (1936-1938) 279 undergraduates in a small residential college for women were observed independently by seven of their number for their responses to clothing fads. A fad is here defined as a precipitate but short-lived deviation in some article or articles of clothing. It is differentiated

* From "Fad and Fashion Leadership Among Undergraduate Women," by J. E. Janney, *Journal of Abnormal and Social Psychology,* 1941, Vol. 36, pp. 275-278. Reprinted by permission of the publisher and author.

from fashion in that fashions are slower to originate, last longer, and are less striking in deviation from the current mode. Thus, a sudden shift to wearing cardigan sweaters backward for a few weeks is classified as a fad, but the wearing of Brooks sweaters over a period of six months to two years is classified as a fashion.

In addition to the continuous running account of fad responses, these seven young women independently reported on the social groupings which occurred among all of the 279 subjects. Thus, most of the cliques, chumships, and antipathies were delineated. From the following sources the following types of data were secured: from the dormitory sign-out books, information as to dating and trips to the nearby metropolis; from the physical education department, the records for athletic participation; from the Dean of Women's office, records for disciplinary offenses and election or appointment to posts of honor and responsibility; and from the registrar's office, records as to academic standing and intelligence-test scores.

We wish to invite particular attention to: (1) the great variety of indices and criteria used, (2) the relative objectivity and overtness of the aforementioned, (3) the use of the subjects themselves in the collection and interpretation of the data, and (4) the relatively long time over which these data were assembled.

RESULTS

Very early in the census of fads it became increasingly clear that fads tended to occur in patterns: (1) that certain cliques were responsible for the overwhelming majority of locally initiated fads, (2) that these cliques were sharply differentiated as to the types of fads initiated, (3) that the types of fads initiated bore certain resemblances to the types of social activities engaged in by the cliques in question.

From an analysis of sixty-seven clothing fads indulged in by varying percentages of 279 young women, the following groupings of faddists seemed to emerge.

Group A: Bizarre Faddists. Nine in number, eight of whom were in the same clique. This group was responsible for the local initiation of twenty-four fads such as beer jackets, slacks, gob hats, mechanical beetles on coat lapels, "rump-sprung" skirts,

"side-wheel" curls, etc. Nineteen of the twenty-four fads locally initiated by this group were worn on the local campus only when young men were absent, and all of their fads were unrelated to general costume effects. The fads initiated by this group were not always followed by others outside the group. At times they were the subjects of "razzing" by other students. They would continue, nevertheless, to wear the objects of opprobrium as a gesture of good-natured defiance. Such fads as lumber-jack caps, bells on ankles, plaid ribbon hair bows, etc. seemed to elicit the derision of their sometime followers.

The social participation of these young women which appear congruent with this type of fad leadership was concerned with the writing, direction, and production of vaudeville acts lampooning local customs and dignitaries, and the designing of cartoon advertisements. All nine of these young women were the recipients of considerable attention from a variety of young men. Their favorite magazine reading was *Mademoiselle* and *Esquire.*

Group B: Distingué Faddists. Seven in number who locally initiated twenty fads, all of which were followed by other students. The fads in this pattern were the secondary elaboration of a modish ensemble. Their fads included such items as the wearing of pearl necklaces with Brooks sweaters, wedge shoes, pastel woolens, "butcher-boy bobs," etc. All of their fads were primarily for wear in social gatherings where young men were present. Ten of these fads were related to formal evening attire—for example, creating a turban by the intertwining of multi-colored chiffon handkerchiefs. The only approach to the bizarre was the use of dog collars for belts with sport costumes; nevertheless, the dog collars used were of an extremely conservative design. These seven young women were scattered through three different cliques. The type of social participation of these young women which seemed to be congruent with the fads in question was the beginning, development and management of a club devoted to the development of original modern dances *à la* Martha Graham and Trudi Schupe. These young women were responsible for the development of several dances which were indigenous to the local campus. Sufficient time has not elapsed to determine whether there will be any irradiation to other campuses. All of these young women were

rated by the seven investigators as being cognizant of the more subtle aspects of etiquette. All in this group were the recipients of continuous masculine attention. The *New Yorker* and *Vogue* were their favorite magazines.

Five of the seven in the distingué group were NYA students and of necessity did a large amount of sewing. This economic necessity was regarded by each of the five as an opportunity for creative design, and their counsel was frequently sought by other students whose financial resources were much greater.

Group C: Oscillating Faddists. Eight in number, who started eight fads. This group tended to swing from the extreme of the height of fashion, where they surpassed both Joseph and Solomon, to the dowdy extreme of Dr. Samuel Johnson. The fads which these cases initiated dealt with such items as overalls, jackboots, turtle-neck sweaters, frizzy bangs, etc. The girls were scattered through three cliques. The social participation which seemed to be congruent with their fad responses was that of perpetual and consistent rebellion against the *status quo.* These eight included all of the conspicuous malcontents in the college. The rebellion of five of them frequently took a constructive course, as they were responsible for the resuscitation of the comatose undergraduate newspaper. They also created sufficient disturbance to bring about a much-needed improvement in the lighting system in the library, etc. The other three were distinguished among their fellows primarily for ironic comments upon the passing scene and for being perpetual thorns in the flesh of the disciplinary authorities.

Group D: Egregious Faddists. Three in number, who attempted to start fifteen fads, none of which was followed. Their fads ranged all the way from original coiffures to strapless evening gowns. All of their fads were in good form if one may take *Vogue* as a criterion. Their efforts to be well dressed approached the proportion of a compulsion. Their efforts to initiate fads appeared to be part and parcel of their hyper-insensitive and kaleidoscopic efforts to achieve superior social status and to attract favorable masculine attention. Their attempts to be clever conversationalists, and to be class politicians appeared to be symptomatic of a compulsive craving for popularity. All of the seven

student observers in this study reported that the quickest way to kill a fad was to have one of these young women take it up. The strenuous endeavors of these young women to attract masculine attention were fruitless, and none was a member of any feminine clique.

Group E: Conforming Faddists. Two hundred thirty-two in number, none of whom originated any fads but all of whom at one time or another followed one or more of the fads initiated by the A, B, or C groups. Sixteen of these conformers followed the initiators so closely that at times very close scrutiny was necessary to determine whether they had initiated the fad or not. The sign-out books in the dormitories showed that these young women were among the most frequent visitors to the nearby metropolis, and interviews yielded the fact that a large amount of their time there was devoted to window shopping and casual strolls through the department stores. Fifteen other young women followed over half of the fads noted but were less quick to do so and did not go to the nearby metropolis in the aforementioned manner. Of these 232 conformers, 201 wore one or more fads after the fads had been initiated for two weeks or more.

Group F: Obsolescent Faddists. Twenty in number. These young women did not dress—they upholstered. Their clothing was conspicuous by being ill-fitting and from one to three years behind the mode. Even their newly purchased clothing showed the same obtuseness in regard to style. Eleven of the twenty were compelled by necessity to make a considerable portion of their own clothing. But in contra-distinction to the five such cases in the distingué group, they regarded sewing as an onerous burden instead of an artistic opportunity. Consequently some of their creations gave the impression of being tied together rather than sewed. In common with the egregious faddists, none of this group was in any clique. Of this group of twenty, seventeen experienced great difficulty in finding roommates and at various times during their college careers were compelled to room alone. Of the remaining three, one had a roommate who took her on as a problem child for purposes of rehabilitation, and the other two roomed together in desperation. Eleven of the twenty received no masculine attention for the two-year period, three on several occasions had

blind dates which failed to result in any follow-up, one was dated once by each of eleven men. Closer scrutiny of this latter case seemed to indicate that these young men were dating her out of curiosity, as she had many characteristics in common with Mrs. Malaprop. The remaining six dated young men once or twice a month. Replies to inquiries at the neighboring university indicated that the young men in question appeared to be as socially isolated as the young women themselves. This latter observation cannot be supported by the wealth of first-hand data which underlies our comments upon the young women.

Of the twenty obsolescents only one would voluntarily appear at teas, receptions, etc. Likewise, she was the only one who used cosmetics except on those rare occasions where attendance was compulsory at some formal function. Eighteen of the twenty spent the larger part of their free time in self-imposed solitary confinement in their rooms—reading, listening to the radio, or just sitting. During the second year of this study there was systematic and wide-spread resentment among the students against compulsory daily chapel. The prevailing adaptation to the situation was that of writing letters, reading newspapers, or *sotto voce* comments on the chapel speaker. On the other hand, eighteen of these young women reported in interviews that they simply went wool-gathering in chapel. A concerted effort was made by leaders of the student government to socialize these young women by having them share responsibilities in the management of some of the campus activities. Only under pressure would any of these young women accept some small but definite responsibility, such as collecting tickets or ushering at a class play. At no time were the student leaders able to get any one of them to accept any responsibility which involved self-direction or the management of others.

In general, these young women were conspicuous by their absence from voluntary social gatherings and conspicuous by their ill-fitting out-moded clothes at compulsory social gatherings.

CONCLUSIONS

Longitudinal observation and items analysis of sixty-seven clothing fads occurring among 279 undergraduate women seems

to indicate, (1) that fads do not occur in a random manner, (2) that the fads which are followed after initiation are originated by young women who are members of prestige-bearing cliques and who are leaders in other types of activities, such as choreography, design, decoration, and comedy, (3) that the cliques in which fads are tried out may be different in the general type of fads, and this difference in the type of fads be congruent to other types of social activity in which the clique engages, (4) that the overwhelming majority of young women studied not only did not originate fads but were several weeks late in following any of them, (5) that those young women who are insensitive to fads are in general insensitive and unskillful in other types of social situations. Consistent dowdiness may be another symptom of unsocialization, but (6) academic standing, intelligence, athletic participation, financial income, and health fail to differentiate any of the patterns reported in this paper.

36. LEADERSHIP

The psychology of leadership is a fascinating topic. Many people in many countries and in many ages have written about it. But few have done much about attempting to *predict* leadership. The present paper represents a beginning in this direction. It presents the results of some observations on the selection and performance of junior officers in the Marine Corps in World War II. For this group, *sociometric group opinion* was a more valid predictor both of success in Officer Candidate School and of combat performance than several objective tests.

GROUP OPINION AS A PREDICTOR OF MILITARY LEADERSHIP *

Stanley B. Williams
and
Harold J. Leavitt

Leadership has very nearly defied definition, let alone measurement. It appears to be some elusive combination of abilities which varies from person to person, from group to group, and possibly even from moment to moment. Unfortunately, the most valid statement we can make about the qualities of leadership is that we know little about them. This unhappy conclusion is borne out by the recent review of leader-

* From "Group Opinion as a Predictor of Military Leadership," by Stanley B. Williams and Harold J. Leavitt, *Journal of Consulting Psychology*, 1947, Vol. 11, pp. 283-291. Copyright, 1947, by the American Psychological Association, Inc. Reprinted by permission of the publisher and authors. The opinions expressed herein are those of the authors and are not to be construed as official or as representing the view of the Navy Department or the Naval Service at large.

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ship studies by W. O. Jenkins.[1] As Dr. Jenkins has pointed out, the early hopes for psychological tests of leadership have been largely unfulfilled.

The implication of the work reviewed by Jenkins is that, for practical purposes, leadership predictors will have to be tailor-made and not just taken from the grab bag of accumulated aptitude tests.

Psychologists faced just such a practical situation during the war. The military services would have appreciated scientific aid in selecting junior officers, for example, but there was little aid to give them. Psychologists in the various services faced special aspects of the situation. For some billets, technical proficiency was of prime importance; for other billets, personality and character factors were more important than technical training. The latter case probably applies to the lieutenants who led combat platoons. Certainly it seemed to us, in our examination of applicants in the Marine Corps, that the qualities considered desirable by the Marine Corps were not primarily those measurable by standard aptitude tests.

We therefore decided to take a slightly different approach to the problem of selecting junior Marine Corps officers. We reasoned that, inasmuch as the only usable criterion of successful leadership would be a subjective judgment or rating by superior officers, we might as well look for predictors among similar kinds of subjective judgments. This was on the assumption that there would be more agreement among various raters than between raters and tests. The question then became: Whose judgments are likely to be predictors of later performance? Those made by superior officers, by teachers, or by friends and acquaintances of equal rank? In the following study, we examined each of these.

The present paper presents the results of some observations on the selection and performance of junior officers in the Marine Corps. The data are few because the study was not begun until the middle of 1944. However, we were able to make use of a criterion of combat performance in addition to the usual school criterion. We therefore have a measure of how well the individ-

[1] Jenkins, W. O., "A Review of Leadership Studies with Particular Reference to Military Problems." *Psychological Bulletin*, 1947, Vol. 44, pp. 54-79.

uals who were commissioned led their platoons in combat. Before being commissioned, these platoon leaders had been given a number of psychological tests, and at the same time we also had sampled the opinions held of them by their buddies, that is, the other members of their training platoons. Inasmuch as none of these test scores was used in selection or promotion or known to anyone but the research staffs, the study comes very close to approximating the conditions of an experiment. Its results point to the conclusion, amplified below, that the impression one makes on others is a more satisfactory measure of leadership potential than the scores one makes on many psychological tests.

METHODS

Subjects. Group opinions and other psychological measures were obtained on Marine Corps Officer Candidate Applicants during the year 1944. For the most part subjects were drawn from the V-12 College Training Program. They had an average age of 21 years, but ranged from 18 to 26. Just prior to the testing period, applicants had completed several weeks of "boot" training at a different camp. As soon as they arrived at our camp,[2] they were organized into platoons of approximately 50 men each. These platoons were destined to stay at this camp for from six to 15 weeks, before being sent to Officer Candidate School at yet a different camp. During the time they were at our camp, platoon members lived, ate, marched and studied together. Each platoon was assigned a room in a barracks and to each platoon was assigned a noncommissioned officer (usually a sergeant) and a commissioned officer (2nd lieutenant) as leaders. Motivation for success appeared to be exceptionally high. Each man knew that, if successful in Officer Candidate School, he would probably be assigned to duty in the Pacific Theater as a second lieutenant in charge of a combat platoon. Although a few were destined for desk jobs, this was not their expectation. In short, the goal was the same for everyone, and evidently everyone was anxious to reach the goal.

More than 1600 men were given some kind of psychological test. However, the group opinion index was taken on only 1193 of this

[2] Camp Lejeune, N.C.

number. The opinions were taken five weeks after platoon formation. Of these, in turn, 240 had also been asked for their opinion at the end of the second week.

Of the total group, only about 72 per cent completed Officer Candidate School and were awarded commissions. Of this commissioned group, we were able to trace through combat only about 300 cases, but about 40 per cent of these in turn were unusable for statistical analysis. Either they had not actually led combat troops, or the reports were incomplete, or the ratings had not been made on the basis of first-hand observation. After attrition from all sources, we were able to salvage of the original group only 185 cases on whom records were complete, and of the 185 only on 100 did we have a group opinion score. (The rapid dwindling of experimental groups is a well-known phenomenon to military researchers.) The major results of this study, therefore, are based on only these 100 cases.

Tests Administered. Within their first week at the camp, all subjects were given a combination biographical information and neurotic symptom questionnaire called the NDRC Personal Inventory, Format 4. This is a paper-and-pencil questionnaire prepared by the NDRC in cooperation with the Navy. It had been validated originally against a criterion of psychiatric judgment and had been found useful in screening naval recruits. In the present experiment it was scored two ways: once with the original NDRC stencil and again with a stencil (designated MFRL) developed specifically to predict success in the Marine Corps Officer Candidate School. The two stencils were intercorrelated .58.

Group opinion was calculated from the responses of platoon members to items in a nine-page questionnaire booklet, containing one item per page. On each of the first five pages was a description of a personality "trait." In order, the traits were: desirability as a room-mate, fairness in making military court decisions, leadership in an emergency, sense of humor, and all-round ability as a combat officer. On each trait, the candidate nominated the five best men in his platoon and the one worst man. He also stated the number of men he knew in the platoon, the number he knew well enough to rate, and the number he knew well enough to select for friendship. (Results showed these

percentages to be, on the average, 93, 70, and 77. Individual differences in degree of acquaintance were not significantly related to validity criteria.) Each candidate assigned himself a rank in the platoon with regard to his potentiality as a combat officer. He also estimated the rank which the rest of the platoon would assign him, or in short, guessed the platoon's opinion of himself. All platoons were queried approximately simultaneously, each platoon being gathered together in a separate room by its own leaders. Every man filled out his questionnaire silently, privately, and with the aid of an alphabetical roster of names. Selections were limited to platoon members.

After trying out various scoring procedures, a raw score for each of the five traits was determined for each person. This score was the algebraic sum of all positive and negative votes received, without special weighting, but corrected for variations in platoon size. For some purposes a constant was added as an aid in computation. The score chiefly used was the one based on all-round officer ability, and it is this which will be referred to as "group opinion" unless otherwise specified. Its distribution was approximately normal, though somewhat leptokurtic.

A score called "underestimation of group opinion" was calculated as the algebraic discrepancy between a man's estimate of group opinion of self and the true group opinion. The latter value was the rank of the man as determined by the group opinion score on the fifth trait. A similar score is tentatively called "social judgment." This is the same discrepancy between estimate of group opinion and true group opinion, but without regard to sign; it is the absolute amount of the error of the subject's estimate. (It is especially to be noted that neither of these scores is based on the candidate's self-rank. Our experience had suggested that discrepancies between self-ranks and group ranks were less significant. Therefore these data will not be reported.)

Ratings also were obtained from the sergeant and from the second lieutenant in charge of each platoon. These were made at the end of five weeks, and in a few cases again at the end of 15 weeks of training. It turned out that the ratings of the sergeant and the lieutenant were almost perfectly correlated. They will be referred to as "leaders' ranks, five weeks" or "leaders' ranks, 15

weeks." Unfortunately, despite efforts to avoid it, these ranks may have been contaminated by some knowledge of the group opinion. Although the calculated group opinion index was not known to the leaders, the raw judgments could have been known.

Unless otherwise stated, all group opinion scores are those based on choices made after five weeks' acquaintance. The five week choices are correlated .78 with the two week choices.

No tests of verbal or mechanical ability were administered. However, scores were available, from classification cards, on the Army General Classification Test and the Army Mechanical Aptitude Test.

Other tests made on various parts of the total group of candidates included: an impressionistic rating of personality traits made by psychologists on the basis of candidates' written autobiographies; a performance test of reaction to voluntary hyperventilation; the 300-item Multiple Choice Group Rorschach Test (Harrower-Erickson). None of these appeared to be significantly related to our criteria and will therefore not be discussed further.

Criteria of validity. The first used, and for immediate selection the more practical criterion, was a *pass-fail grade in Officer Candidate School.* Those who failed OCS were returned to the enlisted ranks. No follow-up of these failures was attempted. In addition to the pass-fail grade, all OCS numerical grades and ratings were available. Although there is some profit in analyzing reasons given for failure, the results of such analyses will not be reported here. These analyses indicated that during the period of this study, OCS grading standards were relatively constant. The OCS final grade was based on a combination of ratings for leadership qualities ("military characteristics") and grades in school courses (academic grades), with the former weighted double the latter. The pass-fail criterion was accepted as the best single measure of school success. A pass or fail grade was made on every student; complete numerical grades were occasionally missing. The group opinion and Personal Inventory scores tended to be associated more with leadership ratings than with academic grades in OCS. Conversely, GCT scores were associated more with academic grades than with leadership ratings.

The second criterion used is called *combat proficiency.* This

was obtained from a special one-page rating sheet sent to the commanders of combat battalions under whom the subjects served as platoon leaders. Ratings were made immediately following combat campaigns.[8] The sheet contained six four-choice items calling for ratings on cooperation, reaction to stress and fear, degree to which respected by his men, technical proficiency, variability in mood, and dependability. Following these were two five-choice items, which proved to be nearly identical, asking for an over-all proficiency rating. The five choices on Item 8 ranged from "anxious to keep him" to "not officer material," the middle position being "would not request transfer but might take a chance on a replacement." The sheet was headed by a warning that this was *not* an official fitness report, that the ratings were to be used for research purposes only and, to underline its purpose, that the form be mailed directly to our research laboratory. We have reason to believe that ratings were made on actual performance and not on indirect impressions. Before being sent to the field, the rating sheet was pretested with officers who had just returned from combat and who constituted a group similar to the overseas raters. Statistical tests of the reliability of the final ratings are not available, but the internal evidence indicated a considerable degree of discrimination among raters. Many added profuse comments on reasons for ratings. In making comparisons with predictors, we cut the five choices on the last item into two groups, yielding a high group of 72 out of 100 cases and a mediocre group of 28. The actual distribution was 24 outstanding, 48 superior, 20 mediocre, 6 below average, and 2 unsatisfactory. Distributions on other items differed from this significantly. The combat proficiency rating was complete on only 185 subjects from the original sample and on only 100 of those who had participated in the pre-OCS group opinion rating. The combat sample was, surprisingly, a relatively unbiased sample of the original test population, with one exception. It was noticeably lacking in men with the lowest group opinion scores.

RESULTS AND DISCUSSION

In Table I are presented the correlations among the several

[8] The Iwo Jima and Okinawa campaigns.

"traits" as indicated by choices within the platoon, as well as the validity coefficient of each with respect to success or failure in OCS. Although coefficients are based on the first sample of candidates tested, later samples gave very similar results. The correlation between the best officer item and OCS is based on 522 subjects. In a later sample of 671, the coefficient was .42.

Intercorrelations among the group's selections are not uniformly high. For example, votes for sense of humor are correlated with the votes for best officer only .39. Votes for roommate are correlated with votes for best officer only .68. Furthermore,

TABLE I

PRODUCT-MOMENT CORRELATIONS AMONG TRAIT RATINGS AND BISERIAL CORRELATIONS WITH OCS PASS-FAIL GRADE
(N is 289 except for Best Officer vs. OCS which is 522.)

	Sense of Humor	Emergency Leadership	Fairness	Best Officer	OCS
Roommate	.56	.78	.95	.68	.19
Sense of Humor		.11	.58	.39	−.13
Emergency Leadership			.94	.95	.25
Fairness				.85	.36
Best Officer					.38

the votes on the several traits are not equally predictive of OCS success. Ratings on sense of humor, in fact, are if anything negatively correlated with the criterion. These data confirm the impression that the subjects attempted to exercise discrimination in voting.

The main body of evidence appears in Table II. In general, it was found that the objective tests were more highly correlated with school performance than with combat performance, a significant datum itself. Examples in Table II are the PI, the GCT and the MAT.

To the civilian eye, the correlations may appear discouragingly small. They are. But military psychologists seldom realized the large validity coefficients they dreamed of. Nevertheless, many of the coefficients are significant. None of them is corrected for

heterogeneity. The true validity of the opinion score is therefore undoubtedly higher than the coefficients indicate, and the same thing may be true of the other measures.

The main significance of the data in Table II is the relative standing of the predictors, not their absolute validity. With two possible exceptions, group opinion is the only predictor of combat proficiency whose coefficient, .43, is statistically significant (S.E., .11). Without exception, the 16 men in the combat group who had received a balance of 10 or more positive votes from

TABLE II

COEFFICIENTS OF CORRELATION BETWEEN PREDICTORS AND EACH OF TWO CRITERIA OF VALIDITY, OCS PASS-FAIL AND COMBAT PROFICIENCY RATINGS

PREDICTOR	CRITERION	
	OCS	COMBAT
Group Opinion 2 weeks	.33 (240)	.47 (100)
Group Opinion 5 weeks	.40 (1193)	.43 (100)
Underestimation	.31 (649)	.31 (100)
Social Judgment	.25 (522)	.16 (100)
Self Rating	.15 (522)	.13 (100)
Leaders Ranks 5 weeks		.22 (100)
Leaders Ranks 15 weeks	.18 (275)	.36 (100)
Personal Inventory (MFRL)	.26 (1430)	.12* (185)
Personal Inventory (NDRC)	.16 (1429)	
GCT Army	.37 (1621)	.02* (185)
MAT Army	.29 (1616)	−.01* (185)
OCS Final Grade		.17* (185)

* Coefficients marked with an asterisk are tetrachoric, all others are biserial. The figure in parentheses is the N of the sample used for computation. All smaller samples are drawn from the larger samples.

their platoons were rated superior or outstanding in combat; none was rated mediocre or poor. This fact largely accounts for the positive correlation. Men with only one to 10 positive votes are distributed only very slightly in favor of the superior ratings; many of them were regarded as mediocre or poor. Men with a balance of negative votes tended to make poor, mediocre and superior but almost never outstanding ratings. However, many of these "social rejects" were weeded out in OCS and many more than to be expected from chance were lost between OCS and combat. All of which means that, as a selection test, high platoon

status would have been an accurate predictor of leadership, middling status would have been nonindicative, and low status would have been a fair indicator of failure. For positive prediction, the false positive rate would have been low but the false negative rate high.

Of questionable validity are the leaders' ranks and the underestimation score. The first of these is the ranking made by the platoon leaders after 15 weeks of observation; its biserial correlation with combat ratings is .36, S.E., .12. These ranks are correlated .53 with the group opinion and, as explained earlier, they may have been contaminated slightly. The under- or over-estimation of the platoon's opinion of self is correlated (biserial) .31 with combat ratings (S.E., .12). This correlation must be largely spurious, for obviously those men who have very high group status have more chance for underestimation than those with low status.

The failure of other measures to predict combat proficiency no doubt has a negative significance, particularly since some of them are associated with school performance. For predicting OCS graduation alone, a battery composed of the GCT, MAT, and PI is not unpromising, inasmuch as these tests are not correlated with each other except for the GCT and MAT (.40). GCT scores are correlated with PI (MFRL), .12; with PI (NDRC), .09. MAT scores are correlated with PI (MFRL), .23; with PI (NDRC), .14. Such a battery, however, would not have predicted combat proficiency.

On what basis does the group make its judgment? First, there is the negative evidence. It was not apparently based on measures of intelligence, mechanical aptitude, or neurotic tendency. The group opinion score was virtually uncorrelated with GCT (.02), with MAT (.08) and with the Personal Inventory (.05). On the positive side, it appears that qualifications for a good officer are thought to be similar to those for fairness (Table I). We can surmise that the common factor in fairness and best officer ratings is something like maturity, or responsibility of judgment. Group opinion was correlated with pre-OCS platoon leaders' ranks .53. It is correlated with ratings on "military characteristics" (leadership qualities) made by instructors at OCS .46, but with academic

grades (class marks) at OCS only .15. In short, the group's judgment of leadership is significantly related to the subjective but not to the objective measures. A common factor in all positive correlations appears to be personal judgment.

Of all the scores based on subjective judgments, there are only two which do not maintain significant correlations with other subjective judgments. The first is the self-rating. Apparently the average person is a poorer judge of himself than are other people, for the validity of self-prediction is low and statistically insignificant. The other is OCS final numerical grade, which is partly based on subjective judgments of the school instructors. The only criterion possible to use for these grades is the combat proficiency rating. As Table II shows, the school grades do not predict the criterion. The correlation of .17 is not significant.

There are at least two hypotheses as to the nature of personal judgment on which the group opinion is based. The first is that the judgment is simply a method of measuring motivation, stability, manners and other properties of individuals and not just a measure of popularity or relative standing in the group doing the voting. The second is that the judgment is based on a more immediate perception of status relations within the group. The two are not necessarily incompatible, inasmuch as status ultimately must be a function of individual traits.

It has been noted that the validity of the two-week group judgment is comparable to that of five-week judgment; the two are intercorrelated .78. This argues against the first hypothesis, for presumably an analytic judgment ought to improve with increasing observation time. However, some data from a small unpublished study by the authors tend to favor the hypothesis. In a sample of about 150 cases it was found that on the basis of a ten-minute interview alone, we (the authors) could significantly predict OCS graduation (tetrachoric r, .36). We deliberately tried to rate the candidate's motivation, manner, and bearing, but not his aptitudes.[4] The fact that a stranger to the group can make a significant judgment of a single member apart from his group

[4] In a control group of the same size, the correlation was almost no better (.38) when the interviewer possessed knowledge of the candidate's scores on the GCT, MAT, and Personal Inventory.

argues against the interpretation that the group's judgment is based only on perception of social status. This shows that it is possible for the voters to have judged each other without reference to group status and still have predicted the criteria significantly. Whether they did or not, is another matter.

As to the status hypothesis, little is known about the stimulus properties of group structure. Presumably they depend on the socially directed behavior of individuals. Aggressive, friendly, dominating, threatening and submissive behavior undoubtedly depends on the group as well as the individual. The interplay and competition among members of newly-formed groups may well be dramatic enough to be perceived almost immediately by a single member. If the response to the sociometric questionnaire reflects only the responder's own status in this competition, responses should be quite different if the responder is a member of the group or if he is an outsider. It would be interesting to see an experimental test of this proposition. It should be possible to compare experimentally (if observation time could be equated) ratings of individuals both in and out of group context, made by both member and nonmember interviewers. This would be essentially a comparison of the judgments made by statistical groups with those made by real groups.

Regardless of what it is that group members perceive as leadership qualities, or how quickly they perceive them, there still remains the basic question of measuring the psychological properties of military and other leaders. In the long run we must place our greatest faith in objective tests, however much we might refine and improve individual ratings and judgments by sociometric or other techniques. Until good objective tests are built, however, our most promising selector of leaders probably is some form of collective judgment.

This suggests a final question: Is sociometry democracy? If we mean by democracy the actual selection of one's present leaders by vote, it evidently is not necessarily the same thing as sociometry. The platoon members in this study well knew that their judgment was a rating and not a vote. Would a platoon have voted differently in an actual election? There can be no empirical answer at present. Nevertheless, it is a rather fundamental ques-

tion. Democracy is often regarded, even by its best friends, as too inefficient to be used in wartime. Perhaps the inefficiency lies in certain secondary characteristics of democracies (division of power, etc.) rather than in its method of choosing leaders. Perhaps there is no more efficient method of choosing leaders than the democratic vote. But, to test the democratic hypothesis, we would not be justified in using sociometric ballots alone as evidence. It would still have to be shown, experimentally, that sociometric balloting is equivalent to the voting process in a political democracy. Nonequivalence is conceivable, simply because the setting up of a political democracy, even in one platoon, might alter the entire social structure. Conceivably in a political democracy factors such as patronage and self-interest and pork barrel might vitiate the objectivity of an individual's judgment. Perhaps, after all, a sociometric ballot taken in an authoritarian atmosphere reflects a more objective judgment. At present it is entirely impossible to say.

SUMMARY

In a follow-up study of junior officers in the Marine Corps, most of whom became combat platoon leaders, it was found that a sociometric group opinion was a more valid predictor both of success in Officer Candidate School and of combat performance than several objective tests.

Combat performance, as judged by superior officers, was not significantly related to any of the measures employed, including OCS grades, except the opinion of the pre-OCS training platoon.

Reasons for the relative superiority of group opinion are discussed. Group members have more time to observe each other than do superior officers, they know each other in a realistic social context, and they react directly to each other's social-dominance behavior. All these are conditions favorable to informed judgment. Judgments are not related to scores on tests of intelligence, mechanical aptitude or personality.

PART V

The Social Psychology of Institutions

37. SOCIAL CLASS

Relatively few people ever learn the blunt facts about the class-and-caste system of our society. The present selection is about New England Yankees, but similar points could equally well be made by excerpts from the same chapter, about people in the Middle West, the Far West, and the Deep South. The greater portion of this same book is devoted to a *scientific* analysis of social classes in the United States, with a description of various techniques and methods for the *measurement* of social status. See also Selection 7, *Status and Prestige,* pages 69-72.

CLASS AMONG THE NEW ENGLAND YANKEES *

W. Lloyd Warner, Marchia Meeker and Kenneth Eells

Studies of communities in New England clearly demonstrate the presence of a well-defined social-class system. At the top is an aristocracy of birth and wealth. This is the so-called "old family" class. The people of Yankee City say the families who belong to it have been in the community for a long time—for at least three generations and preferably many generations more than three. "Old family" means not only old to the community but old to the class. Present members of the class were born into it; the families into which they were born can trace their lineage through many generations participating in a

* From *Social Class in America: A Manual of Procedure for the Measurement of Social Status,* by W. Lloyd Warner, Marchia Meeker, and Kenneth Eells. Chicago: Science Research Associates, Inc., 1949, Chap. 1, "What Social Class Is in America," pp. 11-15. Copyright, Science Research Associates, Inc. Reprinted by permission of the publisher and authors.

way of life characteristic of the upper class back to a generation marking the lowly beginnings out of which their family came. Although the men of this level are occupied gainfully, usually as large merchants, financiers, or in the higher professions, the wealth of the family, inherited from the husband's or the wife's side, and often from both, has been in the family for a long time. Ideally, it should stem from the sea trade when Yankee City's merchants and sea captains made large fortunes, built great Georgian houses on elm-lined Hill Street, and filled their houses and gardens with the proper symbols of their high position. They became the 400, the Brahmins, the Hill Streeters to whom others looked up; and they, well-mannered or not, looked down on the rest. They counted themselves, and were so counted, equals of similar levels in Salem, Boston, Providence, and other New England cities. Their sons and daughters married into the old families from these towns and at times, when family fortune was low or love was great, they married wealthy sons and daughters from the newly rich who occupied the class level below them. This was a happy event for the fathers and mothers of such fortunate young people in the lower half of the upper class, an event well publicized and sometimes not too discreetly bragged about by the parents of the lower-upper-class children, an occasion to be explained by the mothers from the old families in terms of the spiritual demands of romantic love and by their friends as "a good deal and a fair exchange all the way around for everyone concerned."

The new families, the lower level of the upper class, came up through the new industries—shoes, textiles, silverware—and finance. Their fathers were some of the men who established New England's trading and financial dominance throughout America. When New York's Wall Street rose to power, many of them transferred their activities to this new center of dominance. Except that they aspire to old-family status, if not for themselves then for their children, these men and their families have a design for living similar to the old-family group. But they are consciously aware that their money is too new and too recently earned to have the sacrosanct quality of wealth inherited from a long line of ancestors. They know, as do those about them, that, while a certain

amount of wealth is necessary, birth and old family are what really matter. Each of them can cite critical cases to prove that particular individuals have no money at all, yet belong to the top class because they have the right lineage and right name. While they recognize the worth and importance of birth, they feel that somehow their family's achievements should be better rewarded than by a mere second place in relation to those who need do little more than be born and stay alive.

The presence of an old-family class in a community forces the newly rich to wait their turn if they aspire to "higher things." Meanwhile, they must learn how to act, fill their lives with good deeds, spend their money on approved philanthropy, and reduce their arrogance to manageable proportions.

The families of the upper and lower strata of the upper classes are organized into social cliques and exclusive clubs. The men gather fortnightly in dining clubs where they discuss matters that concern them. The women belong to small clubs or to the Garden Club and give their interest to subjects which symbolize their high status and evoke those sentiments necessary in each individual if the class is to maintain itself. Both sexes join philanthropic organizations whose good deeds are an asset to the community and an expression of the dominance and importance of the top class to those socially beneath them. They are the members of the Episcopalian and Unitarian and, occasionally, the Congregational and Presbyterian churches.

Below them are the members of the solid, highly respectable upper-middle class, the people who get things done and provide the active front in civic affairs for the classes above them. They aspire to the classes above and hope their good deeds, civic activities, and high moral principles will somehow be recognized far beyond the usual pat on the back and that they will be invited by those above them into the intimacies of upper-class cliques and exclusive clubs. Such recognition might increase their status and would be likely to make them members of the lower-upper group. The fact that this rarely happens seldom stops members of this level, once activated, from continuing to try. The men tend to be owners of stores and belong to the large proprietor and professional levels. Their incomes average less than those of the lower-

upper class, this latter group having a larger income than any other group, including the old-family level.

These three strata, the two upper classes and the upper-middle, constitute the levels above the Common Man. There is a considerable distance socially between them and the mass of the people immediately below them. They comprise three of the six classes present in the community. Although in number of levels they constitute half the community, in population they have no more than a sixth, and sometimes less, of the Common Man's population. The three levels combined include approximately 13 per cent of the total population.

The lower-middle class, the top of the Common Man level, is composed of clerks and other white-collar workers, small tradesmen, and a fraction of skilled workers. Their small houses fill "the side streets" down from Hill Street, where the upper classes and some of the upper-middle live, and are noticeably absent from the better suburbs where the upper-middle concentrate. "Side Streeter" is a term often used by those above them to imply an inferior way of life and an inconsequential status. They have accumulated little property but are frequently home owners. Some of the more successful members of ethnic groups, such as the Italians, Irish, French-Canadians, have reached this level. Only a few members of these cultural minorities have gone beyond it; none of them has reached the old-family level.

The old-family class (upper-upper) is smaller in size than the new-family class (lower-upper) below them. It has 1.4 per cent, while the lower-upper class has 1.6 per cent, of the total population. Ten per cent of the population belongs to the upper-middle class, and 28 per cent to the lower-middle level. The upper-lower is the most populous class, with 34 per cent, and the lower-lower has 25 per cent of all the people in the town.

The prospects of the upper-middle-class children for higher education are not as good as those of the classes above. One hundred per cent of the children of the two upper classes take courses in the local high school that prepare them for college, and 88 per cent of the upper-middle do; but only 44 per cent of the lower-middle take these courses, 28 per cent of the upper-lower, and 26 per cent of the lower-lower. These percentages provide a good in-

dex of the position of the lower-middle class, ranking it well below the three upper classes, but placing it well above the upper-lower and the lower-lower.[1]

The upper-lower class, least differentiated from the adjacent levels and hardest to distinguish in the hierarchy, but clearly present, is composed of the "poor but honest workers" who more often than not are only semi-skilled or unskilled. Their relative place in the hierarchy of class is well portrayed by comparing them with the classes superior to them and with the lower-lower class beneath them in the category of how they spend their money.

A glance at the ranking of the proportion of the incomes of each class spent on ten items (including such things as rent and shelter, food, clothing, and education, among others) shows, for example, that this class ranks second for the percentage of the money spent on food, the lower-lower class being first and the rank order of the other classes following lower-middle according to their place in the social hierarchy. The money spent on rent and shelter by upper-lower class is also second to the lower-lower's first, the other classes' rank order and position in the hierarchy being in exact correspondence. To give a bird's-eye view of the way this class spends its money, the rank of the upper-lower, for the percentage of its budget spent on a number of common and important items, has been placed in parentheses after every item in the list which follows: food (2), rent (2), clothing (4), automobiles (5), taxes (5), medical aid (5), education (4), and amusements (4-5). For the major items of expenditure the amount of money spent by this class out of its budget corresponds fairly closely with its place in the class hierarchy, second to the first of the lower-lower class for the major necessities of food and shelter, and ordinarily, but not always, fourth or fifth to the classes above for the items that give an opportunity for cutting down the amounts spent on them. Their feelings about doing the right thing, of being respectable and rearing their children to do better than they have, coupled with the limitations of their income, are

[1] See W. Lloyd Warner and Paul S. Lunt, *The Social Life of a Modern Community*, Vol. I, "Yankee City Series" (New Haven: Yale University Press, 1941), pp. 58-72.

well reflected in how they select and reject what can be purchased on the American market.[2]

The lower-lower class, referred to as "Riverbrookers" or the "low-down Yankees who live in the clam flats," have a "bad reputation" among those who are socially above them. This evaluation includes beliefs that they are lazy, shiftless, and won't work, all opposites of the good middle-class virtues belonging to the essence of the Protestant ethic. They are thought to be improvident and unwilling or unable to save their money for a rainy day and, therefore, often dependent on the philanthropy of the private or public agency and on poor relief. They are sometimes said to "live like animals" because it is believed that their sexual mores are not too exacting and that pre-marital intercourse, post-marital infidelity, and high rates of illegitimacy, sometimes too publicly mixed with incest, characterize their personal and family lives. It is certain that they deserve only part of this reputation. Research shows many of them guilty of no more than being poor and lacking in the desire to get ahead, this latter trait being common among those above them. For these reasons and others, this class is ranked in Yankee City below the level of the Common Man (lower-middle and upper-lower). For most of the indexes of status it ranks sixth and last.

[2] The evidence for the statements in this paragraph can be found in *The Social Life of a Modern Community*, pp. 287-300.

38. PARENT-CHILD RELATIONSHIPS

Materials on the psychology of the family are presented in two sections. Some of the problems of adjustment in marriage are discussed in Selection 39, *Marriage,* pages 375-389. The present selection deals with some factors of *adjustment* in parent-child relationships. Parental attitudes, interests, sacrifices, and ambitions are discussed as to their effect on a child's social development.

EFFECT OF PARENTAL BEHAVIOR ON CHILD'S SOCIAL DEVELOPMENT *

John J. B. Morgan

Since the mother has more continual contact with the child during the first few years of his life than any other person, it is usually the mother who gives the infant his first social lessons. If there are other children in the home, and if the father and servants take a prominent part in the family life, the infant is more likely to avoid the too early development of fixed social patterns. But in any case since the mother has a dominant influence on the child's start in social life, her influences on the growing child have been receiving the attention of students of child psychology.

IMPORTANCE OF PARENTAL ATTITUDES

Earlier studies on the influence of the home environment were largely devoted to attempts to appraise physical equipment, factors which affect slightly or not at all the social development of a child. The real influences are the personal attitudes of those who

* From *Child Psychology,* by John J. B. Morgan. New York: Rinehart & Company, Inc. (3rd ed.), 1942, Chap. 14, "Social Development," pp. 502-509. Copyright, John J. B. Morgan. Reprinted by permission of the publisher.

deal with the child. Let us see how such attitudes affect the child's social behavior. When the child is uncomfortable, when he wants something, or even when he is calmly "just living," people affect what happens to him and the way in which he must act to get along most comfortably. For purposes of illustration, let us assume that the individual who is "in the way" is the child's mother. He must use a certain amount of varied and random activity because he does not know how he should act to make her do what he wants. He may laugh, may cry, may wave his arms, may kick, may coo, or what not. To some of these acts his mother will respond with more vigor than with others. Obviously, the child learns to do the thing which gets results from his mother. The principle is exactly the same as that of an animal learning to get out of a puzzle box. Certain acts are effective and others are not. The animal learns to repeat the effective ones. Now in the case of the child what are the effective ones? They are determined by the personal traits of the mother. Should she be a mother who is sensitive to crying, the child will learn to manipulate her by crying. Should she be sensitive to lalling and insensitive to crying, the child would learn to lall.

Thus the early social behavior of a child is a reflection of the sensitive areas of the mother. It often happens that the thing to which the mother is most responsive is something that is distasteful to the mother. The child learns to use it just the same—a fact which accounts for so many children developing traits that displease the mother. The mother actually teaches them to the child by responding to them. As the child gets older, such acts bring so much displeasure and punishment that the child may forgo their use; but the mother would not be forced to punish her child for these acts had she not taught them to him in the first place by her sensitive responses to them. These facts have been recognized, and a number of studies of parental attitudes and their influence on the growing child have been made.[1]

This statement of the effect of parental influence should not

[1] Stogdill, R. M., "Experiments in the Measurement of Attitudes Toward Children," *Child Development*, 1936, Vol. 7, pp. 31-36. Macfarlane, J. W., "Studies in Child Guidance: Methodology of Data Collection and Organization," *Monographs of the Society for Research in Child Development*, 1938, Vol. 3, No. 19.

be construed to mean that it is only the queer mother or the one who has had some emotional difficulty who exerts a characteristic influence on her child. The normal, wholesome mother, whose personality traits are thoroughly admirable, guides her child just as truly as the one who has queer personality patterns. As a matter of fact, the normal mother probably has more effect than the queer one, because the child is more likely to discern the exaggerations in the queer mother and to be less influenced by them because they are unusual.

Attempts to evaluate the attitudes of mothers and to measure the effects of these attitudes upon children have met with relatively little success because the problem is one of such great complexity. There are a great many factors at work, and the first task must be to isolate these for individual study. A first step in this direction has been made by one individual who by a sort of common-sense and armchair method evolved eight possible factors which should be considered. Each of these is to be regarded as a continuum varying from one extreme to the other. If these turn out to be the correct factors and scales can be devised to measure the point at which any one mother belongs on each, a method would be provided to determine the effect of definite personality patterns upon a child. The factors are given as a sample of the beginning of accurate work on this intricate problem.[2]

Eight Good-Parent Behavior Variables

1. Freedom—Arbitrary Control

Child free to choose, decide, originate, reject; never subject to arbitrary or autocratic control.	Child restrained strictly within the bounds of autocratic despotism. Obedience demanded.

2. Stimulation—Neglect

Child-centered home; child constantly subject to attention, affection, suggestion, concern, action.	Adult-centered home; child left to own devices, neglected, ignored, unstimulated.

[2] Champney, H., "The Measurement of Parent Behavior," *Child Development*, 1941, Vol. 12, pp. 131-166. Champney, H., "The Variables of Parent Behavior," *Journal of Abnormal and Social Psychology*, 1941, Vol. 36, pp. 525-542.

3. Babying—"Adulting"

Everything done for the child; especially things he is old enough to do for himself; treated as baby.	Child treated as above his present development; encouraged to do things for himself, make own decisions; treated as adult.

4. Maladjusted—Well Adjusted

Home is erratic, discordant, disorganized, tense, neurotic, unpleasant.	Home is organized, harmonious, relaxed, pleasant, characterized by sense of humor.

5. Approving—Deprecating

Child is typically praised, encouraged, approved, accepted, facilitated.	Child is typically blamed, discouraged, disapproved, rejected, inhibited.

6. Rational—Nonrational

Attitude toward child is logical, organized, analytical, intellectual.	Attitude is expedient, prescriptive, authoritarian, emotional.

7. Training—Free Growth

Parent pushes child for rapid development, by teaching, training, and unnecessary information and stimulation.	Parent makes no effort to accelerate the child's development; training only for necessary routine.

8. Socialized—Individualized

The home is characteristically friendly, sociable, outgoing, hospitable, tolerant, generous, cooperative.	The home is characteristically reclusive, aloof, isolated; atmosphere within the home characterized by privacy, private property, individual rights and duties.

No one parental attitude leads inevitably to a specific result in the child. The outcome depends upon its combination with other factors and the manner in which the child responds. In actual life all these attitudes are interwoven in all degrees of complexity. In discussing the possible effects of one personality atti-

tude of a parent, it is well to keep in mind that the effect of this one factor is always tempered by that of others. It is the multiplicity of influences which eventually makes for social balance in any one child.[8]

DEGREE OF PARENTAL INTEREST IN THE CHILD

In an ideal situation the welfare of the child should determine the degree of interest each parent has in the child. The child should have enough care so that he has a properly developed feeling of security in the home, but not so much that his individual assertiveness is destroyed. He should have enough affection from each parent so that he feels accepted, but not so much that he fails to broaden his love life to include those outside the family. He should be guided in the solution of problems, but not to such an extent that he never learns to face a difficulty himself.

Such a balance is not easily achieved if the parents are guided by their own needs. It is very easy for a maladjusted parent unwittingly to make the child suffer because of his own failures. In some instances the maladjustments may be minor and unrecognized.

Various situations may cause overdevotion. One such situation is emotional hunger of the parents. This may be the result of a lack of devotion in their own childhood, maladjusted marital relations, loss of mate, loss of another child, or a thwarting of vocational ambitions.

Some children enjoy this devotion so thoroughly that they develop an unusual attachment to the parent giving it and may never be able to break from the ties thus formed. The resultant attachment has been charged to some perverse tendency in the child. From the author's experience he is inclined to believe that in most cases the overdevotion of a child for either parent is due to the behavior of an emotionally starved parent rather than to any perverse impulse on the part of the child.

Other children react against this overdevotion and regard it as an unwarranted bondage. They are likely to develop toward their parents an antagonistic attitude, which to the latter seems

[8] Symonds, P. M., *The Psychology of Parent-Child Relationships*. New York: Appleton-Century-Crofts, Inc., 1939.

very strange and unreasonable. What may appear to the mother or father as devotion may seem to the child to be nagging. We have discovered a number of cases where the mother asked for help in retaining the devotion of her child, whereas the child, in confidence, told us that his main ambition was to grow big enough to get away from home and the nagging attention of the mother.

On the other hand, a parent who gives the child no devotion, and who is cold, stern, and forbidding, may develop a hunger in the child which leaves him fearful, resentful, and morose. In infancy such neglect often leads to autoerotic habits or to thumb-sucking. In later life such a person may devote untold energy in a vain hunt for someone to love him enough to make up for his infantile starvation.

EFFECTS OF PARENTAL SACRIFICE

It is not unusual for parents to feel keenly the sacrifice they have made in becoming parents. With the father it may take the form of a keener realization of the financial burdens involved; with the mother, the loss of freedom for social activities or of her youthful graces. As a result they may feel that the child should be grateful to them for bringing him into the world. If such gratitude is not manifested spontaneously by the child, he may be told of the debt he owes to his parents. Burdens are imposed on the child so that he may partially repay this obligation, but no matter what he does he is not allowed to feel fully freed from the debt.

In adult life we are all aware of the fact that one of the best ways to arouse enmity in another is to make him indebted to us and then continually to remind him of the fact. How parents expect to gain devotion from their children by such a method is hard to understand.

Instead of making the child devoted, it makes him feel unwanted. He feels that he must do as little as possible to increase his indebtedness, and his feeling of security in the home is undermined. He determines to leave the home and shift for himself. In some cases this may lead to the development of worthy independence, but it may cause much unhappiness.

PROJECTION OF PARENTAL AMBITIONS UPON CHILD

Many parents look upon their children as a means of achieving their own thwarted ambitions. Or if they have attained a measure of success themselves, they look upon their progeny as a means of "carrying on the great work" which they have started. This secret ambition may permeate their whole attitude toward the child from his earliest infancy. Such a parent is interested in having his child develop to his highest capacities and watches every little move he makes, thwarting him when he does something which looks inefficient, urging him on when he does something apparently desirable. This, of course, leads to the type of excess interest which we discussed earlier in this section.

The author has had his attention called to a number of very superior children who fail to make proper advancement in school. One very important factor in such cases is this extreme ambition on the part of parents for their children. The child may start off very well; he enjoys the praise for his good work and the unusual amount of attention he gets. On the other hand, he soon discovers that his parents are insatiable. The more he does, the more they expect of him. He is prodded and urged beyond endurance until he finally rebels. The gossipy comparison of intelligence quotients and the mad race on the part of parents to see whose child can get through school in the shortest space of time, are two aspects of this situation.

There may be another complication if the parent chooses the type of work he wants his child to do. The mother who wanted to be a musician forces piano lessons on an unwilling son and, by this insistence on practice which to him is inane, kills any love for music which might have developed in him. One woman developed a very antagonistic attitude in her daughter because she was forcing her to take aesthetic dancing. The mother had never been able to exhibit herself in this fashion, for reasons which were never discovered, but, in effect, was exhibiting herself in her child.

The effect on the child is not always resentful resistance to the domination of the parents. Sometimes he takes this urging very seriously and makes a consistent attempt to accomplish what the

parents plan for him. The projection of this adult urge on a young child is one of the potent causes of an anxiety attitude which may follow the individual through life. Such children approach every task with feverish zeal accompanied by a fear of failure which makes life a burden for them. Often these children are the delight of the teacher because they accomplish so much, and she adds her voice to the others urging these unfortunate children on. The teacher should recognize this condition and attempt to give the child other interests and develop in him a balanced outlook.

39. MARRIAGE

This is a study of six important areas of married life: sex relations, spending of family income, social activities, in-law relationships, religious activities, and mutual friends. The length of time required to arrive at an *adjustment* in these marital relationships was investigated for a selected population, and the results are reported here.

It should be emphasized that this is a study of relatively successful marriages in a limited population, namely, parents or friends of a group of college students. Also, there may be some question as to whether those who returned the questionnaires were representative of the entire group who received questionnaires. The selection is included, however, to illustrate one type of information needed about the institution of marriage. Another important area of family life is that of parent-child relationships, Selection 38, pages 367-374.

LENGTH OF TIME REQUIRED TO ACHIEVE ADJUSTMENT IN MARRIAGE *

Judson T. Landis

This is a report of a study of married people designed to gain information on the number of months or years it takes to arrive at an adjustment in marital relationships.[1] Our hypothesis was that not only does it take months

* From "Length of Time Required to Achieve Adjustment in Marriage," by Judson T. Landis, *American Sociological Review*, 1946, Vol. 11, pp. 666-676. Reprinted by permission of the publisher and author.

[1] The Burgess-Cottrell and Terman studies gave information on the factors associated with happiness in marriage. They did not consider the length of time to adjust in marriage and its relationship to happiness in marriage. Burgess, Ernest W., and Cottrell, Leonard S., Jr., *Predicting Success or Failure in Marriage*, Prentice-Hall, Inc., New York, 1939. Terman, Lewis M., *Psychological Factors in Marital Happiness*, McGraw-Hill Book Company, Inc., New York, 1938.

or years to arrive at adjustments in marriage but also that there is a definite relationship between the time taken to adjust in the different areas and the happiness of the marriage.

We use the term adjustment in this study to refer to a working arrangement which exists in marriage. This arrangement could be one which is mutually satisfactory or one which is satisfactory to one spouse but unsatisfactory to the other. The term adjustment is used, then, to refer to the state of accommodation which is achieved in different areas where conflict may exist in marriage.

Nine hundred freshman and sophomore students at Michigan State College were asked to send copies of a four-page questionnaire to their parents or to friends with a request that the questionnaires be filled in and returned.[2] It was made clear that the responses were to be anonymous.

Each spouse was asked to respond to the questionnaire independently of the other spouse. They were asked to check how long it had taken them to work out an adjustment in each of the following six areas: spending the family income, relationships with in-laws, sex relations, religious life in the home, choosing and associating with mutual friends, and social activities and recreation. They were also asked to state their present adjustment in each of these areas and in one other area, the training and disciplining of the children. In addition, they were asked to rate the happiness of their marriage.

The study is in the main, a study of successful marriages. The sample represents a select group in the following respects: the marriages have existed an average of twenty years; no divorced or separated people were included in the sample; the respondents were largely the parents of college students; the incomes were above the average of the general population: and the number of years of education were above the average of the general population.[3] The sample is probably representative of the parents of

[2] The students were in the Basic College course in Effective Living. They were told that the information gained would be summarized and presented to them in the term of the course in which marriage and family relationships are studied.

[3] Forty-eight per cent of those responding classified their marriages as very happy, 34.6 per cent happy, 16.4 per cent as average, and less than one per cent as unhappy or very unhappy. Thirty-four per cent received incomes from

college students for whom courses in marriage and family relationships are being organized. One of the motives for initiating the study was to gain information useful in building a course in marriage for college students.

The response to the questionnaires was very good. There was a return of over fifty per cent, and the replies were quite complete. Many comments were given explaining the difficulties in each area. Responses that were incomplete were discarded and those cases were eliminated in which only one partner of the marriage responded. After such eliminations the responses of 409 couples were used for the analyses. The information was put on punch cards and an analysis made by length of time required to make an adjustment in each area. In addition, the data on length of time required to achieve adjustment in each area were analyzed by years of education, years of marriage, age at marriage, and church attendance. Happiness ratings of the marriages were also analyzed by these same factors.

Length of Time Required to Adjust in Sex Relations: Husbands and wives agreed that it took longer to achieve a satisfactory adjustment in sex relations than in any other area in which adjustment had to be made. Slightly over one-half of the couples felt that they had made a satisfactory adjustment from the beginning. Of the husbands an additional 15.2 per cent felt that there had been a satisfactory adjustment from the beginning, while a further 8.8 per cent of the wives felt there had been a satisfactory adjustment from the beginning. In these cases, however, the other spouse did not agree. The disagreeing spouse stated that it had taken months or years, or that a satisfactory adjustment in sex relations had never been made. It will be noticed that the husbands more frequently than the wives stated that the sex adjustment was satisfactory from the beginning. Approximately 12 per cent of the men and women reported that they had made a satisfactory adjustment within the first year, and ten per cent in from one to 20 years, the average being six years. Twelve

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$1,000 to $2,999, 36 per cent from $3,000 to $4,999, 22 per cent from 5,000 to $9,999, and 8 per cent from $10,000 and over. Twenty-three per cent had had a grade school education, 43 per cent, a high school education, and 34 per cent, a college education.

per cent of the individuals felt that there had never been a satisfactory adjustment, and six per cent of the couples agreed on this point. Four per cent of the wives and seven per cent of the husbands made statements that conflicted with those of the other spouse on sex adjustment. These two groups stated that a satis-

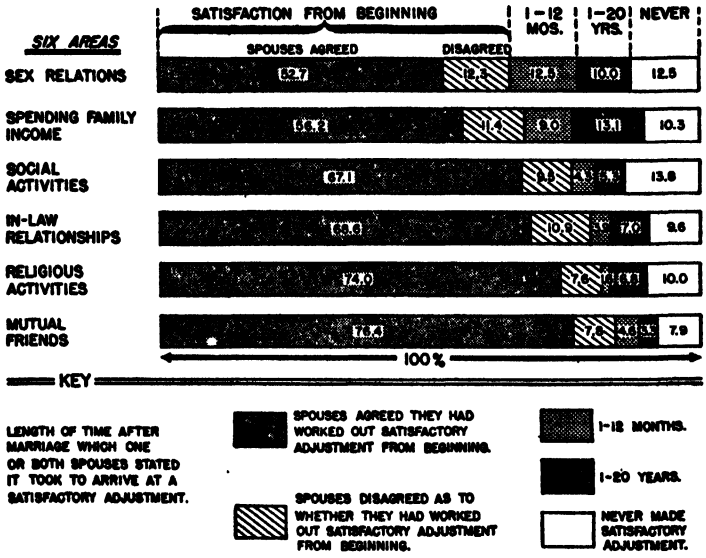


FIGURE 1. Percentages of 409 Couples Reporting Various Periods of Time after Marriage to Achieve Adjustments in Six Areas: Sex Relations, Spending the Family Income, Social Activities, In-Law Relationships, Religious Activities, and Associating with Mutual Friends.

factory adjustment had never been achieved, while their spouses stated that the adjustment had been satisfactory. (See Figure 1.)

Time to Make Adjustments on Spending the Family Income: Husbands and wives agreed in stating that the second most difficult area of adjustment was in the spending of the family income.[4] There were no significant sex differences in the time the individuals reported that it had taken to achieve a satisfactory

[4] "Spending the family income" included earnings, spending, saving, insufficient income, and budgeting.

adjustment other than that the men were slightly more optimistic in reporting that everything was satisfactory from the beginning. It will be noted that 56 per cent of the couples agreed that they made the adjustment from the beginning and that in the cases of an additional 11 per cent of the couples one spouse or the other thought it had been satisfactory. In about equal percentages the disagreeing spouses said that it had taken one year, several years, or that they had never made the adjustment. Approximately nine per cent felt the adjustment had been made within the first year and 13 per cent within one to 20 years, the average number of years required being seven. One couple reported that it was 34 years before they reached a satisfactory adjustment. About ten per cent of the men and women stated they had never made a satisfactory adjustment, five per cent of the couples agreeing. In the other cases one spouse felt that no adjustment had been made, while the other usually felt that the adjustment had been made from the beginning. It is interesting to note, in these cases of disagreement, that the one spouse who thought the adjustment was satisfactory from the beginning also checked the statement "it is satisfactory for both of us."

Time to Make Adjustment in Social Activities: The area which was listed as ranking third in length of time required to make the adjustment was the area centering around social activities and recreation. It is not as serious as making an adjustment in sex and spending the family income, standing about half-way between the two extreme areas of least difficulty and most difficulty. Of all the couples, 66.8 per cent agreed that they had made the adjustment from the beginning. In nine per cent more cases one spouse thought it had been satisfactory from the beginning; a slightly larger percentage of the husbands feeling that the adjustment had been satisfactory from the beginning. Four per cent of the men and women stated that an adjustment had been made within the first year, 5.6 per cent said it took from one to twenty years, and 13.6 per cent said there had never been a satisfactory adjustment in this area. A larger percentage of women reported that they had never made a satisfactory adjustment in the realm of social activities than in any other single area. The 45 men and women who reported that they had reached a satisfactory adjust-

ment in from one to twenty years gave an average of seven years.

Time to Make Adjustment on In-Law Relationships. Approximately the same percentage of the couples, 67.3 per cent, reported a satisfactory adjustment on relationships with in-laws from the beginning as on social activities. In 10.7 per cent more instances, one spouse felt that the adjustment had been satisfactory from the beginning. Within the first year 3.8 per cent achieved an adjustment, and 6.8 per cent in from one to twenty years; the average being eight and one-half years. Those feeling that they had never made a satisfactory adjustment in relationships with their in-laws totaled 9.4 per cent.

Time to Adjust in Religion. Making an adjustment in the religious life of a couple required less time than in most other areas. This may be because many churches discourage "mixed marriages." Parents also encourage their children to marry those of the same faith so that young people are more awake to the problems in this area than in other adjustment areas of marriage. A satisfactory adjustment from the beginning was achieved by 73.6 per cent of the couples. In 7.6 per cent more cases, one spouse felt that the adjustment had been satisfactory from the beginning. Again, the husbands were a little more liberal in stating that the adjustment was satisfactory from the beginning. Among the remainder, only 1.5 per cent said they had worked out an adjustment in the first year, and 6.9 per cent in from one to 20 years, with an average of approximately six years. Almost ten per cent stated that they had never arrived at a satisfactory adjustment. A larger percentage of the women than the men felt that the adjustment had never been satisfactory.

Time to Make Adjustment with Mutual Friends: The area in which the 409 couples found the least difficulty in adjusting was in choosing and associating with mutual friends. Seventy-six per cent of the couples agreed that their adjustment in this area had been satisfactory from the beginning. In 7.7 per cent more instances one spouse thought it had been satisfactory from the beginning. Approximately five per cent of the couples stated that they had made the adjustment during the first year, 3.3 per cent in from one to 20 years, with an average of five and one-half years, while 7.7 per cent felt that there had never been a satisfac-

tory adjustment. Again more women than men reported that the adjustment had never been satisfactory.

We have seen that the sexes agreed in rating the six areas in the same order of difficulty. They agreed fairly well on the length of time required to make the adjustment or in stating that they had never made the adjustments. There was a tendency for a larger percentage of the men to state that the adjustment had been satisfactory from the beginning in all areas and, with the exception of sex and income, for fewer to state that they had never made the adjustment. This supports the conclusion that in our culture the wife has to make a greater adjustment in marriage than does the husband.[5] She knows the situation is not satisfactory but she must adjust herself to the domination of the husband in the marriage relationship. The husband is frustrated more by failure to make the adjustments in sex relations and spending the family income, while the wife is more frustrated because of the failure to make a good adjustment in religion, in associating with mutual friends, or in social activities.

State of Adjustment in Each Area: To see just what adjustment the couples had achieved in the six areas under discussion, each person was asked to check one of eight statements which described his present adjustment. It will be remembered that in each of the six areas, approximately ten per cent of the husbands and wives said they had never reached a satisfactory adjustment. The statements checked indicated that from 18 to 37 per cent of the couples had not achieved an adjustment "satisfactory to both" in the six areas. The largest group, 37 per cent, had not achieved a mutually satisfactory adjustment in sex relations, and the smallest group, 18 per cent, in associating with mutual friends. These husbands and wives reported that an adjustment had been made, but that it was satisfactory to one and not to the other. Some gave one of the other statements describing the adjustment. (See Table I.)

Time Required for Making Adjustment in Relation to Education: As was noted earlier, 23 per cent of the 818 spouses were grade school graduates, 43 per cent high school graduates, and 34 per cent college graduates. No consistent relationship could be

[5] Burgess, Ernest W., and Cottrell, Leonard S., Jr., *Predicting Success or Failure in Marriage*, Prentice-Hall, Inc., New York, 1939, p. 341.

found to exist between increased years of education and the length of time required to adjust in the six areas. In working out an adjustment in social activities there was a slight positive association between increasing years of education and length of time to adjust; in sex relations, spending the family income, and in-law relationships there was a very slight negative association; and in religious activities and associating with mutual friends there was no difference in the length of time required to adjust.

Church Attendance and Length of Time to Adjust: The relationship between the frequency of church attendance and time required for making adjustment was considered. There was found to be no consistently reliable relationship between those who go to church regularly and occasionally or never and the length of time required to adjust in marriage.

Adjustment and Age at Marriage: The length of time required to make satisfactory adjustments in the various areas was analyzed

TABLE I

PERCENTAGES OF 409 COUPLES REPORTING VARIOUS DEGREES OF PRESENT ADJUSTMENT IN SEVEN AREAS

PRESENT ADJUSTMENT	SEX RELATIONS	SOCIAL ACTIVITIES	CHILD TRAINING	RELIGION	SPENDING THE INCOME	IN-LAW RELATIONSHIPS	MUTUAL FRIENDS
Satisfactory for me but unsatisfactory for my spouse	4.8	3.0	2.4	3.4	2.6	3.0	1.5
Satisfactory for my spouse but unsatisfactory for me	3.5	3.2	3.4	2.6	2.7	2.6	1.6
Satisfactory for both of us							
Spouses Agreed	63.1	72.1	70.7	75.8	77.0	76.5	82.1
Spouses Disagreed	16.2	9.8	13.1	8.3	7.5	8.4	7.1
Unsatisfactory for both of us but working toward a better adjustment	2.4	3.4	5.8	2.6	6.0	1.9	3.0
At a standstill in adjustment	2.2	2.4	.5	2.5	1.2	.7	.9
Have many quarrels over it	.9	.7	2.8	.2	.6	.2	.6
Never discuss the subject	3.9	2.1	.7	3.2	.7	3.0	2.0
Think we will never reach a satisfactory adjustment	3.0	3.3	.6	1.4	1.7	3.7	1.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

by age at marriage. The age at marriage was of significant importance in determining how soon people achieved a satisfactory adjustment in the different areas. With one exception, religion, those married under 20 made a poor adjustment when compared with those who married over 20. Again, with two exceptions (In-law relationships and the choice of mutual friends) those who were married at 30 years or older made a better adjustment than those married at any other age. The greatest difference was found in the adjustment in the area of sex relations. Only 47 per cent of the men who married under 20 said the adjustment was satisfactory from the beginning, while 83 per cent of the men who were 30 and over when they married said the adjustment was satisfactory from the beginning. There was a great sex difference in these two groups. Both men and women who married under 20 had difficulty in adjusting in sex relations, but it was especially the men who experienced difficulty. Of those who married over 30, it was the men who reported the greatest degree of success rather than the women. The men who married at the age of 30 or over included fewer who never made a satisfactory adjustment in sex relations than any other age group. In this same group, however, there were more women who had never adjusted in sex relations than there were in any other age group.

Although the percentages were different, the same pattern existed with relation to the age of marriage among males and spending the family income. The men who married under 20 had the greatest difficulty, while those who married at 30 and over had the least difficulty.

In the realm of social activities, the same pattern also appears, with the exception that the sex difference is not present. Both the men and women who married under 20 reported the highest percentage of failures at the beginning and both reported the greater success among those who married when 30 or over. The men who married under 20 seemed to have much more difficulty in making the adjustment with the in-laws from the beginning than did those who married later. This might be explained by a greater tendency for parents to interfere or to attempt to supervise when very young people marry. However, the women who married between 15 and 29 got along as well with the in-laws as did those

who married later. The women who married at 30 or over included more who failed to get along with the in-laws from the beginning and more who had never adjusted with the in-laws. When the age of marriage was related to the time required to make the adjustment in religion and with mutual friends, no pronounced difference was found in the age groups. Those who married when 30 or over had a slightly better chance to make an adjustment in both areas early in marriage and, in addition, there were fewer who never made the adjustment. Again, it was the men who married under 20 who had the most difficulty.

Number of Years Married and Adjustment in Six Areas: Since the questionnaire was answered by people who had been married from one to 40 years, the question arose as to whether those who had been married 30 years or more might have forgotten the difficulties they experienced in the earlier years of their marriage and that those who had been married under ten years might exaggerate the problems of early marriage. Therefore, a breakdown by ten-year periods was made to learn whether the duration of the marriage had affected the responses given. The analysis showed that all four ten-year groups rated the areas in the same order. It is true, however, that those who had been married from 30 to 40 years reported a greater percentage of successful adjustments from the beginning and in general reported fewer cases in which they had never made an adjustment. The exception here was in sex relations in which those married from 30 to 40 years reported a greater percentage of failures than any other group.

Studying the relationship between the duration of the marriage and the time required to make adjustments showed that the greatest difference was in adjustment in sex relations. Only 56 per cent of the spouses who had been married from one to ten years said the adjustment had been satisfactory from the beginning. The percentage increased by about five per cent with each successive age group, so that 70 per cent of the spouses who had been married 30 years and over said the adjustment was satisfactory from the beginning. Of those who have never made an adjustment, there were the most failures among the women who had been married under ten years and among the men who had been married over 30 years.

A study of the relationship between the duration of the marriage and the adjustment in spending the family income, in social activities, and in adjusting to mutual friends showed little variation with the exception that as noted above, there were more who made successful adjustments from the beginning and fewer who never made a satisfactory adjustment among those married 30 or more years. In the area of religion the largest percentage of successful adjustments from the beginning was reported by those who had been married from one to ten years. The couples who reported greatest difficulty in adjusting to in-law relationships from the beginning had been married from one to 20 years.

Happiness of Marriage: After completing the questionnaire, each person was asked to check a phrase which most nearly described his marriage: very happy, happy, average, unhappy, or very unhappy.[6] Since these marriages have lasted an average of 20 years, one would not expect to find many unhappy marriages. Forty-eight per cent said the marriage had been very happy, 34.6 per cent happy, 16.4 per cent average, and .8 per cent unhappy or very unhappy. There were no sex differences in the rating of the happiness of the marriages. A very close relationship existed between the length of time required to adjust and the rating of the happiness of the marriage. A greater percentage of those who made their adjustment from the beginning in each area rated the marriage as very happy. There was a gradual decrease in the percentage of very happy with the increase in time required to make satisfactory adjustments.

The question arises as to whether a marriage can be very happy if there has never been a satisfactory adjustment in some area or areas. Of those who made an adjustment from the beginning in sex relations, 53.3 per cent said they were very happy, 35.3 happy, and only 11.4 per cent said they were average in happiness. On the other hand, of those who had never made an adjustment in sex, the figures are reversed. A rating of very happy was given by

[6] The same five degrees of happiness were used by Burgess and Cottrell. In that study 42.6 were very happy, 20.5 happy, 14.4 average, 13.5 unhappy, and 8.0 very unhappy. Since there were divorced people in the Burgess-Cottrell study, one would not expect so many happy marriages as were found in this study. Burgess and Cottrell, p. 32.

11.2 per cent, happy by 36.7 per cent, and a rating of average by 53.1 per cent. In general, the same pattern existed in all areas: those who never made a satisfactory adjustment in an area were more likely to consider their marriage average in happiness. There was a sex difference, more women than men saying their marriage had been average if there had never been an adjustment with mutual friends or in social activities. On the other hand, more men than women said their marriage had been average if the adjustment had never been satisfactory in sex relations or in spending the income.

Failure to Adjust in More than One Area and Happiness: If spouses agreed that they had failed to make adjustments in any two areas, approximately four out of five of the marriages were classified as average or unhappy. If they failed to adjust in three or more areas, all were in the average or unhappy classification. Only one couple agreed that they had never adjusted in as many as five areas. This would be expected since this is a study of successful marriage. Some couples were contemplating divorce who had failed to adjust in from two to five areas.

Age at Marriage, Income, Years Married, Education, Health, Church Attendance, and Happiness: When an analysis was made of happiness ratings of the marriages by the age at which men and women married, it was found that a smaller percentage of those who married under 20 years reported their marriages as being very happy, the men experiencing the greater difficulty.[7] Of the husbands the largest percentage of very happy marriages was among those who had married at the age of 30 or over, of the wives those who had married between the ages of 20 to 24.[8] An

[7] Terman and Burgess and Cottrell found a significant relationship between the age at marriage and happiness in marriage. However, their studies showed that it was the wife who married under 20 who experienced the greater difficulty in achieving happiness in marriage. Terman, Lewis M., *Psychological Factors in Marital Happiness*, pp. 180-183, McGraw-Hill Book Company, Inc., New York, 1938. Burgess, E. W. and Cottrell, L. S., Jr., *Predicting Success or Failure in Marriage*, pp. 115-117, Prentice-Hall, Inc., New York, 1939.

[8] This agrees fairly well with the study by Hart and Shields who found the ideal age for grooms to be about 29 years and, for brides, about 24 years. Hart, Hornell, and Shields, Wilmer, "Happiness in Relation to Age of Marriage," *Social Hygiene*, 12: 403-410, 1926. It does not agree with the Burgess-Cottrell study which found more poor adjustments among men married at 31 and over and more good adjustments among women married at 28 and over.

analysis of the happiness rating by income showed that those who had incomes of $5,000 and over were more likely to be found in the happy group and a smaller percentage found in the average group than those who had less than a $5,000 income. An analysis by number of years married indicated that those who had been married under ten years reported the largest percentage of very happy marriages and the smallest percentages of average marriages, while those who had been married 30 to 40 years reported the fewest very happy marriages and the largest percentage of average marriages. The reporting of fewer happy marriages in the older age group would seem to be an indication of a somewhat different outlook on life rather than evidence that marriages become less happy as people grow older.[9] A significant relationship existed between health and happiness in marriage. Of those who had very good health, 63 per cent said the marriage was very happy and only eight per cent termed it average, while of those with poor health 46 per cent said the marriage was very happy and 19 per cent average. Those who were regular church attendants rated their marriages as very happy in greater numbers than those who attended church occasionally or never. A slightly larger percentage of those having a college education rated their marriage as very happy and a smaller percentage rated the marriage as unhappy when compared with those who had a high school or a grade school education. The amount of education was more closely related to the happiness of the women than it was to the happiness of the men.

A greater percentage of the 94 people with no children were very happy and a greater percentage were average in happiness than the 658 people with one to four children or the 60 people with five or more children. The greatest difference was found among the women. If they had no children, 55 per cent said they were very happy, if one to four children 47 per cent, and if five or more children 40 per cent said they were very happy. If they had no children 21 per cent said they were average in happiness, if one

[9] Landis, Judson T., "What Is the Happiest Period in Life?" *School and Society*, June 6, 1942. People aged 65 to 100 said they were happiest between the ages of 25 and 45.

to four children 17 per cent, and if five or more children 13 per cent.

Terman found no significant difference between the happiness scores of childless and non-childless husbands and wives.[10] The data of both Hamilton and Bernard agreed with the Terman findings.[11] The findings of Mowrer and Mowrer agreed with the present study in that the chances for successful adjustment decrease as the number of children increases.[12] Burgess and Cottrell found more good adjustments among couples with one or no children than among couples with two or more children.[13]

Husbands and wives agreed fairly well on the happiness rating of their marriages. When there was disagreement the spouse tended to place the marriage on the next higher or on the next lower rating with only 16 of the couples disagreeing to the extent that one spouse rated the happiness of the marriage as very happy while the other rated it as average.[14]

SUMMARY AND CONCLUSION

Husbands and wives, regardless of age at marriage, years married, or years of education, reported it had taken more time to work out adjustment in sex relations than in any other area. They agreed in listing the rest of the areas in the following order: spending the family income, social activities and recreation, in-law relationships, religion in the home, and associating with mutual friends.

There was a very close relationship between the length of time required to adjust in marriage and the happiness of the marriage.

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[10] Terman, Lewis M., *Psychological Factors in Marital Happiness*, p. 171, McGraw-Hill Book Company, New York, 1938.

[11] Bernard, Jessie, "Factors in the Distribution of Success in Marriage." *American Journal of Sociology*, 1934, 40, 49-60.

[12] Mowrer, E. R., and Mowrer, A. R., *Domestic Discord*, University of Chicago Press, Chicago, 1928.

[13] Burgess, E. W., and Cottrell, L. S., Jr., *Predicting Success or Failure in Marriage*, p. 259, Prentice-Hall, Inc., New York, 1939.

[14] Although husbands and wives were asked to check the questionnaires independently of each other and to seal them in separate envelopes, there were doubtless some who did consult each other. However, the comments throughout the questionnaires would seem to show that most couples followed the instructions in this respect.

If couples failed to work out adjustment in three or more areas, they classified their marriage as average or unhappy.

The study confirms the findings of others that age at marriage, education, income, and health are associated with happiness in marriage.

A similar study representing a cross-section of the population would doubtless produce different findings. This is a study of successful marriages among the parents of college students. It was felt that in building marriage courses for college students, there is need for information on successful marriage with attention to varying lengths of time required to achieve success in the different areas. It would be of value to conduct similar studies among the parents of college students in other parts of the country. It would also be desirable to get the same type of information from people representing different social, economic, residential, nationality, and racial backgrounds.

40. EDUCATIONAL FACTORS

Education is one of our most important social institutions. It affects the lives of almost all people in our culture. Only one aspect of education is briefly touched upon here; but it shows the tremendous importance of what goes into the *curriculum*. Even though this selection was written some years ago, the problems illustrated have by no means been solved in the various and varying educational systems in use in the United States.

THE CURRICULUM *

Arthur I. Gates

Among the investigations in psychology which have had a tremendous influence upon educational theory and practice, must be included the studies of the problem of formal discipline, made by Thorndike and Woodworth in 1902. At that time, educational theory and practice were largely founded on the idea that the mind consisted of a number of powers or faculties which it was the main task of education to improve. The school should devote itself to developing memory, imagination, will, reasoning, and other powers. It was assumed that these faculties had an organic basis which might be compared to a muscle and that systematic and rigid training would develop the power as a whole, as the muscle is developed by any one of many sorts of formal and exacting exercises. This general theory led to the development of the curriculum which included a large number of problems introduced not because of their di-

* From *Psychology at Work*, Paul S. Achilles (Editor). New York: Whittlesey House, 1932, Chap. 3, "Psychology and Education," by Arthur I. Gates, pp. 60-63. Copyright, McGraw-Hill Book Company. Reprinted by permission of the publisher, editor, and author.

rect utility or even their reality, but because of the mental exercise which they provided. In many cases it was assumed that the more formal and difficult and exacting the mental work, the more beneficial the results. Guided by such a theory, the curriculum was narrow and formal in character and contained a large number of such problems as the following, which I am taking, with certain modifications, from E. L. Thorndike's "Psychology of Arithmetic." [1] First are certain problems, which to quote Thorndike, "would occur in real life only in an insane asylum."

Alice has $\frac{5}{8}$ of a dollar, Bertha $1\frac{1}{16}$, Mary $\frac{2}{25}$ and Nan $\frac{3}{4}$. How much have they together?

Consider the following ingenious method of finding how many pints there are in a large pile of nuts. The problem is as follows:

There are 9 nuts in a pint. How many pints in a pile of 6,789,582 nuts?

By implication, the child is advised first to count the nuts in the pile and then the number in the pint, and divide the former by the latter.

Consider the following clever way suggested to the child as a means of finding the thickness of a board:

A nail 5 inches long is driven through a board so that it projects 2.419 inches on one side and 1.706 on the other. How thick is the board?

Offer the following problem to any sensible farmer and ask him how often he has been required to figure it out:

Just after a ton of hay was weighed in market a horse ate 1 pound of it. What was the ratio of what he ate to what was left?

Consider also the thoughtfulness of this horse in eating exactly 16 ounces of hay.

The studies published by Thorndike and Woodworth in 1903

[1] By permission of the author and The Macmillan Company, the publisher.

resulted in a complete overthrow of the older educational theory of formal discipline. In place of this doctrine was offered the theory of transfer of training, which, in brief, states that improvement in thinking, reasoning, neatness, honesty, and the like is to be found in the development of innumerable particular habits, and that these habits are likely to remain imbedded in the situation in which they are developed. A corollary to the theory is that such habits transfer from a situation in which they were developed to other situations roughly in proportion to the degree to which the two settings have elements in common. This doctrine at once led to the educational theory that the school should attempt to teach primarily those facts and skills, attitudes and habits which are required in the affairs of everyday life.

The impetus given by this revolutionary doctrine led rapidly to a host of studies designed to determine the frequency and importance of operations in arithmetic, facts and principles in history and science, and information and skills required in other subjects, in the lives of children and adults as they are today, or, as they are likely to be presently. In one such study made by a student of Professor Thorndike, Dr. G. M. Wilson, a survey of the actual arithmetical operations used by representative adults in all walks of life and in all the activities of life was made. This investigation showed not only that the arithmetics included an enormous amount of fantastic and misleading problems, like those cited before, but a large number of operations, which, though of value to certain specialists, are rarely if ever used by a typical child or adult. The following are examples: The greatest common divisor and the least common multiple, long and complex problems in compound fractions, reductions to denominate numbers, apothecary weight, computation of the square and cube root, problems in proportion, problems in ratio beyond limits set by fractions, problems in mensuration, such as those concerning the trapezium, polygons, spheres, problems in discounts except as they are concerned with United States money, partial payments, compound interest, and many others.

Similar investigations have been made in other fields. For example, spelling books in common use fifteen years ago often included as many as 7,500 words, a considerable proportion of

which were such demons as the following: *marasmus, hychopathy, varioloid, quassia, valerian, badinage, chirography,* and several more difficult ones that many people today would hesitate even to pronounce in public.

What to teach in spelling has since been determined by counts of millions of words found in the written composition of children of all ages, and of adults. As a result of extensive investigations of these types, it has been found that approximately four thousand words comprise about 98 per cent of those used in the written composition of both children and adults. Such words as the demons listed above are not written once a year by more than perhaps one person in a million. It is, of course, a sheer waste of time to teach all of the children to spell all these words, which they will never use and probably never understand. It is furthermore true that study of such words is a less effective means of developing spelling ability than study of the words that one will actually use in writing.

All along the line the misleading formal and futile materials have been eliminated from the curriculum, with the result that there has been an enormous reduction in the needless difficulties in the elementary school. On the other hand, the curriculum has been tremendously broadened. Instead of struggling despairingly with problems and exercises introduced merely because they were difficult and therefore presumably designed to improve the mind, the children are now engaged in learning facts about food and clothing, hygiene and health, the nature of the physical world immediately about them, how to get along with each other, the significant facts of social, political, and economic institutions, and other things that will be of vital importance in their everyday life.

41. POLITICAL FACTORS

How does a voter "make up his mind" in a presidential election? How is his decision affected by his religion, social position, and his family voting history? How is he affected by the various kinds of political propaganda to which he is subjected? In order to answer such questions, a careful survey was made of voters in Erie County, Ohio, *during* a presidential-election year. The method, reported here, was that of the *panel* or repeated interview technique, with the same people questioned month after month. Several generalizations are proposed concerning short-range changes in attitudes and overt behavior.

THE PEOPLE'S CHOICE *

Paul F. Lazarsfeld, Bernard Berelson
and
Hazel Gaudet

DYNAMIC SOCIAL RESEARCH

A group of social scientists remained in Erie County, Ohio, from May until November, 1940, in order to observe the progress and effect of the presidential campaign in that community. A large number of people were interviewed, but the study centered around a panel of 600 respondents who were questioned every month for a period of seven months.

The panel subjects fell into two main groups: those who did not change their political opinion during the period of the study and those who changed in any of a variety of ways. Some shifted

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* From Preface to the Second Edition of *The People's Choice: How the Voter Makes Up His Mind in a Presidential Campaign*, by Paul F. Lazarsfeld, Bernard Berelson, and Hazel Gaudet. New York: Columbia University Press, 1948, pp. x-xxv. Copyright, Columbia University Press, 1944, 1948. Reprinted by permission of the publisher and authors.

their party allegiance, others could not make a decision until the end of the campaign, and still others claimed a definite vote intention but did not go to the polls. These various types of changers and shifters were the central interest of the study, for they were the people in whom the processes of attitude formation and change could be observed. They were compared with the "constant" people. Their personal characteristics, their contacts with other people, and their exposure to radio and newspapers were carefully examined. The reasons they gave for their changes were related to their objective social-economic positions. The opinions they had at one time were contrasted with what they stated at both previous and subsequent interviews. In other words, we did not describe opinion; we studied it *in the making.*

Now let us consider one phase of this dynamic analysis in order to discover its essential elements. The panel was interviewed for the sixth time during October and for the seventh and final time immediately after the election. Thus we know how these people intended to vote shortly before the election and for whom they actually voted. The results are as follows:

	Vote Intention in October				
Actual Vote	Rep.	Dem.	Don't Know	Don't Expect to Vote	Total
Republican	215	7	4	6	232
Democrat	4	144	12	0	160
Didn't vote	10	16	6	59	91
Total persons	229	167	22	65	483

This simple table has a surprising number of implications. Let us assume for a moment that the interviews in October and November had been conducted with different people, rather than with the same people, as was actually the case. Then, the findings would have read as follows: in October 42 percent (167 out of 396) of those who had a vote intention meant to vote for the Democratic Party; in November 41 percent (160 out of 392) voted for it. This would have given the impression of great constancy in political attitudes. Actually, however, only the people in the major diagonal of the table remained unchanged: 418 out

of 483 respondents did what they intended to do; 13 percent changed their minds one way or another.

This 13 percent represents the *turnover* which took place in the few weeks before the election. The concept of turnover is basic for analysis of opinion formation. If the turnover is large, it indicates that the opinion or behavior is unstable. We know that people feel uncertain and that propaganda may be effective, or that clarification and education are required.

If such dynamic research is conducted more frequently in the future, it may be possible to classify social events according to the following dimensions: What types of events show a small or large turnover as they develop? Does the turnover tend to become smaller as the events run their course? At what point is a minimum turnover reached and what is likely to increase it again? Under what conditions do we have a balanced turnover, as in this case, where the changes in various directions seem to cancel each other? When does turnover occur with a shift in "marginal distributions"?

Answers to such questions, however, would give only a rough picture of different social events. We can be more precise. Turnover is the result of changes which come about in the intentions, expectations and behavior of individual persons. Three broad questions can be raised in this connection:

(a) What kind of people are likely to shift?
(b) Under what influences do these shifts come about?
(c) In what directions are the shifts made?

Question (a) can be answered in a variety of ways. Let us concentrate here on the "crystallizers," those people who had no definite vote intention in October but who went to the polls in November. Long before they had reached a decision we could predict rather successfully what they would do: They would decide finally to vote in the same way as did people with similar social characteristics who had made up their minds earlier in the campaign. For example, it is a familiar fact of contemporary American politics, corroborated in this study, that urban people are more likely than rural people to vote for the Democratic Party, and Catholics vote Democratic more frequently than Protestants. If we predict, therefore, that urban, Catholic "Don't

knows" will vote for the Democratic Party, we shall be correct in a considerable number of cases, and post-election interviews will verify our predictions.

Such "external correlations" sometimes evoke expressions of disappointment. Turnover analysis, however, permits us to go "inside the situation." We can pick out a variety of psychological mediators which connect the social situation and the individual decision. In each interview, for example, respondents were asked who, in their opinion, would win the election. Even among those who had not yet formed a vote intention, there were many individuals with a definite expectation. And, significantly enough, the expectations expressed by the undecided were not haphazard ones, but instead were usually those prevailing in their own social environments. Following the process one step further, it turned out that expectations foreshadowed final decision: many people voted for the candidate they had previously picked as the winner. Thus these expectations were one of the "intervening" variables which helped in explaining the development of vote decisions.

The table on page 395 also suggests answers to questions about the specific influences which produce changes in attitudes or behavior. Again let us focus our attention on one group, those who said in October that they did not intend to vote. It will be noted that the large majority of this group fitted their actions to their words: 59 of the 65 actually did not vote in November. But the six changers, those who shifted from an intention of inaction to an actual vote, all cast their ballots for the Republican candidates. The influences which produced this change were not hard to discover. The field staff in Erie County had observed that, in this election at least, the Republican machine was much more active and efficient than the Democratic. And, indeed, when the six changers were asked what had made them go to the polls, all stated that they had been visited at the last moment by a Republican party worker who had persuaded them to vote.

Thus, by studying the different groups which contribute to the turnover, we can analyze the influences which operate to bring about changes in behavior. This, in itself, provides a large field for investigation. We can record what people read and listen to,

and relate such exposure in a twofold way to changes in mind. Some people were aware that they had been influenced by a specific reading or listening experience, and they told us so in the special interviews conducted with all changers. In other cases, a more intricate statistical analysis was necessary to trace the more unconscious influences. (These techniques have been more elaborately discussed in a recent publication.) [1]

SOCIAL RESEARCH AS A CONTINUING ENDEAVOR

We are frequently warned that the results of a specific study are valid only for the time and place where it was conducted. Does this mean that the findings of one study can never be duplicated in another? Should we expect different results, even under similar conditions? Questions of this kind suggest that terms such as "repetition" and "corroboration of evidence" need to be considered more carefully. In fact, when similar studies are available, comparative analyses can serve three positive functions:

1. The comparison may indicate that the findings of both studies are the same. This we shall call "the function of *corroboration.*"

2. The comparison may indicate that, although the statistical results of the two studies differ, consideration of the specific conditions under which the results were obtained will lead to the same general conclusions. This we shall call "the function of *specification.*"

3. A negative result in the first study may be clarified by new findings in the second one. This we shall call "the function of *clarification.*"

It happens that the present study can be compared with a similar one. A second but briefer panel study was conducted during the 1944 presidential campaign, four years after the one dealt with in this volume. The Bureau of Applied Social Research, in cooperation with the National Opinion Research Center, then at the University of Denver, conducted two interviews with a nation-wide cross-section of about 2,000 people: one interview be-

[1] Zeisel, Hans, *Say It with Figures* (New York, Harper and Bros., 1947), Chap. X.

fore the election, the other after. What will a comparison of these two studies yield? We shall select several examples to illustrate and clarify the functions of comparative analyses.

A first example deals with the corroboration of findings. In the Erie County study, there were 54 party changers, persons who shifted their allegiance from one party to the other. Here again the question about the direction of attitude change arose. Did these party shifts bring the changers in closer harmony with other members of the subgroups to which they belonged, or did the changes occur in some other direction?

In order to answer this we made use of the fact already referred to, namely, that the poor, the urban residents, and the Catholics are more likely to vote the Democratic ticket, while the well-to-do, the Protestants, and the rural dwellers are more frequently found in the Republican camp. On the basis of these three social characteristics, indications of membership in different social groups, it was possible to construct an "index of political predisposition." The index, in turn, permitted us to classify the social backgrounds of all individuals as conducive to either a Democratic or a Republican vote. It was thus possible to distinguish between two types of individuals: those whose vote intentions were in harmony with their social backgrounds, and the deviate cases whose intentions were at variance with those of the subgroups to which they belonged.

When the 54 party changers were studied, it was found that, before their shifts in party allegiance, 36 individuals had expressed intentions at variance with their social environments, while, after their shifts, only 20 were deviate cases. We thus came to the conclusion that party changes are in the direction of greater consistency and homogeneity within subgroups.

Because the 1944 study covered only the final few weeks of the campaign, when party changes are rare, it found an even smaller number of shifters. Moreover, an index of political predisposition is less valid when applied to a nation-wide sample than when applied to the residents of one county. And yet, despite these limitations, the results of the second study are an almost *a fortiori* corroboration of those in the first. In 1944 it was possible to study

36 changers. Before their shifts, 22 expressed intentions which deviated from the prevailing opinion climate of their social environments; after the shifts, only 14 deviated.

A comparison of similar studies can thus increase our confidence in findings which might be considered doubtful if only one of the studies had been carried out. Without such corroboration, a finding based on 54 cases in one study and on 36 in a second would be so unreliable that we would question its validity. With the corroboration made possible by successive studies, we are more inclined to accept the result.

Comparative analyses can also confirm general conclusions by indicating that statistically different results are the outcome of different specific conditions. In order to illustrate this function of "specification" we shall return once more to a group of changers already considered: those who said in their preelection interviews that they would not vote, but who finally went to the polls. In the Erie County study all such individuals voted Republican, while in the 1944 study a majority of these changers voted Democratic. At first glance this might appear to be a contradiction of findings. But is it? In 1940 the Erie County Republican machine was by far the stronger; in 1944 the Political Action Committee was active throughout the nation. Furthermore, P.A.C. concentrated on getting low-income people to the polls on the assumption that, if they voted at all, they would vote Democratic. The figures of the 1944 study prove that assumption correct. Of 20 people (largely from low-income groups) who did not intend to vote but who finally did, 3 cast a Republican and 17 a Democratic ballot.

Thus comparative analyses of studies carried out under different historical or social conditions can lead to much the same sort of confirmation as does actual duplication of results. A comparison of the final decisions of last-minute voters in an election where the Republican machine is strong, with the similar decisions made by similar voters in an election where pro-Democratic forces are active leads to one general conclusion: the machine which makes a strong last-minute effort to get stragglers to the polls can be of great assistance to its party.

Finally, a comparison of similar studies can lead to the clarification of results. In the 1940 study there was some indication that the party changers were the more indifferent voters. This finding was an unexpected one, for political experts have frequently asserted that, during a campaign, the more intelligent and concerned voter will shift his allegiance from one candidate to another as he learns more about their platforms and as he is better able to appraise their qualifications to deal with the foreign and domestic situations which arise. Because the relationship between party changers and indifference was unanticipated, the plan of the 1940 study did not make adequate provisions for examining it.

This was corrected in the 1944 study. Then all respondents who expressed a vote intention in their preelection interviews were asked two questions: Were they much concerned whether or not their candidate won? and, Did they believe there were any important differences between the two candidates? Analysis of the answers to these questions revealed, in fact, that the party changers (those who voted for one candidate after having said they intended to vote for the other) were considerably *less* concerned with the election than were the "constant" voters (those who actually voted as they had previously intended to): 38 percent of the changers, as contrasted with 21 percent of the constant voters, said it made little difference which candidate won the election; 65 percent of the changers, as contrasted with 46 percent of the constant voters, could see no real differences between the candidates. It is important to recognize that these expressions of indifference are not post-factum rationalizations of party changes; they were obtained *before* the change took place.

We can thus clarify a result in the earlier study. The people who change their political opinion are not greatly concerned about the campaign or its outcome. Their indifference makes it difficult for them to reach a lasting decision, for they are easily swayed by fortuitous influences. A conversation with a friend today sways them toward one candidate; a persuasive radio talk yesterday had convinced them to vote for the other party. It is not impossible, in fact, that some of the indifferent voters have not reached a real vote decision even as they enter the polling booths.

EMPIRICAL DATA AND SOCIAL PROCESSES

The Erie County study resulted in a number of generalizations which should be relevant to any research concerned with short-range changes in attitude or behavior. These do not yet form a coherent system. They are generalizations which form a bridge between the facts as they are observed and a more systematic theory which still awaits development. They are statements about social processes, and are, thus, high-order generalizations when contrasted with statements of empirical fact, low-order generalizations when contrasted with the theoretical formulations toward which social research aims.

All of our conclusions about the social processes through which attitude changes occur are closely interrelated, but for our present purposes it will be sufficient to discuss them separately.

1. A first point concerns the stability of attitudes. The subjects in our study tended to vote as they always had, in fact, as their families always had. Fully 77 percent of the panel members said that their parents and grandparents had voted consistently for one or the other of the major political parties, and they maintained these family traditions in the 1940 election. This stability was made possible by a sort of protective screen built around central attitudes. Despite the flood of propaganda and counterpropaganda available to the prospective voter, he is reached by very little of it. And, when we examine what exactly does reach him, we find that he elects to expose himself to the propaganda with which he already agrees, and to seal himself off from the propaganda with which he might disagree.

2. Such stability cannot be explained by reference to the "stubbornness" or "inertia" of human nature. Whatever other social or psychological functions may be served by the preservation of basic attitudes, it provides a source of great satisfaction to individuals in their group contacts. By maintaining their attitudes intact, they are able to avoid or to minimize conflicts and disagreements with the persons in their social environments who share these attitudes. Thus attitude stability is instrumental in preserving feelings of individual security.

3. These individual tendencies are supplemented by group

processes. While the individual preserves his security by sealing himself off from propaganda which threatens his attitudes, he finds those attitudes reinforced in his contacts with other members of his group. Because of their common group membership, they will share similar attitudes and will exhibit similar selective tendencies. But this does not mean that all of the members of a group will expose themselves to exactly the same bits of propaganda or that they will be influenced by precisely the same aspects of common experiences. Each individual will have his private fund of information and his private catalogue of experiences, even though these are selected and judged according to common standards.

In their mutual interactions, each individual makes public some of the private information and a few of the private experiences which support common attitudes. Thus all individuals become subject to a broader range of selected influences. The interactions serve to increase the isolation of any one individual; they provide him with additional arguments to support his position. The end result of such interactions among group members, then, is a reinforcement, a mutual strengthening, of common attitudes.

4. And yet, change does come about in some cases. It is important, therefore, to determine the conditions under which attitudes lose their stability, and the processes through which the change takes place.

One process depends on the activation of previous experiences and ideas. Every individual carries around with him germs of observations and half-forgotten experiences which are in a sense "recessive," usually because they do not fit into the prevailing traditions or interests of the group to which he belongs. Under certain circumstances, however, during a crisis or during a period of intensive propaganda, these can be brought to the fore. They can then lead to a restructuring of attitudes, and, perhaps in some cases, to a change in group affiliations.

5. Such predispositions to change are more typical for individuals in whom cross-pressures operate. In our complex society, individuals do not belong to one group, only. They have a variety of major social affiliations: their social class, their ethnic group, their religious group, the informal associations in which they

participate. These various affiliations will make conflicting claims on some individuals: an upper-class Catholic, for example, may find that his religious affiliation pulls him in one direction, while his class position pulls him in the opposite direction. And when concrete situations, such as an election campaign, require him to make a definite decision, he must also decide which of his group loyalties should take priority.

The problem of determining how these cross-pressures are resolved is one of the main tasks for social research. The following questions are relevant in this connection: In which of his various group affiliations does the individual experience such conflicting claims? Are there any general rules for predicting which claims will prove the stronger, when several are in conflict? The reader will find that many of the specific findings in the present study are pertinent to this problem, although no safe generalizations about so complex a topic can be made on the basis of a single investigation. The method developed in the Erie County study, however, should provide the means for answering the question. What kind of behavior does an individual under such cross-pressures exhibit? We found in the present study that, compared with the rest of the Erie County population, individuals who experienced cross-pressures took considerably longer to arrive at a definite vote decision. But such delay is not the only possible reaction. Other alternatives range all the way from individual neurotic reactions, such as an inability to make any decisions at all, to intellectual solutions which might lead to new social movements. Many of the baffling questions about the relationship between individual attitudes and social environment may be answered when these problems of cross-pressures and reactions to them are thoroughly and properly studied.

6. But when we talk about an individual and his environment we oversimplify the problem, for the environment consists of other individuals. How are their attitudes developed? Or, to put it somewhat differently, through what mechanisms and processes does a group develop common attitudes?

Again the problem leads us in several directions. We are led, first of all, to study opinion leaders. In every social group there

are some individuals who are particularly active and articulate. They are more sensitive than others to the interests of their group, and more anxious to express themselves on important issues. It is relatively easy to locate these individuals, and thus to study how they differ from the majority of their group.

In the present study we found that one of the functions of opinion leaders is to mediate between the mass media and other people in their groups. It is commonly assumed that individuals obtain their information directly from newspapers, radio, and other media. Our findings, however, did not bear this out. The majority of people acquired much of their information and many of their ideas through personal contacts with the opinion leaders in their groups. These latter individuals, in turn, exposed themselves relatively more than others to the mass media. The two-step flow of information is of obvious practical importance for any study of propaganda.

The concept of opinion leadership is, incidentally, not a new one. In the many studies of "power," "influence," and "leadership," we are reminded that every community can point to important men and women who set the fashions and are imitated by others. But our investigation suggests that this familiar concept must be modified. For we found that opinion leadership does not operate only vertically, from top to bottom, but also horizontally: there are opinion leaders in every walk of life.

7. Opinion leadership, however, is only one of the mechanisms through which the attitudes of a group are formed. Another is what has been called the "emergence" or "crystallization" of opinion. Social situations, of which a political campaign would be one example, constantly demand actions or opinions. And the members of a group meet these demands, even when there is no particularly articulate individual on whom they can rely for advice. For, above and beyond opinion leadership are the mutual interactions of group members which reinforce the vague feelings of each individual. As these interactions take place, a new distribution of articulate opinions and attitudes is crystallized.

In essence, then, the process of emergence is another phase of the process of reinforcement discussed above in point (3). When

prior attitudes exist, mutual interactions will reinforce them; when no prior attitudes but only vague feelings exist, mutual interactions will crystallize these feelings into definite opinions.

Such emergences of attitude or action have usually been studied only in panic situations, or in attempts to understand "mob behavior." The same processes are at work in many other situations, however, and they do not always lead to turbulence or violence. They occur whenever a stream of propaganda inundates a community, when an important event takes place, or if a group decision is to be made. And, because of their generality, it is important to study under what conditions and in what way these emergences develop.

It is interesting to note that, formulated in this way, questions about the formation of opinion are similar to problems with which economists have struggled for many years. For example, they frequently view the stabilization of price levels as a function of the interactions between supply and the demands of a number of individuals. This is logically similar to considering the distribution of opinion in a group a result of the interactions of many individuals. In neither case can the final result be explained by the previous actions or opinions of individuals considered separately. In both cases the final result is a function of interactions which have as their by-product something which had not existed before.

8. There is still another factor in opinion change. Opinions seem to be organized in a hierarchy of stability. In the course of a campaign, the more flexible ones adapt themselves to the more stable levels. Each political party holds a set of tenets which it tries to impress upon voters. At the beginning of a campaign quite a number of people give "Republican" answers to some questions and "Democratic" answers to others. But as the campaign goes on, there is a tendency for the opinion structure of more and more people to become more and more homogeneous. When the changes are studied, the topics can be ranked according to their degree of flexibility. Vote intention is most stable; attitudes on more specific topics tend to become consistent with party position. Among these topics, in turn, there are some which seem

to be dragged along by others. In the 1940 campaign, for instance, opinions on the personalities of the candidates were relatively more stable, and opinions on specific issues, such as the role of the Government in economic affairs, were likely to be adjusted to the evaluation of the men.

42. DEMOCRACY

There is now a considerable literature of experimental work on the problem of *democracy versus autocracy*. Much of this deals with changes in behavior in democratic as compared with authoritarian atmospheres. The excerpt below, by Kurt Lewin, is taken from a chapter on "The Practicality of Democracy," in which questions on democracy are answered by several other social scientists. The present selection gives a working definition of democracy and demonstrates the practicality of certain democratic procedures.

THE PRACTICALITY OF DEMOCRACY *

Kurt Lewin

Democracy — like forms of group living—cannot be defined adequately by isolated elements of conduct, rules or institutions; it is the larger *pattern* of group life and the group *atmosphere* which determines how a society is to be classified. The pattern includes such diversified aspects as the form of leadership, the degree and type of interdependence of sub-groups, the way in which the policy of the group depends on the will of its various sections or members; it includes how children talk to parents, workers to foremen, or how the crippled are treated. However, though social *techniques* must be considered, it is the actual *group dynamics* that counts. This holds for a small group of children as well as for the life of a whole community or state, or for the organization of the world.

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* From *Human Nature and Enduring Peace: Third Yearbook of the Society for the Psychological Study of Social Issues*, Gardner Murphy (Editor). Boston: Haughton Mifflin Company, 1945, Chap. 17, "The Practicality of Democracy," by Kurt Lewin, pp. 302-312. Copyright by the Society for the Psychological Study of Social Issues. Reprinted by permission of the publisher and copyright owners.

AUTOCRACY, DEMOCRACY AND LAISSEZ-FAIRE

In our present state of knowledge, the scientifically superior method of defining a special form of group life is probably the determination of its position within a totality of other forms of group life. One of the outstanding facts which has been known but is not sufficiently recognized concerns the relation between

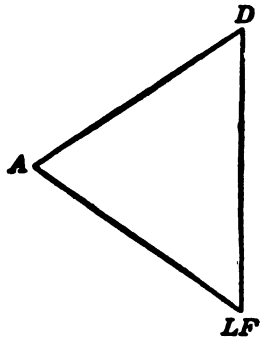


FIGURE 1. The relations of similarity and difference between Autocracy (A), Democracy (D), and Laissez-Faire (LF) cannot be represented by one continuum.

autocracy, democracy and individualistic freedom (laissez-faire). The average Sunday-school teacher, foreman or university professor is accustomed to perceive problems of discipline or leadership as lying on a single continuum, in which lack of discipline and maximum individual freedom represent the one end and strict authoritarian discipline the other. This conception, however, is basically incorrect. Autocracy, democracy and laissez-faire should be perceived as a triangle (Fig. 1). In many respects autocracy and democracy are similar: they both mean leadership as against the lack of leadership which appears in laissez-faire; they

both mean discipline and organization as against chaos. They both mean a stress upon the group rather than upon the individual. Among other lines of comparison, democracy and laissez-faire are similar: they both give freedom to the group members in so far as they create a situation where the members are acting on their own motivation, rather than being moved by forces induced by an authority in which they have no part.

The person who thinks in terms of one continuum has no choice but to consider democracy as something *between* autocratic discipline and lawlessness; he sees it as a soft type of autocracy, or frequently as a kind of sugar-coated or refined method to induce the group member to accept the leader's will. It is a prerequisite to democratic living and democratic education that this concept be destroyed. The democratic leader is no less a leader and, in a way, has no less power than the autocratic leader. There are soft and tough democracies as well as soft and tough autocracies; and a tough democracy is likely to be more, rather than less, democratic. Like autocracy, democracy is fully aware of the rôle of power in group life and considers power a necessary and legitimate element of group organization. But the democratic use of power is as far from a superiority aloof from the ruled—so characteristic, for instance, of the treatment of "natives" by the British colonial office—as from the religious zeal for one's own power so typical of the "sacred egoism" of totalitarian Fascism.

The difference between autocracy and democracy is an honest, deep difference, and an autocracy with a democratic front is still an autocracy. In democracy the use of power must recognize the "equal right" of each member of the group to live a good life. Sometimes democracy merely "tolerates" differences among individuals or among groups. An outspoken democracy does not merely recognize the "right to be different" as the basis for "individual freedom" and the treatment of "minorities"; it will encourage that richness of group life and group productivity which can grow only from a diversity of sub-groups and personalities. It will, however, be equally determined to enforce the principle of "intolerance against the intolerant," a principle without which no democracy seems to be able to live in the long run.

As to the form or organization, two differences between democ-

racy and autocracy may be mentioned: (*a*) The unity of an autocratic group is based on its relation to the top leader of the hierarchy to a greater degree than is true of a democratic group. Goal-setting or policy determination in an autocracy is, to a high degree, in the hands of the leader, rather than in the hands of the group as a whole. It is typical of a democracy that the leader is responsible to the group; in an autocratic system the follower is responsible to the leader. This principle of "no responsibility to people below oneself and all responsibility to the leader above" was one of the first steps to be acclaimed again and again by Hitler after his ascent to power.

(*b*) Interdependence within the group and the interactions essential for group life in an autocracy follow, in general, "vertical" lines, i.e., relations between higher and lower in the hierarchy of organization. In a democracy the "horizontal" type of interdependence among people of equal status is more emphasized. That is one of the reasons why, for instance, discussion and group decision—which have their full meaning only among equals—play greater rôles in democracy.

As to the problem of the practicality of democracy, one may consider (1) the effect of democracy on the character and capacity of the individual, (2) its effect on efficiency as regards production in industry, and in other fields, and finally (3) the problem of how to learn democracy and its correct application. This includes the problem of the learning of democratic ideology and the training of democratic leaders.

At present, statements about these topics have to be based on rather scant scientific data, and one must always keep in mind that there are many forms of autocracy and democracy. Only recently has the step been taken from descriptions of attitudes to "action research" on groups. Scientific insight about the causal relations in group life will have to be established by experiments in group dynamics. The last decade has seen an increasing development in this field although research is still in its initial stages.

The experiments help in many ways to substantiate the triangular relation of autocracy, democracy and laissez-faire, and to clarify the rather disturbing complexity of problems by showing

where the differences lie; why differences in group procedures which might look important are actually unimportant; and why others which look unimportant are important. It is particularly interesting to consider what might be called an efficient "tough democracy."

EFFECT OF DEMOCRACY ON THE CHARACTER AND CAPACITY OF THE INDIVIDUAL

The best controlled study in this field is probably that of Lippitt and White.[1] In this study the same groups of children went through an autocratic, a democratic, and a laissez-faire atmosphere. They show that the character of the individual, at least as it expresses itself in conduct, is deeply and very quickly affected by a change in social atmosphere. The degree of friendliness, for instance, was greatest in democracy. With an exchange of two children[2] between the autocratic and democratic groups their friendliness and aggressiveness changed within one meeting. Aggressive reactions[3] were greatest in a form of autocracy and led to discontent not only with the leader but with the fellow members as well. It sometimes led to scapegoating.

The sociability of the individual children and the amount of constructive help they offered to other children was greatly affected by the change in social climate. Under autocracy conversation kept much more to the immediate topics; the children under democracy showed a broader outlook in many respects. In autocracy they lost some of their individuality as measured by the degree of individual differences. They became more dependent and more ready to drop work when not under immediate pressure. In other words, initiative and "laziness" are traits which depend much on the social atmosphere.

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[1] Lippitt, R., and White, R. "The 'Social Climate' of Children's Groups." Barker, R., Kounin, J., and Wright, H., editors, *Child Behavior and Development*. New York: McGraw-Hill Book Company, Inc., 1943, pp. 485-508.

[2] Lippitt, R., "An Experimental Study of the Effect of Democratic and Authoritarian Group Atmospheres." "Studies in Topological and Vector Psychology. I." *University of Iowa Studies in Child Welfare*, 1940, Vol. 16, No. 3, pp. 45-195.

[3] Lippitt, R., and White, R., "The 'Social Climate' of Children's Groups." Barker, R., Kounin, J., and Wright, H., editors, *Child Behavior and Development*. New York: McGraw-Hill Book Company, Inc., 1943, pp. 485-508.

This is not the place to go into the many and not always simple relations between group life and the character and productivity of the individual. However, two conclusions seem to be quite well-established by the experiments on groups, by the experience in industry ("Training in Industry" Program), by studies of family living and by what we know about child development in terms of psychology and cultural anthropology:[4] (*a*) The effect of social atmospheres on character and on character development is very profound. (*b*) A democratic organization with long-range planning seems to be definitely superior to autocracy and to laissez-faire atmospheres in creating initiative and positive sociability.

DEMOCRACY AND EFFICIENCY OF GROUP LIFE

The superiority of democracy in regard to bringing up fair-minded and more richly developed individuals is not likely to be questioned, at least in this country. More frequently, doubts are expressed in regard to democratic efficiency. We are accustomed to the idea that democracy has to "pay" in efficiency for the greater freedom the individual has. For many, efficient group organization is more or less identified with autocratic organization. The problem itself is fundamental because practically every group has to "produce" some kind of "goods," whether it is health in a hospital or automobiles in a factory, fun in a recreation center, or knowledge and education in a school.

In school as well as in industry certain standards exist concerning the rate of learning or production. These standards are set up by the teacher or the management and are upheld by these authorities with a certain amount of pressure. It is assumed that relaxing the standards will slow down the work of group members. This assumption is probably sound, but has *little to do with the problem of democracy.* Lowering the standards or relaxing the pressure to keep up the standards in an autocratic atmosphere means shifting to a softer form of autocracy. It means a shift from autocracy (*A*) toward laissez-faire (*LF*) in Fig. 1. It does *not* mean a shift in the direction of democracy (*D*). Such a shift would involve a positive change of the type of *motivation* behind the ac-

[4] Mead, M., *Cooperation and Competition Among Primitive Peoples.* New York: McGraw-Hill Book Company, Inc., 1937.

tion, a shift from imposed goals to goals which the group has set for itself.

It is by no means certain that production goals set for themselves by work teams, or learning goals set by groups of students, would be higher than those ordered by an authority. However, it is by no means certain that they would be lower. Whether the standards will be set higher or lower depends on the specific social atmosphere and the type of democracy created. Experiments in industry under controlled conditions show a substantial permanent increase of production created in a short time by certain methods of "team decision," an increase in production which was not accomplished by many months of the usual factory pressure. (The money incentive remained unchanged.) This demonstrates that democratic procedures may raise group efficiency.

Only a few details of the problems, which are by no means simple, can be discussed here. (1) One should be careful to distinguish between discussion and decision. A discussion might be better than a lecture for clarifying issues and bringing about motivation. However, it is one thing to be motivated, another to transform motivation into concrete goals, stabilizing these goals in a way which would carry the individual through to the actual completion of the work. Controlled experiments under comparable conditions show that discussion without decision does not lead to a parallel increase in production. There are indications that *even* if the discussion leads to the *general* decision of raising production without setting *definite* production goals to be reached in a definite time, the effect is much less marked. Experiments with groups of housewives[5] and students' eating-co-operatives[6] show that "lectures" as well as "requests" are less efficient in bringing about changes in food habits than *group decision.* Discussions without decisions do not make for efficient democracy. On the other hand, democratic methods, properly handled, are superior to requests in bringing about changes.

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[5] Lewin, K., *The Relative Effectiveness of a Lecture Method and Method of Group Decision for Changing Food Habits,* Committee on Food Habits, National Research Council, Washington, D.C.

[6] Willerman, B., *Group Decision and Request as Means of Changing Food Habits,* Committee on Food Habits, National Research Council, Washington, D.C.

(2) One of the reasons why democratic methods are superior is illustrated in the study of students' co-operatives. Students were to change from white to whole-wheat bread. From each student was obtained a rating of his eagerness to reach the goal and of his like or dislike of whole-wheat as compared with white bread. After "request," the eagerness to succeed was lowest in the individuals who disliked whole-wheat bread and increased with the degree of liking. *After group decision,* however, the eagerness to reach the group goal was largely independent of personal like or dislike. In other words, group decision provides a background of motivation, where the individual is ready to co-operate as a member of the group, more or less independent of his personal inclinations.

HOW TO LEARN DEMOCRACY

It is one of the basic facts about group standards that they are not an expression of a common biological entity called "human nature" but are somehow acquired. This fundamental fact seems to be very difficult to realize. To the individual who follows a certain cultural pattern, most of what is essential to this culture seems as "natural" and unquestionable as the air he breathes. It is a prerequisite of international peace that the fallacy of this position be understood. For permanent co-operation we must understand better both our own and other cultures, their similarities and their differences. That is one of the reasons why a large program of research on our own standards and those of other countries is vital.

Two of the important aspects of learning democracy are *changes of ideology* and *leadership training.* The scientific knowledge, finally—based upon experimental cultural anthropology and experiments in leadership training—is as yet very limited. There are definite indications, however, that the education of leaders and the means of changing the forms of leadership can be brought about sometimes in an astonishingly short time.

In all the experiments mentioned, the problem of leadership plays an important rôle. As the earlier experiments show,[7] a

[7] Lippitt, R., same citation as footnote 2. Lippitt, R., "From Domination to Leadership," *Journal of the National Association of Deans of Women,* 1943, Vol. 6, pp. 147-152.

group atmosphere can be changed radically in a relatively short time by introducing new leadership techniques. The paradoxes of democratic leadership are by no means solved; however, the studies of leadership, and particularly of leadership training,[8] give some information.

(1) Autocratic as well as democratic leadership consists in the leader's playing a certain rôle. These leader rôles cannot be carried through without the followers playing certain complementary rôles, namely, those of "autocratic" or "democratic" followers. Educating people in democracy or re-educating them from either autocracy or laissez-faire cannot be accomplished by the passive behavior of the democratic leader. It is a fallacy to assume that individuals if left alone will form themselves naturally into democratic groups; it is much more likely that chaos or a primitive pattern of organization through autocratic dominance will result. Establishing democracy in a group implies an active education: the democratic follower must learn to play a rôle which implies, among other things, a fair share of responsibility toward the group and a sensitivity to other people's feelings. Sometimes, particularly in the beginning of the process of re-education, individuals may have to be made aware, in a rather forceful manner, of the two-way interdependence which exists between themselves and others within the democratic group. To create such a change, the leader must be in power, and able to hold his power. As the followers learn democracy, other aspects of the democratic leader's power and function prevail. What holds for the education of democratic followers holds also for the education of democratic leaders. In fact, it seems to be the same process through which persons learn to play these two rôles and it seems that both rôles have to be learned if either one is to be played well.

(2) It is important to realize that democratic behavior cannot be learned by autocratic methods. This does not mean that dem-

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[8] Bavelas, A., "Leaders Can Be Trained," *The Association Forum*, 23, Nov.-Dec., 1942. Bavelas, A., "Morale and the Training of Leaders," in Watson, Goodwin, ed., *Civilian Morale*. New York: Reynal and Hitchcock, 1942, 143-165.

ocratic education or democratic leadership must reduce the power aspect of a group organization in a way which would place the group life on the laissez-faire point of the triangle (Fig. 1). Efficient democracy means organization, but it means organization and leadership on principles different from those of autocracy. These principles might be *clarified* by lectures but they can be *learned,* finally, only by democratic living. The "training on the job" of democratic leaders[9] is but one example of the fact that teaching democracy presupposes establishment of a democratic atmosphere.

One should be slow in generalizing experimental findings. Any type of organization like a factory, a business enterprise, a community center, a school system, or the army has characteristics of its own. What democracy means technically has to be determined in each organization in line with its particular objective. The objective of our educational system is customarily defined as twofold. It is to give knowledge and skills to the coming generation and to build the character of the citizens-to-be. The experiments indicate that democratic education does not need to impede efficiency in regard to the first objective, but can be used as a powerful instrument toward this end. The experiment also indicates that, for educating future citizens, no mere talk about democratic ideals can substitute for a democratic atmosphere in the school. The character and the cultural habits of the growing citizen are not so much determined by what he *says* as by what he *lives.*

(3) It is important to realize that the methods of changing group ideology or group goals and obtaining group efficiency are not based on dealing with the individual as an individual but as a group member. The goals were set for the group as a whole or for individuals in a group setting. The experimental studies indicate that it is easier to change ideology or cultural habits by dealing with groups, rather than with individuals. In addition, the anchorage of the motivation of the individual in a group de-

[9] Bavelas, A., "Leaders Can Be Trained." *The Association Forum,* 23, Nov.-Dec., 1942. Bavelas, A., "Morale and the Training of Leaders," in Watson, Goodwin, ed., *Civilian Morale.* New York: Reynal and Hitchcock, 1942, 143-165.

cision goes far in achieving the execution of the decision and in establishing certain self-regulatory processes of the group life on the new level of ideology and action.[10]

SUMMARY

On the whole, then, research in democratic living indicates the deep interdependence of the various aspects of group life, such as ideology, leadership form, power distribution, productivity and efficiency of the individual and the group. It shows that the ideology of a group, the character of its members and the distribution of power are so closely interwoven that no one of them can be changed without altering the others. This should be a lesson to the hard-boiled politician who thinks only in terms of power and to the sympathetic believer in the "goodness of human nature" who forgets too easily that *ideology cannot be changed without changing the actual distribution of power within a group.* There are definite indications that democracy is not only practicable but *superior in regard to character development, social relations and efficiency if it is handled as a true democracy.*

Finally, there are good indications that "self-understanding" and "self-education" within democratic groups is possible. The chances for the success of such a program will be much enhanced by making full use of the instruments of research in social science which, after all, means merely using an old democratic standby: the rational approach.

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[10] Lewin, K., *The Relative Effectiveness of a Lecture Method and Method of Group Decision for Changing Food Habits,* Committee on Food Habits, National Research Council, Washington, D.C.

PART VI

Social Conflicts

43. INDUSTRIAL CONFLICT

This is not so much a study of *actual* industrial conflict as it is a report of one kind of approach to the problem. That approach is *psychological.* It is suggested that a study of the attitudes, expectancies, and ways of perceiving industrial situations, on the part of management and labor leaders, will throw real light on the problem of labor strife. The investigations described here tend to confirm the idea that people in opposition are "ready to see the good on one side and the bad on the other." The influence of *attitudes* on perception has important practical implications.

PSYCHOLOGICAL ASPECTS OF INDUSTRIAL CONFLICT: I. PERCEPTION *

Ross Stagner

A thorough understanding of the phenomena of industrial conflict requires an exploration of the psychological aspects of this problem. Strikes, lockouts, slowdowns, and sitdowns occur as a result of processes in the minds of men. We must know how workers and executives think about industrial situations if we are to develop any clear comprehension of how certain conflicts come into focus.

It is clear that if everyone behaved in a logical manner, strikes would never occur. Everyone loses in a strike—particularly one of long duration. The employees lose tremendous sums in wages. The employer loses in gross sales, in overhead, in business losses to competitors, and ultimately in net profits. The public loses through declining purchasing power, reduced production of

* From "Psychological Aspects of Industrial Conflict: I. Perception," by Ross Stagner, *Personnel Psychology,* 1948, Vol. 1, pp. 131-143. Reprinted by permission of the publisher and author.

goods, and the disruption of orderly living. The Hinde & Dauch Paper Company recently published figures showing that a strike in one of their mills had cost the workers an amount in wages that will require five years, eleven months to recoup at the rate of increase won. The company does not estimate its own losses in profits, but the figure is undoubtedly large. Thus both sides might have gained from a sensible pre-strike settlement.

The irrationality of strikes is further evidenced by the constant assertion of leaders on both sides that they dislike strikes and lockouts. It seems amazing that we can have so many industrial stoppages if neither business men nor labor leaders desire them.

The easy and tempting solution to this paradox, as far as management executives go, is to blame the irrationality of union officers. For union men, the equally enticing explanation bears down on the pigheadedness of industrialists.

The professional psychologist, looking at the strike from a third viewpoint, necessarily concludes that both are right. Obstinacy and irrationality are clearly demonstrated on both sides of almost every industrial controversy. But this observation is not particularly helpful. Why is a union policy set on irrational grounds? And why is it opposed so stubbornly by company officials?

To get a scientific interpretation of this phenomenon, it is necessary to do a job of analysis. Not all strikes are alike, and no simple statement is going to explain any of them. We must explore the *conditions* attending strikes and industrial disturbances, and consider their implications for human thinking. From the psychologist's angle, there are two sets of factors to which special attention must be given: (1) the purposes or motives of the individual (the needs which he is trying to satisfy in a given situation); and (2) the way in which he perceives that situation. The present paper proposes to examine the latter of these.

Psychologists are now familiar with the conception that two men may be in the same *physical* environment, but may be in different psychological environments. A heavy fall of snow may look wonderful to a skiing enthusiast, annoying to a truck driver. A *fact* as seen by one is not necessarily a fact as seen by the other. Essentially, this is a problem in perception. What conditions de-

termine how we will see a given situation? A complete listing might be rather long, but four factors will be mentioned to show clearly what is meant.

(1) The *biological quality* of the organism determines perception. For example: a color-blind man does not perceive a world rich in hues and tints. Technicolor movies have no special appeal for him. The *facts* of color are censored from his perceptions. But this is of little help as regards industrial strife, for we have no reason to believe that there are any biological differences between managers and workers or union officials.

(2) The *past history* of the organism is another determinant of perception. When a botanist walks in the fields, he perceives many items overlooked by the psychologist. A combat veteran does not look upon national policies threatening war in the same manner as an eighteen-year old boy. Training and experience prepare us to observe certain facts and ignore others. This obviously is one element in the backgrounds of industrial executives and union representatives which makes for disagreement about facts, hence for trouble. Unpleasant working conditions are much more important to workers than to personnel executives.

(3) The *purposes* of the organism also determine perception. When I want to drive a nail, a shoe, a milk bottle, and a paper weight may be seen as possible substitutes for a hammer. When I want a container, a milk bottle is noticed; the others simply seem to disappear. The purpose of a business man is to operate at a profit; certain aspects of the situation loom very large to him. To the union official these "facts" are mere figments of the imagination; they are unreal. His awareness of the cost-of-living problems of workers is similarly lacking in importance to the executive.

(4) *Attitudes,* which are complex products of motives, emotions, and past experiences, determine our perceptions. The man who dislikes Jews reports that he observes a great deal of undesirable behavior by this religious group; persons who are not anti-Semitic report that they do not observe such behavior at all, or see it only rarely. The critic of business sees in such events as the recent simultaneous price boosts by oil producers and steel

companies a conspiracy to fleece the public; the man favoring business sees these same actions as necessary steps to maintain profits.

Such factors as attitude, purpose, and past experience differ sharply for industrial executives and union leaders. The inevitable consequence is that they perceive totally different facts in the same situation. Certain aspects will be exaggerated, others distorted, others ignored. Reports of a given committee meeting, or of a strike incident, made by management and union sources, seem to relate to completely different events. It is often difficult to recognize any common reality in the two accounts. Similarly, the cause of a strike often is described in an entirely different way by union and business spokesmen.

The perception of each group by the other is another important element in industrial conflict. Psychologists who have worked in industry state that success in labor relations seems to depend in part on this function. Production executives who perceive workers as fundamentally irresponsible, lazy, or downright malicious, are prone to have labor trouble. Managers who see their employees as basically much like themselves generally have few labor problems. Less attention has been given to parallel observations of union leaders, but studies of a few such men appear to confirm this expectation. Union officers who see businessmen as grasping, greedy exploiters usually have a high proportion of conflicts with their companies; whereas those who see the boss as friendly and human, even though perhaps tough on occasion, have few strikes or slowdowns in their shops.

We are not overlooking, of course, the fact that some managers act in such a way as to justify these differences in perception; just as the behavior of workers may justify some of the attitudes cited for management. But we want to emphasize that the perceptions are often distorted before actual contact occurs, and may in fact explain the behavior which precipitates serious trouble. Thus, a youth may acquire a violent anti-labor prejudice from his father; when he becomes an executive, he never sees workers and unions in an impartial light, but only through his biased spectacles. His hostile actions, guided by his unfavorable perceptions, may cause

the workers to react with violence, and he will consider that this proves his prejudice to have been correct.

The *expectancy,* in other words, with which we approach a situation will often decide what seems to happen. A union man who goes into a bargaining session expecting to get into a fight will probably have one. Every move of management is seen by him as a challenge which he must beat down. Some management representative gets angry with him, and the war is on.

The foregoing analysis suggests that a study of the attitudes, expectancies, and ways of perceiving industrial situations, on the part of management and labor leaders, will throw real light on the problem of labor strife. To check this hypothesis, different approaches have been used: (1) discussions with industrial psychologists; (2) direct interviews with industrial executives and union officers; and (3) objective devices such as adjective checklists.

The belief that perception played a major role in industrial relations arose from the author's personal experience. It has been discussed with various psychologists having industrial positions, and they have, practically without exception, agreed as to its importance. They have also provided illustrations of its operation. This, of course, does not prove the hypothesis true, but encourages a more methodical check. As a result we have made the investigations which are reported below.

I

The first attempt to check on the theory used the standardized interview method. Nine officials of local labor unions and six executives handling labor relations with these unions, were interviewed personally.[1] While the number of cases is small and the area limited to the upper Connecticut Valley, the findings agree with casual observations in many larger enterprises throughout the country.

Each person interviewed was presented with a standard list of topics on which his opinion was asked. For the labor leaders these were:

[1] These interviews were made by Mr. R. G. Egan, a senior at Dartmouth College, who used the material for his psychology thesis.

The man's personal background
Attitude toward present relations with management
Hopes for future relations with management
Attitude toward technological improvements
Attitude toward the annual wage
Attitude toward split unionism
Plans for training of labor leaders
Attitude toward present labor legislation
Legislation you would like to see enacted
Is labor-management cooperation possible under the present set-up?
How can it be improved ?
Personal feelings after a negotiation meeting with management
Present and future education of rank-and-file toward management

For the executives, a parallel list of topics was presented for discussion, omitting the items on training of labor leaders and education of rank-and-file union members. The term "labor" was of course substituted for "management" in these interviews.

Each person was assured of anonymity and was encouraged to talk freely. This usually was achieved in very little time. Notes were made sketchily during the talk, and were written up in detail immediately afterwards. Careful attention was paid to emotion as well as ideas expressed.

Among the union officials, the major characteristic noted was a feeling of distrust and suspicion of management statements. The extreme of this is illustrated by Mr. A, who sees evidence of hostility or trickery in all management moves. He says: "They told us that if we got our production up to that of the plant in (another state), we could have a raise; then they turned around and told the other plant that if they got production as high as ours, then they would deserve a raise." (Management representatives denied making such contradictory statements, but this man believed they were made, and his judgment of management suffered accordingly.) "They have to be forced into everything," he asserts. "We don't damn management unless they deserve it—but they usually deserve it," he concludes.

Similar in tone, but less vehement in his emotional expression, is Mr. B. Inclined on the whole to cooperate with his company, he nevertheless says the following of his manager: "He is a very intelligent man. Sometimes when we meet with him, we make an agreement. Then when we get back to the shop, we realize that he has put one over on us." And again, "It's not that management looks down on us, but we know they are smarter than we are." This man expects his management to stir up trouble and then call for a vote under the Taft-Hartley Act, hoping to get rid of the union. Thus, while he favors outlawing strikes, he does not believe that management will behave in such a way as to make such a step possible.

In marked contrast to these two is a third union officer, Mr. C, who says: "My hope is that we continue always to have a manager that understands us as well as does our present boss. He is a square shooter and has always treated us right." "In a mill of our size we are a family group . . . I feel proud of our manager. He respects me, and I respect him." The only negative attitude expressed toward management is a rather vaguely generalized one: "Management should change its attitude that just because workers organize, they are radical."

It should be no surprise to anyone that, by all the indications we could obtain, labor relations were best at Mr. C's shop and worst in that where Mr. A was employed. Whether the attitudes and points of view about management caused, or resulted from, the general situation cannot, of course, be shown directly. It seemed clear, at any rate, that the occurrence of *future* conflicts would be profoundly influenced by these mental patterns of the union leadership.

The interviews with executives were equally productive of a wide range of ideas about labor. Mr. D, whose union officials feel that he is "too stuck up" and that they cannot trust him ("He just says 'yes, yes,' and then doesn't do anything about it"), is moderate in his expression of bias: "I really don't see what good the union has done these fellows; they are just contributing money to the union." Under the Taft-Hartley Act he will have a chance to show the workers "where they have been led astray by some of the labor organizers." (Almost every union man inter-

viewed said he had noticed that management had gotten tougher since the passage of the Taft-Hartley Act.) Regarding an annual wage, this executive says: "Of course you have an awful lot of workers who are lazy; if you gave them an annual wage, you would take away the incentive to work." He then comments rather naively, "Why they should believe everything the union tells them and nothing management tells them is beyond me; *we pay them their wages.*"

Even more suspicion and hostility toward labor is exemplified by Mr. E, the opposite number to union officer A. At one time E claims that his rank and file workers are all right, only the officers being bad. On other points, however, he says of the workers that "they seem to lose sight of everyone else but themselves. No matter how you slice it, they still think they should have more." He believes that "workers are forced into the union and once in it, a small group dominates the meetings so that only the desired few are allowed to speak." Some of his accounts of grievances presented by the union seemed to indicate that he had a very poor conception of how unions operate, but of course we had no way of checking the facts.

The mere fact that their workers chose to join a union seemed to have irritated many executives. One personnel man said of his General Manager: "I think Mr. F felt a little hurt that his employees felt it necessary to join a union." Others made it plain that they perceived union membership as evidence of disloyalty to the company.

What is the significance of these interviews? We interpret them as indicating the importance of *a way of looking at reality*. More realistically, the interviews show that the facts are not the same for people with different attitudes. One executive says: "The union has not been unreasonable in its demands." Another says with obvious annoyance, "No matter how you slice it, they still think they should get more." The same union demands are seen as entirely different by these two men.

Furthermore, the progress of bargaining sessions will be affected by these ways of looking at the opposing groups. An industrial relations executive who believes that workers are exclusively greedy and selfish will be prepared in advance to reject all wage

demands as excessive. A union leader who is extremely suspicious of management will distrust all compromise proposals his company offers. The settlement of minor grievances is made more difficult by the attitudes of many individuals on both sides.

A phase of the interviews which is difficult to record here, but which impressed us very much, was the *emotional coloring* of many facts in the minds of both workers and executives. Our decisions as to a man's attitudes were influenced by his tone of voice, facial expression, etc., as well as by the words employed. These emotions have an important effect on the way facts are perceived, judgments made, and actions carried out. Generally speaking, the men from plants with poor labor relations were markedly more emotional than the others. It is of course impossible, without detailed records over a period of time, to know whether these emotions are results of, or partial causes of, the poor relations.

II

Psychologists are the first to recognize that interview studies of such subtle problems as this have one major defect. This is that the interviewers may have "seen" certain facts which were not objectively present. While certain control factors of a personal character make this unlikely, we were concerned to try to devise a purely objective check wherever possible, to eliminate the chance of interviewer bias.

The following experiment, developed for this purpose, has been repeated several times, with a total of several hundred Dartmouth College students. In every instance the objective results harmonize with what would be expected from the interviews.

A check-list of twenty adjectives is presented in mimeographed form to the student, on a page ruled off into five columns. Generally the adjectives are such as could apply to either executives or workers, e.g., friendly, aggressive, tolerant, irritable, cooperative. Starting in the extreme right-hand column, the student is asked to check those items which he thinks are *generally characteristic* of factory workers. After finishing this column, he is asked in the next to check those characteristic of business executives. In column 3 he marks those he considers good or desirable; in column 4, those bad or undesirable. Finally, he checks those which

apply to *himself*. Immediately afterwards, he is asked to rate himself on a scale from 0 (pro-labor) to 10 (anti-labor).

The results are tabulated in such a way as to show: How do pro-labor students perceive workers? How do they perceive executives? Do anti-labor students differ significantly on either group? Does the student see himself as resembling the group he favors on the rating?

The results for a typical group of about 100 students are shown in Table 1. It is clear at a glance that pro-labor students "see" the typical worker in a more pleasant light than they "see" executives (14.2 worker traits pleasant, while only 11.6 executive traits were judged pleasant). The anti-labor students reverse this trend: in their eyes, executives have 13.2 pleasant traits, workers, only 11.8.

TABLE 1

PERCEPTION OF WORKERS AND EXECUTIVES BY PRO-LABOR AND ANTI-LABOR STUDENTS

	PRO-LABOR	ANTI-LABOR
Worker—pleasant traits	14.2	11.8
Executive—pleasant traits	11.6	13.2
Workers—self traits	13.8	11.4
Executives—self traits	12.5	12.9
Worker—self—pleasant	12.3	10.2
Executive—self—pleasant	10.1	11.8

The differences on the other tabulations are similar but smaller. Pro-labor students ascribe to themselves 13.8 traits assigned to workers, only 12.5 traits accorded to executives. The anti-labor group accepted 12.9 "executive" traits, but only 11.4 worker characteristics.

Combining these two sets of judgments, we find that pro-labor students rated as pleasant, and applied to themselves, 12.3 "worker" traits, while only 10.1 "executive" traits met both requirements. Again the anti-labor group reverses the trend, with 11.8 "executive-pleasant-self" traits and only 10.2 "worker-pleasant-self."

These purely objective studies seem to supply convincing evi-

dence on two points: (1) students who are "pro-labor" see workers in a good light, executives relatively less so; whereas anti-labor students see executives favorably, workers antagonistically. (2) Students tend to see themselves as resembling the group they prefer, or else they project their own traits onto the preferred group.

This study, while limited in scope, seems to back up in a significant way the results of the interviews. It confirms the view that executives will differ in the way they "see" labor and labor problems; those relatively friendly to unions will see good features in them; while those unfriendly will see mostly bad characteristics. Further, executives are necessarily led to identify themselves with the business side and they probably spread some of their liking for themselves over the entire business community. Converse statements would hold true for union officers—they can be expected to see the good points of workers and the bad aspects of industrialists.

III

It is urgent that we recognize the importance of perception in industrial conflict. No doubt there would be many industrial difficulties even if all executives and all union leaders were calm, fact-minded, and objective in their judgments. The evidence indicates that present leaders on both sides come to an industrial controversy ready to see the good on one side and the bad on the other. This tendency exaggerates, if it does not actually create, many serious conflicts.

We are not inclined to suggest that a change in the perceptual patterns, particularly of one side, will solve all labor strife. The personnel man who reads this article may come into his office the next morning full of sweetness and light, prepared to see good in all union stewards. But what if the stewards have not also read this report? They may not trust his apparent change, and act in such a way as to convince him that his former prejudice was correct. Furthermore, many controversies are simply conflicts of desires, with no disagreement about facts involved.

The immediate practical applications that are apparent seem to be two in number. One of them is in the selection and training of new executives. Schools of business administration might

well try, in courses in personnel administration, to stress the fundamental similarity of workers and businessmen. If we could break down the stereotype of workers as lazy, irresponsible, and malicious, and of unionists as violent, unreasonable racketeers, these young men would enter the personnel field better equipped for their jobs. Also, companies selecting men, whether college-trained or from the ranks, for personnel or supervisory positions, should give this characteristic important weight.

As a practical matter of day-to-day personnel administration, it would appear that executives should recognize and accept the suspicious attitude of unionists. Leaning over backward to give full information to the union on changes affecting workers; scrupulous honesty in keeping even trivial promises; and listening patiently to grievances and complaints, however unimportant they may seem, may over a period of time help to reduce this suspicion.

These methods are slow. It would be encouraging if psychologists could offer quick, simple, inexpensive methods of changing a man's perceptual patterns. Unfortunately, our experiences so far indicate that the task is quite difficult. It may be that only the gradual recruitment of a new group of industrial and labor leaders will solve the problem. One young executive whom we interviewed said: "Men in my father's up and coming time gave labor as little as possible. . . . Labor has now changed this picture, but the men of my father's generation . . . cannot rid themselves of the ideas under which they were brought up. They have been forced to give in in many cases, but they have done so grudgingly.

"Our generation that is going into business today has grown up realizing that the old methods will no longer work. We know that the welfare of the working man must be taken into consideration. The average worker is not a wild radical but a man who believes in the American way of life. We will, I am sure, meet in the middle and settle our differences."

44. MORALE

This is only a brief excerpt from a fuller discussion of the goals and attitudes of labor. It might have been entitled "Job Satisfaction," for the point is made that *job satisfaction and performance* are related to appreciation of the contribution the job makes to something bigger than the job itself. The Hawthorne experiment, briefly reported here, deals with this topic in much greater detail. The goals and attitudes of management also need careful consideration. Also, note Selection 43, *Industrial Conflict,* pages 421-432.

MORE DIGNITY IN THE JOB *

The Labor Committee of the Twentieth Century Fund

To get and hold a job comes first; to have one that rings with meaning and satisfaction comes a close second. "Now nothing is more essential to an understanding of the worker's hankerings," Whiting Williams has concluded, "than this: *to him the job represents much the same type of liberties, assurances, and acknowledgements which wider-margined folk obtain, or hope to obtain, from more material forms of property.*" [1]

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* From *Partners in Production: A Basis for Labor-Management Understanding,* a Report by the Labor Committee of the Twentieth Century Fund (William H. Davis, Chairman, James A. Brownlow, William L. Chenery, Howard Coonley, Herbert W. Payne, Sumner H. Slichter, Herman W. Steinkraus, and Edwin E. Witte). New York: The Twentieth Century Fund, assisted by Osgood Nichols, 1949, Chap. 2, "The Goals and Attitudes of Labor and Management," pp. 51-55. Copyright, Twentieth Century Fund. Reprinted by permission of the publisher.

[1] Williams, W., *Mainsprings of Men.* New York: Charles Scribner's Sons, 1925, p. 71.

Peter Drucker, in his series of articles in *Harper's Magazine*,[2] listed the following four prerequisites to worker satisfaction in this regard: (1) he must understand what he is doing and be interested; (2) he must understand what is going on around him; (3) he must feel a real member of the working community; (4) he must get recognition, prestige and a chance to participate in the government of this community.

THE HAWTHORNE EXPERIMENT

These conclusions were based, not only on Mr. Drucker's observations as a student of industry, but also on what happened at the Hawthorne Plant of Western Electric in the remarkable Period XII of the investigation mentioned earlier. This experiment was described briefly by F. J. Roethlisberger, one of the investigators, as follows:

> The idea was very simple: A group of five girls were placed in a separate room where their conditions of work could be carefully controlled, where their output could be measured, and where they could be closely observed. It was decided to introduce at specific intervals different changes in working conditions to see what effect these innovations had on output. Also, records were kept, such as the temperature and humidity of the room, the number of hours each girl slept at night, the kind and amount of food she ate for breakfast, lunch and dinner. Output was carefully measured, the time it took each girl to assemble a telephone relay of approximately forty parts (roughly a minute) being automatically recorded each time; quality records were kept; each girl had a physical examination at regular intervals.

Under these conditions of close observation the girls were studied for a period of five years. Literally tons of material were collected. Probably nowhere in the world has so much material been collected about a small group of workers for such a long period of time.[3]

The investigators, operating on the theory that fatigue and output were directly related, introduced, one after another, a series

[2] November and December, 1946; January, 1947.

[3] Roethlisberger, F. J., *Management and Morale*. Cambridge: Harvard University Press, 1941, pp. 11-12.

of improvements in working conditions. Each time, prior to the change, the girls were consulted. First, two five-minute rest periods were introduced, then they were lengthened. Then the workday was decreased half an hour, and later by one hour. As conditions of work improved, output rose steadily, from less than 2,500 units a week to more than 2,800. Then, in Period XII, all the improvements were taken away. Instead of dropping sharply, output rose further to its highest peak—2,900 units a week. And in the whole of Period XII, which lasted twelve weeks, there was no downward trend.

The conditions under which the experiment was conducted had so revolutionized the situation in the room that output rose without any perceptible effort on the part of the girls, who actually felt less fatigued. Their personal lives and opinions were of interest to their supervisors, they had created a cooperating social group, but, most of all, their work had meaning and importance to them. Among the conclusions drawn by Roethlisberger were the following:

> Most of us want the satisfaction that comes from being accepted and recognized as people of worth by our friends and work associates. Money is only a small part of this social recognition . . . We all want tangible evidence of our social importance. We want to have a skill that is socially recognized as useful. We want the feeling of security that comes not so much from the amount of money we have in the bank as from being an accepted member of a group. A man whose job is without social function is like a man without a country; the activity to which he has to give the major portion of his life is robbed of all human meaning and significance.[4]

A SENSE OF USEFULNESS

Dostoevsky in *The House of the Dead* had this to say on the subject of the meaning of work:

> If it were desired to reduce a man to nothing—to punish him atrociously, to crush him in such a manner that the most hardened murderer

[4] Roethlisberger, F. J., *Management and Morale*. Cambridge: Harvard University Press, 1941, pp. 24-25.

would tremble before such punishment—it would be necessary only to give his work a character of complete uselessness . . .

Let him be constrained to pour water from one vessel into another, or to carry earth from one place to another and back again, then I am persuaded that at the end of a few days the prisoner would strangle himself or commit a thousand crimes punishable with death, rather than live in such an abject condition and endure such torments.

The division of labor brought by the Industrial Revolution has not made jobs meaningless, it has just made exceedingly more difficult the task of imparting meaning to the daily stint of the average worker. A lot of sentiment has been wasted on the assembly-line worker who performs only one operation all day long. There is little persuasive evidence that his plight is worse than that of the average laborer of a century and a half ago. In fact, there are far more varied occupations open to him than ever before and the work is less arduous. The evidence also seems to show that repetitive work under modern factory conditions has more friends than enemies among those who do it.

But it is true that the average employee wants to understand how his particular job fits into the whole. This was proved during the war when morale spurted every time the army or navy explained to those involved the concrete use to which their products were being put at the fighting front or behind the lines.

It is not enough that a man is a functioning part of a useful effort. He must be told about it and understand it in detail. Those on the final assembly line of an automobile factory can perhaps get the same satisfaction a wagon builder got when a customer drove off with his creation. But the countless thousands in the inner recesses of the factory and back in the parts plants derive no such fulfillment.

45. DELINQUENCY

Outstanding studies of delinquency have been made by social scientists such as Sheldon and Eleanor Glueck, William Healy and Augusta Bronner, J. B. Maller, Clifford R. Shaw, Henry D. McKay, Harry Manuel Shulman. Although the psychologist quoted below is not reporting contributions of her own, she summarizes some of the significant findings of other students of the problem, such as those mentioned above. The selection deals primarily with the characteristics of a *"delinquent" environment,* but it should be emphasized that *other-than-environmental factors should also be taken into account.*

CHARACTERISTICS OF A "DELINQUENT" ENVIRONMENT *

Luella Cole

Three elements in the total social situation seem to be of utmost importance in conditioning the behavior of delinquents—the home, the neighborhood, and the school. Because of their outstanding importance they will be dealt with in some detail.

1. THE DELINQUENT HOME

Homes may be characterized from various points of view, all of which deserve consideration. The most obvious characteristic of a home is its physical condition. Out of 734 delinquent children studied by one investigator, 62 per cent lived in homes in which the physical conditions were distinctly poor; 25 per cent

* From *Psychology of Adolescence,* by Luella Cole. New York: Rinehart & Company, Inc., 1948 (3d ed.), Chap. 10, "Delinquency," pp. 319-326. Copyright, Rinehart & Company, Inc. Reprinted by permission of the publisher and author.

came from homes of fair condition, and only 13 per cent from homes that were sanitary, well equipped, and reasonably prosperous.[1] In general, the homes of delinquents are in old houses or tenements where the rent is low; these dwellings are overcrowded and dirty. The moral tone of a home shows an even closer relationship to delinquency. Of 908 delinquents, 74 per cent lived in homes where the moral tone was bad, 19 per cent in homes of fair moral level, and only 7 per cent in really good homes. The moral condition of these homes is further shown by the fact that in 84 per cent of the cases, some member of the immediate family was also delinquent—one parent, both parents, or one or more siblings. In 52 per cent of the cases, one or more members of the immediate family was insane, feeble-minded, epileptic, or syphilitic; such defects were suspected in the families of another 30 per cent. In another investigation,[2] of 1,343 children who were problems in school, 77 per cent came from homes in which one or both parents were of low-grade mentality, illiterate, diseased, or immoral. Still another study contributes the following figures about the homes of 143 delinquents:[3]

TABLE 1

HOME CONDITIONS OF DELINQUENT CHILDREN

Number of homes	
36	Both parents uneducated
10	Both parents subnormal
20	One parent with criminal record
26	One parent heavily alcoholic
13	One parent vicious
36	One or both parents of low ethical standards
58	One or both parents of poor emotional control
21	One or both parents neurotic or psychotic

From the above data it is clear that delinquents are more likely than not to come from poorly equipped homes, in which the par-

[1] Glueck, S. S., and Glueck, E. T., *One Thousand Juvenile Delinquents.* Cambridge: Harvard University Press, 1934.

[2] Williams, H. D., "Survey of Predelinquent School Children in Ten Midwestern Cities," *Journal of Educational Psychology,* 1934, Vol. 7, pp. 365-370.

[3] Healy, W., and Bronner, A. F., *New Light on Delinquency and Its Treatment.* New Haven: Yale University Press, 1936.

ents are of low capacity, inferior economic status, and questionable morals.

There are three additional undesirable characteristics of the homes that produce delinquents. The first is the incompleteness of the family circle; that is, the home is broken by the absence of one of the parents. In present-day society 1 child in 9, or 11 per cent, grows up in a home that lacks either father or mother. If the proportion were the same for delinquents, only 11 in each 100 would come from such homes, but actually over half of them do. The breaking of the normal family constellation therefore appears to be influential in producing delinquents.[4] Frequently children in such homes are brought up to detest one of their parents. A second characteristic concerns home discipline. In 70 per cent of the homes examined in one study, discipline was sadly lacking, quite unsound, or so uneven that the children never knew what to expect. The third element was the neglect or rejection of the child by his parents. Some children were simply not wanted, and their parents never ceased to resent their arrival. In other cases, a child's early, minor, normal misdeeds met with shocked surprise and temporary parental rejection, which in turn stimulated the child to transfer his emotional attachment to his friends and to resent his parents' attitude. Each undesirable act on his part calls forth more rejection, and each rejection produces more resentment and subsequently more misdeeds.[5] In other instances the child is merely neglected and allowed to run wild. Such homes do not offer children the security that any child needs. The parents of delinquents are evidently people who have little control over themselves and even less over their children.[6]

An interesting comparison revealed differences between boys from juvenile court and college students who had, in their pre-college days, committed the same offenses but without being

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[4] Anonymous, "One Child in Nine in a Broken Home," *Statistical Bulletin of the Metropolitan Life Insurance Company*, 1944, Vol. 25, pp. 3-6.

[5] Foulds, G., "The Child-Family Relationship and the Frustration Types among Mental Defective Juvenile Delinquents," *British Journal of Psychololgy*, 1945, Vol. 20, pp. 255-260, and Zucker, H. H., "Affectional Identification and Crime," *Archives of Psychology*, 1943, No. 286, 60 pp.

[6] Sullenger, T. E., "Juvenile Delinquency, a Product of the Home," *Journal of Criminal Law and Criminology*, 1934, Vol. 24, pp. 1088-1092.

brought into court.[7] The college boys showed a history of acceptance by their parents and support by both home and community at the time of their offenses. The juvenile delinquents were friendless and rejected by their parents, and confused in their moral standards. Almost all adolescents get into difficulties, but those who are supported by parents and friends manage to weather the storm.

2. THE DELINQUENT NEIGHBORHOOD

During the last twenty years many studies have been made in various places to show the occurrence of delinquency in different areas of a city. The approach has been entirely pragmatic. Investigators have first taken a detailed map of the city or area under investigation and have tabulated upon it the location of those homes from which delinquents came. In all cases these homes centered in a few districts, sometimes in not more than two or three. Having located the critical neighborhoods in this way, the investigators next made a careful survey of these localities to determine the characteristics which differentiated them from other districts.

A map of New York City appears in Figure 1.[8] The number of juvenile court cases per thousand inhabitants is indicated by the different shadings. The blackest districts are the "delinquency areas," while the light districts are those in which the rate is lowest. Comparison of the districts having the highest and lowest delinquency rates gives the facts shown in Table 2, page 442.

Study of these delinquent areas in the many surveys that have been made indicates that they are of three general types: (1) business districts, (2) manufacturing districts, and (3) districts in which the nature of the population is changing. In no investigation was there more than a scattering of delinquents from strictly residential parts of a city.

A business district is typically a place where adults are busy

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[7] Porterfield, A. L., and Clifton, C. F., *Youth in Trouble: Studies in Delinquency and Despair, with Plans for Prevention*, Fort Worth, Tex.: Leo Potishman Foundation, 1946.

[8] Maller, J. B., "Juvenile Delinquency in New York City," *Journal of Psychology*, 1937, Vol. 3, pp. 1-25, p. 14.

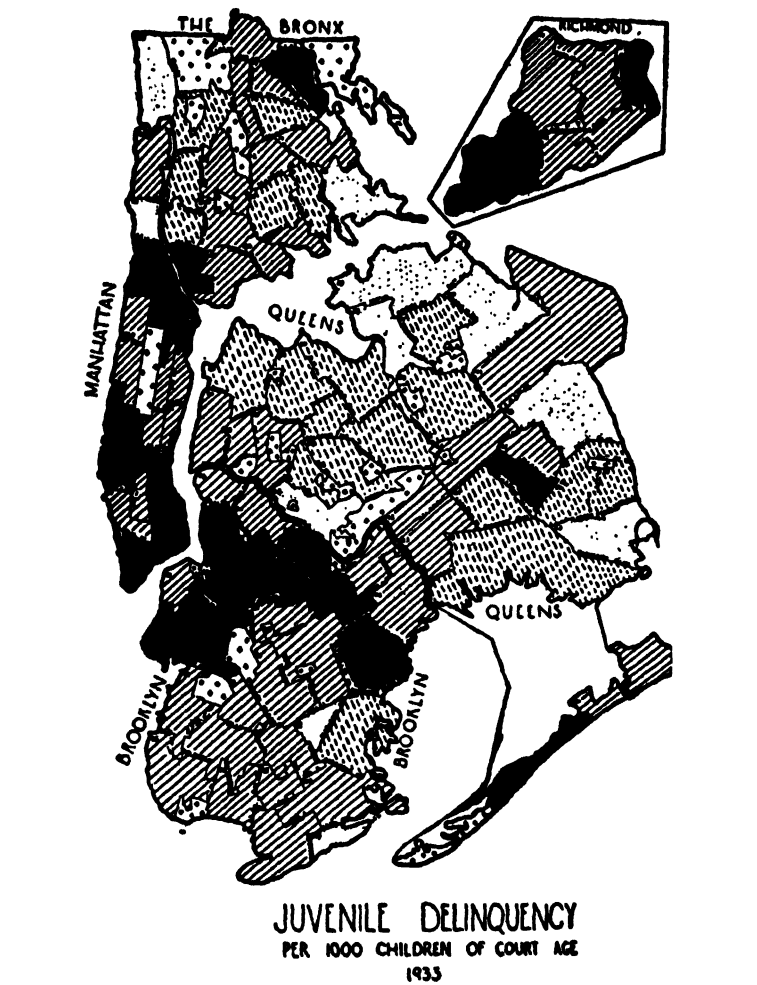


FIGURE 1. Neighborhoods of New York City. From J. B. Maller, "Juvenile Delinquency in New York City: A Summary of a Comprehensive Report," *The Journal of Psychology*, 1937, Vol. 3, pp. 1-25 (esp. p. 14). Used by permission of the *Journal*.

with work or amusement and have no time or attention for children. The adults there, except possibly policemen, feel no responsibility for what children are doing. Consequently, the youngsters have none of the supervision that comes to all children who are living or playing in a residential district, where the mothers especially pay attention to anything any child is doing. Manufacturing districts are not much more acceptable than business districts as places in which to bring up children. In the first place, the smells and sights are likely to be so unsavory that only those

TABLE 2

COMPARISON OF GOOD AND BAD NEIGHBORHOODS

HIGH DELINQUENCY AREAS ARE CHARACTERIZED BY	LOW DELINQUENCY AREAS ARE CHARACTERIZED BY
1) Excessive retardation of children in school (35%)	Moderate retardation of children in school (26%)
2) Low intelligence	Average intelligence
3) High birth rate and high infant mortality rate (83 per 1,000)	Low birth rate and average infant mortality (50 per 1,000)
4) Low rents ($40)	Average rents ($50)
5) Few automobiles owned (15 per 100 families)	Many automobiles owned (56 per 100 families)
6) Great overcrowding (223 people per acre)	No overcrowding (36 people per acre)
7) High adult crime rate	Low adult crime rate
8) Few Boy Scout troops	Many Boy Scout troops
9) Few copies of *The New York Times* sold	Many copies of *The New York Times* sold
10) Many tabloids sold	Few tabloids sold

who cannot afford to live elsewhere will live there. Only cheap houses are built, and the inhabitants are those who work in the near-by factories—mostly families of unskilled or semiskilled laborers. Recreational facilities for children are usually missing because the land is too valuable to be used for playgrounds. A business district usually abounds in forms of amusement intended for adults, but a factory district is rather worse in this respect because the amusements are of a lower type—poolrooms, cheap theaters with burlesque shows, houses of prostitution, saloons, men's "clubs," hangouts of gangs, and so on. Neither factory nor business district offers the protection or the normal outlets for activity that children need.

The third type of district presents a somewhat different problem. Suppose the houses in a few blocks have been tenanted primarily by Hungarians, for instance; while this situation lasts, there is formed a little, closed-in colony, the members of which feel responsible for its children. Suppose then these people begin to drift away—perhaps toward some new place where the men are employed. The cohesion begins to break up almost at once, and is further broken if, for example, Italians start moving into the vacated houses. If the process goes on and the neighborhood becomes entirely populated with Italians, there is again social cohesion. But during the period of the shift, the district is pulled apart by antagonistic social forces. The adults of the two groups do not get on with each other; the children inherit these antagonisms and develop competing gangs. The looseness of social control is furthered if the adults of both groups speak much less English than do their children. In any case, the neighborhood has lost one set of standards without acquiring another. While the change is in process it becomes an area in which the rate of delinquency is higher than the rate in near-by districts that are inhabited solidly by members of either nationality alone. Thus, in one study of two hundred sexually delinquent girls and their partners, it was found that over half the homes and places where sexual relations occurred were located on the boundaries of community areas, while 86 per cent were located on the boundaries of language areas.[9] Such data suggest that "mixed" districts—regardless of the elements entering into the mixture—are also unsettled districts, in which delinquency is likely to flourish.

Perhaps the outstanding characteristic of all these "bad" districts is that they offer no social cohesion, little protection, little supervision, and only warped outlets for childish activities. The "good" district presents the opposite picture. It is one in which there are social traditions, excellent protection (in the form of observant adults), and adequate outlets for the restlessness and emotional drives of childhood and adolescence.

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[9] Crook, E. B., "Cultural Marginality in Sexual Delinquency," *American Journal of Sociology*, 1934, Vol. 39, pp. 493-500.

3. THE DELINQUENT SCHOOL

The public school is in general a contributor to mental health rather than to delinquency, but there are still a few characteristics of the average school that may produce abnormal behavior. The chief adverse element is the nature of the curriculum. It must be remembered that the course of study is a cultural inheritance from a previous time. It has been modified, of course, until it is now a compromise. For children of average and more than average academic ability, the curriculum contains too little of its traditional material, and for those who are nonverbal and nonacademic it contains too much. The delinquent is typically a nonbookish, nonintellectual, nonacademic, nonverbal individual, who does poorly in the traditional school subjects. For instance, in a group of 761 delinquents, 44 per cent had repeated at least one term of school, as compared with 17 per cent of all other children in the same school.[10] About 60 per cent of these children expressed a definite dislike for school, and 34 per cent had been truants, as compared with 7 per cent among nondelinquents. The latter had a higher average intelligence, to be sure, but most of the former scored within the limits of normality. It is probable that these young delinquents experience a considerable degree of frustration in connection with their school life.

The school contributes unintentionally to delinquency because, instead of arranging a curriculum around those things to which a predelinquent child *will* pay attention, it tries to suppress such interests and to substitute a desire for academic learning. By now it is certainly evident that delinquent children soon revolt against the traditional school, and their best hope of salvation is lost. Neither their homes nor their neighborhoods are usually good enough to keep them stable. When they leave school they usually abandon the one constructive influence in their lives.

A "delinquent" environment consists, then, of three main elements: a home in which parents are ineffective in discipline, unsuccessful economically, unable to furnish emotional security to

[10] Kvaraceus, W. C., "Delinquency—A By-product of the School?" *School and Society*, 1944, Vol. 59, pp. 350-351.

their children, of not more than average native ability, of undesirable personal habits, and of questionable morality; a neighborhood that is devised for adults, quite without safeguards for children, and largely without safe outlets for emotional and social life; and a school that tries to make scholars out of nonacademic material. When all three elements are affecting the same unstable child at the same time, a delinquent is likely to be produced.

As should be appreciated by now, there is no single or simple cause for delinquency. It is a mode of life that arises from a complex set of circumstances, each of which adds its bit to the total picture of maladjustment. The main contributing factors are summarized in Table 3.

TABLE 3

FACTORS CONTRIBUTING TO DELINQUENCY

Inheritance	1)	Bad family stock—incidence of feeble-mindedness, insanity, epilepsy higher than in families of nondelinquents.
	2)	Defective mentality—average IQ of delinquent groups is 85 to 90 instead of 100.
	3)	Specific inability to handle verbal symbols, resulting in slow progress in school.
	4)	Unusual vitality, drive, and energy, resulting in restlessness, overactivity, and aggressiveness.
Home	5)	Poverty and crowding in home.
	6)	Delinquency and crime among parents or older siblings.
	7)	Home broken by death, separation, divorce, desertion, or prison term.
	8)	Lack of emotional security in home, high degree of tension.
	9)	Lack of proper or uniform discipline, lack of emotional stability in parents.
	10)	Rejection of child by parents, neglect of child, lack of interest in his activities.
School	11)	Poor work in school; one or more retardations.
	12)	Dislike of school.
	13)	More or less truancy.
Results	14)	Feelings of inferiority, of insecurity, of frustration.
	15)	Emotional and social immaturity.
	16)	Emotional family ties supplanted by those between child and his friends.
	17)	Aggressive drives turned toward parents, school, and society.

In a single case of delinquency these factors may appear in any of a multitude of combinations. Sometimes a child's stupidity and rebelliousness—present almost from birth—seem to be the main

elements that produced his delinquencies. In other instances, a child seems to have started life with normal ability and personality, but the pressures of his environment have distorted his original equilibrium. Some delinquents are frustrated and unhappy, but others seem quite contented with their lives as they are.

46. PREJUDICE

This selection is taken from three different chapters which deal with the development of *experimental* social psychology. Some of the more significant empirical studies are summarized of prejudices of white children concerning Negroes. Investigations of this type provide a useful background for understanding some of the social-psychological factors involved.

ATTITUDES OF WHITE CHILDREN TOWARD NEGROES *

Gardner Murphy, Lois Barclay Murphy and Theodore M. Newcomb

After observing from the results of adult attitude tests the high degree of generality of the individual white man's response to Negroes, Horowitz attempted to carry out a systematic study of the individual genesis of such attitude patterns.[1] Photographs of individual white and Negro boys, and photographs of social situations in which white boys, or white boys and colored boys together, were shown, were presented to white boys from the kindergarten age through the 8B

* From *Experimental Social Psychology: An Interpretation of Research upon the Socialization of the Individual*, by Gardner Murphy, Lois Barclay Murphy, and Theodore M. Newcomb. New York: Harper & Brothers (rev. ed.), 1937, Chap. 4, "The Learning Process in Social Situations"; Chap. 5, "Methods of Studying the Social Behavior of Children"; and Chap. 6, "Development of Social Behavior in a Social Context: Age Levels, Traits, and the Social Situation," pp. 239-241, 283, and 371-372. Copyright, Harper & Brothers. Reprinted by permission of the publisher and authors.

[1] Horowitz, E. L., "The Development of Attitude Toward the Negro," *Archives of Psychology*, 1936, No. 194.

grade. In the "ranks test," the child simply indicated his order of preference from among a mixed assortment of white and Negro faces; in the "show-me" test he indicated which individual boys he would like to bring home to lunch, with which ones he would like to play ball, etc.; in the "social situations test" he pointed out those play groups with which he would like to "join in." Prejudice as defined here is the degree to which one accepts members of one's own racial group, as contrasted with members of the other group. The form of the curve indicating increase in prejudice is somewhat different on the three tests; the point of chief interest is not the individual growth curve, but the change in the intercorrelations between the tests. Whereas at the kindergarten level the three tests correlate only slightly, the correlation increases through the eight-year period. A quantitative definition is thus given to the current concept of integration of attitude. To show prejudice on one test at the kindergarten level gives practically no prediction about prejudice on the other tests at the same level; but by the time the child has reached the 8B group the amount of his prejudice on one test goes a fair way toward predicting the amount of his prejudice on the other two. The child is, so to speak, freeing himself from the influence of the details of the specific situation; he is building up the generalized pro- or anti-Negro response already shown to exist at the adult level.

The next step in research obviously was to study more closely the factors responsible for the growth of prejudice. After preliminary work in various parts of New York City and in urban and rural Georgia and Tennessee, an intensive study was made of two Tennessee communities.[2] Participation for some months in the life of a small village made possible a more exact definition of the way in which the child learns the prejudice pattern stylized among members of the white community. The smallest children played freely with members of either race and, far from developing a consciousness of kind, had to be taught by progressively severe methods to leave these colored playmates alone. One of the

[2] Horowitz, E. L., and Horowitz, R. (unpublished study).

most frequent bases for "getting a whupping" was playing with Negro children. Terms of derogation were not sufficient to produce the racial cleavage. The fixed pattern of the adult had to be transferred at times by means of a birch rod. It becomes clear that the reported integration of attitude is nothing particularly mysterious; that it does not arise from the maturation of race consciousness, but simply from the increasing diversity and intensity of sanctions imposed on the child. (Clearly, *some* adult pressures *do* involve "coercion.")

This discovery led to a new set of test procedures in which the attitudes of white children toward Negro adults and children were seen in the light of the growth patterns already defined. Toward the end of the primary school period the pattern was so well defined that it affected not only conduct but perception, memory and imagination—it had all the "integration" which anyone could desire. Thus, pictures of a library scene containing only white persons were briefly exposed. Afterward the child was asked, "What was the colored man doing?" In the children's reports he was never reading a book, never seated at a table; he was always dusting the books or sweeping the floor. He was fulfilling the rôle which his inferior position in the group demanded. In spontaneous as well as in experimental situations, the child's structuring of his world according to the adult norm is exhibited. "Where do you live?" "Fifth house from the station." Examination showed that the child's house was seventh from the station, but two belonged to Negro families. Much of the observation, memory and thought of the child toward the end of the primary school period is structured to meet social requirements. In the case just quoted, the child did not actively repress memory of the two Negro homes; these were merely irrelevant to the structure about which the white adult was inquiring. It is quite evident that studies of the psychology of testimony, as Bartlett[8] has well shown, need consideration of the social norms which guide and control the development not only of the response pattern but of the entire intellectual life as well.

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[8] Bartlett, F. C., *Remembering*, 1932, pp. 247 following.

The usefulness of pictorial material is also apparent in the attempt to tap the various *stages of development* of a social attitude such as the attitude of white children toward the Negro. Subjects in a nursery school in which there were both white and Negro children were asked to identify by name a series of portraits in which both white and colored faces appeared. None of the pictures was an actual portrait of a child in the nursery school; yet it was soon evident that in making their identification the subjects showed an awareness of race to the extent of giving to the colored faces the names of Negro children. Also when asked to identify faces in the series by such a question as "Is this ——?" (using the name of the child being interviewed), white children refused to identify themselves with the pictures of colored children, although they were quite willing to lend their names to pictures of other white children.

The nature of the process of parental mediation of attitudes is demonstrated by E. and R. Horowitz,[4] who have studied various aspects of the formation of attitudes and patterns of behavior among rural Tennessee children. The content of the study relates to race attitudes, but the chief concern is with the *way* in which the child grasps and assimilates the parental outlook.

Among the questions asked in interviews with elementary school children were the following: "Who tells you what you should do?" "What kind of children does she like you to play with?" "What kind of children does she tell you not to play with?" The white children said that they were told to play with white children, and a variety of reasons were given. Some of the youngest children explained: "Because he's white and I'm white." "Because the white boy is white and a colored boy is black." A somewhat more articulate sense of the presence of a social norm is implied in these responses of third- and fourth-grade children: "It looks funny for a white girl to play with a colored girl." "We don't look right playing with her." "Colored people might have any kind of disease or anything."

The older the children grew, the more consistently had they assimilated these attitudes:

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[4] Horowitz and Horowitz, same citation as footnote 2.

1ST-GRADE GIRL: Mamma tells me not to play with black children, keep away from them. Mamma tells me, she told me not to play with them. (Why not). Mother don't want me to.

2ND-GRADE GIRL: Colored children. Mother doesn't want me to play with colored children, cause they colored men. Might have pneumonia if you play with them. I play with colored children sometimes and mamma whips me.

2ND-GRADE BOY: Colored children, mother and daddy tell me. They tell me not to play with colored people or colored person's things.

Parents, on the other hand, tended to minimize the rôle they played in the development of children's attitudes. They felt that children were *naïve* about race distinctions, that they had never done anything to influence the children and that the children were spontaneously discriminating. The contrast between the parents' account and the child's account of pressure may be illustrated by the following characteristic remarks:

MOTHER: T——— always played with other children. Yes, I used to tell her not to play with some. Just told her, never gave her any reasons. She never played with Negro children, I didn't have to tell her *that*.

CHILD (3RD GRADE, GIRL). White girl. Colored people have dirty houses, they're dirty. Everybody gets dirty, but they keep their hands *so* dirty. Mother told me not to play with them because sometimes they have diseases and germs and you get it from them. I had a colored girl friend who worked for mother, she was a nice clean girl. I liked her but mother didn't much want me to play with her, but I told mother she was all right.

The authors suggest that the fact that parents cannot recall having given direct instruction and that frequently children cannot recall having received it may be very important in the process of development of social attitudes and social behavior. Children go through a process which involves, first, being well aware of the origins of attitudes, particularly those that are imposed by the most important authorities; then they gradually forget the origins, but devise rationalizations to support them and maintain them unchanged.

This analysis gives insight into certain meanings of the word "propaganda." Too often this term has been treated as if it had only "bad" or sinister implications, with so-called "good" propaganda neglected. Here are some suggestions of how a *systematic* and *positive* portrayal of the United States may be presented to the rest of the world.

PRESENTING AMERICA IN AMERICAN PROPAGANDA*

H. M. Spitzer

Today the United States is the most powerful country in the world. This would seem an enviable position. But a position likely to arouse envy is not necessarily a desirable one. Even if maintained with great prudence it is apt to invite the hostility of other countries which are less fortunate. In the interest of both the United States and the peace of the world, the arousal of such hostile attitudes must be prevented.

The way to do this is by psychological action which may take a multitude of forms. One of these, and by no means the least important, is the directed dissemination of information about each nation to all the other nations of the world. Direction is necessary in order to give proper weight to the elements which the nations have in common and to counteract the natural tendency to stress differences. Good and friendly relations between nations depend, like those between individuals, on the extent to which identifications take place; in other words, on how far they are able to see themselves in one another.

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* From "Presenting America in American Propaganda," by H. M. Spitzer, *The Public Opinion Quarterly*, 1947, Vol. II, pp. 215-221. Copyright, Princeton University Press. Reprinted by permission of the publisher and author.

Any nation desirous to contribute to the peace of the world should regard it as a national duty to see to it that the rest of the world is presented with a picture of that nation which invites and favors identifications. That such a picture must not contain anything which is untrue goes without saying. The picture will differ from one arrived at haphazardly in that it will place less stress on the more sensational traits which tend to be overemphasized by the casual observer and will try to knit virtues and weaknesses into a whole, showing the one as the reverse aspect of the other. Where the fortuitous picture shows contrasts, the directed one will show gradations; it will focus attention on national qualities which are more or less permanent rather than on the transitory conflicts which spring from such qualities.

AMERICA—AN ENIGMA

How should such a picture of the American nation be drawn? There can be no doubt that America is not and for quite a long time has not been very well understood abroad. In a world of countries that have grown haphazardly, that have developed slowly and that are deeply entangled in the trammels of the past, a young country, made up of immigrants from all nations, with different historical traditions, eager to discard traditions, devoted to the idea of economic and technical progress and in these fields successful beyond measure, is an enigma, but unfortunately also an object of envy and potential dislike.

This enigma must be dispelled, but it cannot be dispelled unless Americans themselves have a clear conception of the picture they wish to present, of the reaction which its lines are likely to provoke among people in other civilizations, and of the manner in which the picture can be presented to them. No single person can be expected to produce such a picture; there are too many traits that have to be included in it and given the right emphasis. It can only be the work of a group, composed of both Americans and foreigners. For though Americans will know their country best, they may find it difficult, and perhaps difficult in proportion to their knowledge, to present its portrait to people accustomed to the ways and valuations of other civilizations. The traits set down in the following paragraphs thus do not pretend to being

more than a possible starting point for such a collective enterprise. They are a condensation of both American thought and of foreigners' impressions. They have been picked somewhat haphazardly. If found correct and suitable they should be considered in their interrelation and with due emphasis on cardinal features.

A further point to be borne in mind is that the picture to be shown must be neither static nor all sweetness and light. Americans will be more easily believed and better understood if they speak of their own failures. Open recognition of failures will win sympathies by reducing the other nations' envy and by allowing them to feel superior in some respects; it will also lend more credence to American sincerity in the pursuit of American ideals. This is a general caution. If the present paper does not enter upon this aspect, it is because the author does not consider himself competent to deal with it; he realizes its importance but believes that this would be a task for a native American who possesses a natural feeling of the inner connection between weakness and strength rather than for somebody who came to America in middle age.

Attention to change is important because any new picture to be shown may have to oust one that is already in existence; yesterday's truth may not be the truth of today, and insistence on change as an essential feature of the life of nations as well as that of individuals may prove a necessary first step in rooting out established prejudice.

SUGGESTED CONTENTS OF AN AMERICAN PORTRAIT

Freedom of speech. The trait to be put before all. others should perhaps be America's insistence on freedom of speech. The inclination to grumble is a general trait of all mankind, and no dictatorship has succeeded in its attempts to suppress it. But while it acts as a destructive dissolvent in authoritarian states, Americans have managed to harness it as a positive force which fills at least some visitors with awe and envy. The freedom of discussion concerning most topics, the readiness with which Americans criticize government and government officials, the appearance of private citizens before congressional committees to voice their demands and ideas, are things that make a deep impression

not only upon Oriental visitors but upon people from Europe as well. Many of their governments used to assess it as America's chief weakness and genuinely failed to realize that it is the main source of American strength and the quality upon which democratic processes rely. Of course, there must be readiness to admit that there are limitations to the freedom of speech in this country, that there are topics which are barred, although their number may be declining, and that organized and misguided interests exist which try to limit this freedom.

Feeling of fellowship. Next in order might be placed fellow-feeling for the rest of mankind. Americans like all other people should of course be the first to admit that this feeling is strongest for the people that are closest to them and that it shades off at the edges of the world where creed and color become too different and make it difficult to feel oneself as one of their number. This psychological handicap which consists in the difficulty of identifying oneself with people that look and behave differently is by far the most acceptable explanation of America's domestic color problem; Chinese friends and Japanese enemies were not better in this respect when they had the power to lay down the terms of their intercourse with other nations. But America can point to a very good record of attempts to overcome this handicap and to make the equality stipulated in the Constitution come true. Moreover, there is the record of American philanthropy which matches that of any other nation, and to which both friends and enemies can bear witness.

Moral view of life. Next and in connection with the trait just mentioned might come America's fundamental view of life which envisages life as a moral problem. This, rather than metaphysical speculation, is the essential aspect of American religiosity, and while it might not appeal so much to Europe, it should strongly appeal to certain parts of the East and strike a familiar note in both China and Japan. Insistence upon America's valuation of morality and efforts to make clear where moral concepts are alike and where they differ and why, should do very much to improve both human and political relations with the East. It would help with Europe, too, for it would explain the American valuation of success which, especially in Catholic countries, is apt to lay

America open to the charge of gross materialism; Protestants are more capable of visualizing earthly success as the mark of approval bestowed by the Lord.

Freedom of opportunity. A different range of characteristics is bound up with physical circumstances. America has for many generations been the land of opportunity and that fact has moulded the American outlook on life. Even now, when opportunities have been limited by the gradual filling up of the country and by the growth of vested interests in the form of large-scale business and of labor unions and perhaps also by a traditional conservatism, Americans still conceive of the freedom of opportunity as a fundamental right of man and endeavor to uphold it through legislative and administrative measures, through the provision of unlimited possibilities of free education, and through individual resistance to the growth of class barriers. This feature is one which exerts an almost universal appeal and it would be wise to stress it as a part of the outlook which America is preserving, although its physical substratum is disappearing.

Optimism. Insistence on freedom of opportunity is accompanied by a fundamental attitude of optimism which Americans tend to bring to all tasks they undertake. That optimism is a potent aid to success is an established psychological fact and the material development of America furnishes proof of it. Nevertheless, optimism presents a delicate problem where American participation in world affairs is concerned. It has been a handicap when it came to envisaging the more distant future of the world community, especially the part of the future which called for collective action. On the other hand, treatment of this trait furnishes an occasion for making other nations conscious of their qualities by admitting the foresight and cohesion of some of the smaller nations whose record in handling their collective affairs might be justifiably envied.

Rationality and curiosity. Another trait that marks American civilization is the fundamental belief in and the high valuation of rationality. This is coupled with a sincere intellectual curiosity. These two traits have helped towards the economic achievements of the past and they are something that sooner or later is bound to lead America back to the right path should she go astray. Curi-

osity is a trait that should appeal to Orientals in countries where asking questions is one of the fundamental forms of politeness, while the valuation of rationality is shared by many Europeans, especially by the French. It is true that these traits separate America from other countries, especially from the British Commonwealth, and it is therefore wise to put them into the foreground as a fundamental difference in any statement directed to them. A frank proclaiming of differences is apt to circumvent much irritation and thus to decrease friction considerably.

Traits affecting America's relations with other countries. There exists a group of interconnected traits which are of prime importance for America's relations with the rest of the world. They are a strongly overcompensated inferiority complex, individualism, and specialization.

Americans are a young nation. It is true that they started life with the general European heritage, but they have rejected part of it from choice and part from necessity. Americans, whether born or made, wanted to get rid of the limitations imposed upon freedom by a tradition of social hierarchy and of conformity. They were fairly successful with the first, but less so with the second. They learned to recognize that no society can live without a great deal of conformity. They tried to achieve a balance, and today America shows perhaps more conformity in externals than any other country. But while people in the United States conform outwardly in response to social pressure, many of them have preserved a high degree of inner freedom which becomes manifest in their discussions.

There are special reasons for the insistence on conformity. Americans had to establish a social tradition of their own to hold them together. Other nations inherit traditions. The American people made theirs by conscious adoption and by the discarding of ideas which they brought with them from abroad. To many immigrants the American tradition was almost completely alien. Had America been an old nation and the number of immigrants small, the blending of traditions might have been left to chance. Being a young one, it had to hasten the process and was anxious to protect its new heritage. Hence the boasting commented upon by foreign visitors round the turn of the century which was only

America's way of quieting inner uncertainty, hence also the touchiness and readiness to expect slights, and finally the isolationism which served as protection against such slights. If willing to accept and admit this view, America could now point out that the last two wars have given the nation an assurance which enables it to do away with crutches and protective armor. Having reached maturity America can lay herself open to foreign cultural influences without fear of being swamped by them and with confidence in her ability to integrate them into her own civilization.

The final characteristic to be dealt with is American belief in the virtues of specialization. This is the key to some of the country's most typical achievements, not only in the industrial field where it has led to the large scale production of luxuries and conveniences for the common man, but also in the field of scientific research. It is a trait which does not appeal equally to the various nations. It made America very popular in Germany, but it is liable to arouse misgivings in other countries as being potentially injurious to the indispensable sense of proportion. Hence its bearing on peaceful and amicable relations with the rest of the world should be emphasized. It implies recognition of the need for many skills and justifies diversity among the nations as it will ultimately justify diversity within the nation itself.

These, then, are some of the traits which might go into the making of a propaganda picture of America. They furnish only an incomplete picture. Apart from the intentional omissions referred to earlier, there are others which need supplying since they touch upon possible sources of misunderstanding with peoples of other cultures. Among them is the character of the American family and family relationships and, most notable, both the attitude toward success and the specifically American conception of the nature of success. But the present paper is only a first approach to the subject and does not aim at covering the whole range of the matter.

TRANSMITTING THE PORTRAIT

A few words should, however, be said on the manner in which such a picture might be presented to the rest of the world. Implied in all that has been said so far is the guiding idea that any

statement coming from America should make clear what the nation is striving after and not insist overmuch on the nation's achievements.

But in what form are such statements to be made? There are no doubt people to whom they could be presented in essay form on the lines traced above, but such people are a small minority and it is not the minority that matters for this purpose. For although the members of this minority may be the people who guide the nations' destinies, they are not free to guide them at will, but are limited by the outlook of the common man in their countries. It is the common man in whom the picture must touch a responsive chord.

To this end the outline given above must be translated into terms of common everyday experience. A way of doing this would be to show situations which may happen or are certain to happen to everybody and to show what shape they take in different countries. We all may be involved in an accident, we all may have to appear before a court of law, we all have to go to school, we all may find ourselves out of work or out of funds. What is the experience of John Smith in New York in such a case and how does it contrast with that of Ken Watanabe in Tokyo or of Wang San Tzu in Peiping, with that of Jean Dubois in Paris or of Erik Johansson in Stockholm?

Presentation in this form would be possible in most of the current media. It could be made in the spoken words of a radio talk or play, in the written words of a magazine article, or possibly in the picture form of the comic strip or film. In any of these shapes it could be made graphic enough to be absorbed and understood even by the most simple and unsophisticated people.

The following account of "radio war" during World War II is a concrete example of the importance of psychological warfare. In another part of the same book from which the excerpt below is taken, the author defines *propaganda* as consisting of "the planned use of any form of public or mass-produced communication designed to affect the minds and emotions of a given group for a specific purpose, whether military, economic, or political." In this connection, compare Selection 47, *Propaganda,* pages 452-459.

THE BRITISH-GERMAN RADIO WAR *

Paul M. A. Linebarger

With the outbreak of war the British and Germans found radio at hand. Neither had to change broadcasting policies a great deal. Each could reach almost all of Europe on standard-wave; each could jam the other's wave lengths, never with complete success, and the struggle centered around a contest for attention. Who could get the most attention? Who could get the most credence? Who could affect the beliefs, emotions, loyalties of friendly, neutral, and enemy listeners the most?

The Germans showed evidence of real planning. Their public relations facilities were perfectly geared to their propaganda facilities. When the Germans wanted to build the British up for a let-down, they withheld military news favorable to themselves. During the fight for Norway, they even spread rumors of British

* From *Psychological Warfare,* by Paul M. A. Linebarger. Washington, D.C.: Infantry Journal Press, 1948, Chap. 6, "Psychological Warfare in World War II," pp. 81-88. Copyright, Paul M. A. Linebarger. Reprinted by permission of the publisher and author.

successes, knowing that if British morale went up for a day or two, it would come down all the harder when authentic bad news came through the War Office. When the Germans wanted to turn on a war of nerves, their controlled press screamed against the victim; when they turned it off their press was silent. The Germans thus had the advantage of not needing to make much distinction between news, publicity, and propaganda. All three served the same purpose, the immediate needs of the Reich.

The Germans put on the following types of news propaganda:

(1) Official OKW (*Oberkommando der Wehrmacht,* or *Wehrmacht* HQ) communiqués. (These rarely departed from the truth, though they naturally gave favorable situations in detail and unfavorable ones scantily.)

(2) Official government releases, marked by considerable dignity, possessing more political content than the military communiqués.

(3) News of the world, part of it repeated from the British radio, part plain non-controversial news (for stuffing), and part (the most important part) news of genuine curiosity value to the listeners but which, at the same time, had the propaganda effect of damaging belief in the Allied cause.

(4) Feature items, comparable to feature articles in newspapers, which tried to concentrate on a single topic or theme.

(5) Recognized commentators, speaking openly and officially.

(6) Pseudonymous commentators, pretending to speak from a viewpoint different from that of the German Government, but who were announced as being broadcast over the official German radio system. (Of these the British traitor William Joyce, since hanged, known as "Lord Haw Haw," was the most notorious. His colleagues were the American traitors Fred Kaltenbach and Douglas Chandler. At the end of the war Chandler was tried in Boston and sentenced to life imprisonment but Kaltenbach fell into Soviet custody and died.)

(7) Falsified stations, which pretended to have nothing at all to do with Germany. (The "New British Broadcasting Company" transmitted defeatist propaganda with a superficial anti-German tone. Others took a strong Communist line and sought to build up opposition to the British government within England.)

(8) Falsified quotations on the official German radio. (Sometimes it was easier to make up an imaginary foreign source, ostensibly quoted in the German program, rather than to set up a special fake program for the purpose.)

(9) "Planted" news sources quoted on the German radio. (A great deal of the German news was culled out of Swedish, Spanish and other papers which were either secretly German-controlled or which—as in the case of the United States papers involved—were so sympathetic to Germany that they voluntarily printed German-inspired news which the Nazis could then quote from a "neutral" or "enemy" source.)

(10) Open falsification of BBC (British Broadcasting Company, the official British agency) materials—at which the Germans were not necessarily caught by their ordinary listeners, but at which BBC caught them.

(11) Ghost voices and ghost programs, transmitted on legitimate Allied wave lengths when the Allied transmitters went off the air, or else interrupting the Allied broadcasts by transmitting simultaneously.

Of all these, it was soon found that the communiqués and government releases were the most important, although the bulk of the station time had to be diversified with other types of program. The Germans and British both found that radio was important as a starting point for news. It was more valuable to have the press (as in England) or rumor (as in Germany) pass along an item than it was to rely on the direct listeners. Each side sought to make opinion analyses of the enemy; some of the British studies were clever in technique. The radio propagandists had to ask themselves *why* they made propaganda. It is simple to make mischief, spreading rumors or putting practical jokes into circulation. Such antics do not necessarily advance a military-political cause. Sustained psychological warfare required—as both British and German radio soon found out—a deliberate calculation of the particular enemy frame of mind to be cultivated over a long period of time. When radio stations had to broadcast day after day whether anything happened or not, it became difficult to continue to circulate news without faking it and losing the confidence of enemy listeners.

On the German side, the German radio had the forced attention of the entire world. As long as the Germans had the strategic initiative for field warfare, they were in a position to make news scoops whenever it suited them. The security policies of the Allies often gave the Germans a monopoly of news on a given operation. There was never any danger that the Germans were not listened in on; the danger the Nazi operators had to worry about was disbelief. Hence the Germans tried to keep a moderate tone in their news, tried to prepare between crises for the news that would become sensational during crises.

The Germans soon learned a basic principle of war radio. They learned not to permit radio to run ahead of their military capacities. At first, when their spokesmen promised attainment of a given goal by a given time, and the army failed to live up to the schedule, the British radio picked up the unfulfilled promise and dangled it before the world as proof that the Germans were weakening. The Germans thereupon effected Army-radio liaison so that the radio people could promise only those things which the army was reasonably sure of delivering. (When Allied propaganda analysis woke up to this fact, it added one more source of corroboratory intelligence to be checked.)

The British had their hands full getting news out in the languages of the occupied countries. It was immensely difficult for them to follow the politics of the underground. German counter-espionage, under the deadly *Sicherheitsdienst,* made it difficult to keep track of opinion in the occupied countries. Work against Naziism depended on the temper of the peoplė; propaganda against collaborators had to distinguish between outright evil collaborators and those public officials who stayed on out of a sense of mistaken or necessary duty. The British did not necessarily announce themselves at any time as anti-Communist, and collaborated for short-range purposes with Communists all over the Continent. Mr. Churchill himself shifted his North Balkan political support from Mikhailovich to Broz-Tito. But it was vitally necessary to know just how and when to change support from one group to the other. Since the undergrounds had very few radio transmitters, and none of these was reliable during most of the war, the British faced the task of providing radio facilities

for all of the occupied countries. The consequence was to make their radio warfare highly sensitive to politics; they had to address the right people with the right language at the right time, on penalty of failure.

To effect this end, the British set up an agency which never had an American counterpart, the Political Warfare Executive (known by its initials, PWE). This agency had representation from the War Office, the Admiralty, the Foreign Office, and the Ministry of Information. The PWE was the policy-servicing and coordinating agency for all British external propaganda, and left the execution of its operations to the Ministry of Information (MOI) and to the British Broadcasting Corporation (BBC). British radio propaganda maintained a high level of effectiveness. American officials and propagandists often complained that the British were running the entire war in their own national interest. The charge was unjust. The British had facilities for knowing exactly what they wished to do and when they wished to do it. If the Americans came along without clear policies or propaganda purposes, it was natural that the British should take the lead and let the Americans string along if they wished. Furthermore, the British were usually scrupulous in yielding to America's primary interest in areas they felt to be American problems—Japan, China, the Philippines. They were least cooperative when the OWI tried to spread the ideals of Mr. Henry Wallace in Burma or to explain the CIO-PAC to the Hindus.

No clear victor emerged from the Anglo-German radio war; the victory of the United Nations gave the British the last say. In the opinion of many, the British were one war ahead of the United States. They had profited by their World War I experience, and by their two years' operational lead which they had on the Americans. But side-by-side with the Germans, it is harder to appraise their net achievements. The British had immense political advantages; the resentment of a conquered continent worked for them. But they had disadvantages too. The enemy worked from the starting point of a fanatical and revolutionary philosophy; the British had the tedious old world to offer. The postwar interrogations of civilians in Germany showed that an amazingly high proportion of them had heard BBC broadcasts, and that

many of the ideas and attitudes which the British propagandized were actually transmitted to the enemy. On the British side, it is almost impossible to find any surviving traces of the effect of Nazi propaganda. Had the war been purely a radio war this test might be conclusive. But if psychological warfare supplements combat, combat certainly supplements propaganda. The great British and American air raids over Europe unquestionably created an intense interest in British and American plans and purposes.

49. PUBLIC OPINION

This is a chapter from a book, based on a report prepared for the "Committee on Social and Economic Aspects of Atomic Energy" of the Social Science Research Council. The book is primarily a summary of a study made in 1946 of American attitudes regarding foreign affairs, especially in relation to the atomic bomb. The survey was based on a national cross-section sample. One of the important aspects of public opinion—"let the government worry"—is illustrated here. There is an enormous *psychological distance* between the citizens of our democracy and many of the world issues that concern our elected and appointed leaders.

ARE THE PEOPLE CONCERNED? *

Leonard S. Cottrell, Jr.
and
Sylvia Eberhart

Evidences that the people are not deeply concerned about the atomic bomb problem are made doubly perplexing by the pessimism they display regarding the prospects for averting another world war. Polls by the National Opinion Research Center, Gallup, and other organizations indicate that since the first few months after the end of the war there has been an increase in the belief that there will be another war within twenty-five or even ten years. In the summer of 1946, according to these polls, about two-thirds of the people said they expected another war, involving the United States, within twenty-

* From *American Opinion on World Affairs in the Atomic Age*, by Leonard S. Cottrell, Jr., and Sylvia Eberhart. Princeton: Princeton University Press, 1948, Chap. 3, "Are the People Concerned?" pp. 22-29. Copyright, Princeton University Press, 1948. Reprinted by permission of the publisher and authors.

five years, and half these people predicted that it would come within ten years. Such findings as these cannot be taken as evidences of genuine concern, but they are certainly symptomatic of widespread pessimism. Results from our own poll question confirm the conclusion that the public was on the whole decidedly pessimistic at that time. Confronted with the question, "Which of these statements comes closest to your own ideas?" and the following four alternative answers, almost half the people rejected the opportunity to choose even a temperately optimistic statement of the prospects for averting war:

25% chose "I think there is bound to be another world war within the next twenty-five years."
23% chose "Things certainly are bad now, and it looks as though they will get worse, so there may be another world war within twenty-five years."
37% chose "Things don't look too good now, but the nations will work out ways of getting along better, so there may not be another world war within 25 years."
11% chose "I do not think there will be another world war within twenty-five years."
4% could not choose among these statements.[1]

The twenty-five percent who chose the most pessimistic answer came preponderantly from the least well-informed segment of the population—people who gave evidence of having little or no acquaintance with news of international significance. It is quite clear that among such people the belief that another war is certain springs from general pessimism about the ways of the world rather than from an appraisal of actual events. They support their predictions by such arguments as that "there always has been war, and there always will be," or else by expressions of a basic suspicion and hostility toward foreign nations and foreign ways. It is notable that whereas on most questions involving the atomic

[1] A poll reported by *Fortune* in July 1946 put the question this way: "Do you think that there will probably be another big war during the next 25 or 30 years, or do you think there is a fairly good chance to avoid it?" Forty-one percent said that there would be a "big war," 49.6 percent that there was "a good chance to avoid it," 9.4 percent didn't know.

bomb from 25 to 40 percent of those characterized as poorly informed would venture no opinions, all but about 10 percent of such people expressed opinions in our poll regarding the prospects for war, and a third of them chose the most pessimistic statement.

Among better informed people, the statement most commonly chosen was one of qualified optimism: "The nations will work out ways of getting along better, so that there may not be another world war within twenty-five years." Undoubtedly many chose this statement out of hope, or out of loyalty to an idea, rather than because of conviction. The idea of international cooperation and international organization as a means of preventing war has taken a strong hold in the minds of the people who think much about international relations, and they are reluctant to discount its possibilities. "Sitting down and talking things over," "getting together and ironing out differences," compromising, and arbitrating appeal to Americans as ethical and reasonable ideas, and in addition no other course of action suggests itself so obviously for the avoidance of war. But in the process of international "talking things over" international disagreements are inevitably widely publicized, usually as evidences of a lack of cooperativeness and of unethical motives on the other fellow's part, and there is reason to ask whether the people's faith is sturdy enough to withstand these strains. Shifts in public opinion not only about the prospects of war, but also, for example, about the desirability of world organization appear to follow closely upon changes in the general tone of the international news, particularly with respect to Russia's behavior in United States-Russian conferences and in the UN.

What part does the atomic bomb play in people's thinking about war? Two-thirds of the sample in the polling survey said "yes" to the question, "Do you think there is real danger that atomic bombs will ever be used against the United States?" Only about 25 percent were willing to take the position that there was no danger of atomic bombing of the United States. Moreover, half those who acknowledged the possibility that the United States might be attacked said there was at least a fair degree of danger that members of their own families might be killed in

atomic bomb attacks. The small proportion who took a strongly optimistic view of the prospects for avoiding war for at least 25 years were somewhat less likely than the others to foresee a danger of atomic bombing of the United States, but even among them the predominant opinion was that the danger existed. On the other hand, people who asserted with great positiveness that we will be at war within that period were neither more nor less likely to say yes to the question about atomic bombings of the United States than those who tempered their predictions. A third of those who felt war is bound to come said either that the United States would never be subjected to atomic bomb attacks or else that they had no opinion on that question. Many poorly informed people, who tend to be most pessimistic about averting war, have no opinions on questions about the bomb. It might be expected that their pessimism would extend to the threat of atomic bombing also, for they have heard of the bomb, but apparently they give it little thought. Some whose pessimism about the duration of peace is based on a stereotyped suspicion of foreign countries have also a stereotyped opinion that foreign countries cannot equal our achievements and hence that they could not attack us with atomic bombs. Most people, however, even if they are hopeful that "the nations will work out ways of getting along," concede that the atomic bomb is a potential threat to us.

But there is a decided difference between acknowledging a dangerous possibility when attention is called to it and being acutely conscious of that possibility. The view that we might be attacked by atomic bombs is consistent with the view, accepted by the majority of the people, that we have no sure monopoly on the means of making the bombs. But that the danger may nevertheless appear simply hypothetical is suggested by the fact that our present exclusive possession of atomic bombs is ascendant in most people's minds over their acceptance of the judgment that this advantage is a temporary one. If the people were as apprehensive about the bomb as their recognition of its power and their pessimism about averting war may suggest, it is reasonable to suppose that the subject of the bomb would spring to the fore whenever they consider broad aspects of our international relations. But in intensive interviews about the UN

and about the role of the United States in the world, the majority of people make no reference to the bomb unless the interviewer specifically directs their attention toward it. In the first half of our intensive interview in August 1946, in which interviewers employed twenty-five open questions dealing with the UN, our international relations generally, and our relations with Russia in particular, but not alluding to the bomb, only one person out of six brought up that subject spontaneously.[2] These references were mainly to the desirability of our keeping the bomb secret, or to Russia's presumed envy or fear of our possession of atomic bombs. People who think at all specifically about our international relations think about Russia. "Foreign affairs" was almost synonymous with Russia in the interviews just referred to; half the people mentioned Russia before the interviewers did so. In the poll, in answers to direct questions, two-thirds of the people named Russia as the foreign country most likely to know or to learn soon how to make atomic bombs. But whereas it appears to be the case that when people think "war" their thoughts then move to "Russia," it does not appear to be the case that they move necessarily to "atomic bomb."

Undoubtedly if there were actual apprehension rather than simply pessimism about war, the atomic bomb would be a far livelier topic in people's thinking. The people are intellectually aware that the bomb is a possible threat, but the threat is not strongly felt. Their own explanations of why they do not "worry"

[2] Some of the questions were: "How satisfied are you with the way the United States has been getting along with other countries since the war ended? (Why?)" "Do you think the United States has made any mistakes in dealing with other countries since the end of the war? (What?)" "What do you think is the best thing that the United States could do to help keep peace in the world? (Why?)" "How about Russia—do you think the Russian Government is trying to cooperate with the rest of the world as much as it can? (Why?)" "Do you think we can count on the Russian Government to be friendly with us? (Why)" "How do you feel about the general idea of having an organization like the UN? (Why?)" "How successful do you think the UN will be in keeping peace among the countries? (Why?)" "How would you feel about this country belonging to a world organization where we would have to follow the decisions of the majority of the nations? (Why?)" "Do you think this world organization should have armed forces to carry out its decisions if necessary? (Why?)"

about the bomb make this clear. When the interviewers asked, "How worried are you about the atomic bomb?" only a quarter would admit to a state of personal concern. Half the respondents said they were not at all worried, others that they were worried very little. The relatively few who held consistently optimistic views about the bomb, indicating that they did not believe it to be a threat to us, were of course included among the "nonworriers." But most of the nonworriers acknowledged that the bomb represents a potential threat to our peace and security. The reasons they gave for not worrying were just such as they might give for not thinking much about any other social issue that does not compel their attention—that there is no use worrying about something you cannot do anything about, that such problems are problems for the government, for experts, not for the ordinary citizen. These quotations from interviews illustrate the variety of ways in which people indicated that the problem was not theirs to be concerned about; well-informed people were just as prone as poorly informed, voters as non-voters, to disclaim this responsibility:

"I'm not worried about it. What's the use of worrying? If I did, there are other weapons that are worse being developed all the time, and I'd no sooner get over worrying about it than a worse one would come along. So what's the use?"

"Well, I think it's a terrible thing. I think they shouldn't kill people with it, and I think that I don't like it. But I'm not worried. It wouldn't do me any good."

"I don't think I devote much time to worrying about it. The building business is too complicated now for me to worry about the bomb. It's too remote."

"No, I don't care. I got everything I need. From the morning when I get up, I pick apples and I get a dollar a bushel. So why should I worry about that bomb? I don't need to worry. Let it come. I don't think about it."

"I'm not worried. It would be worse in those populated places. Lord knows this isn't a place where they would use it."

"I'm not worried. You can't be killed any deader by an atomic bomb than by a bullet or a blockbuster or anything else."

"Well, I just think it should be controlled. I'm just hoping that this suggestion made by the United States will bear fruit, because I feel if it isn't controlled we might as well decide we're going to the next world. I don't worry about it. I'm not that kind. If it comes, it comes, but I think if anything can be done about it . . ."

"I'm not worried. I think that the head officials or whatever it is would know how to use it."

"I feel like our government will take care of its own, and there is no need for me to worry about something I have no control over."

"No, I'm just like the rest. I know the bomb can wipe out cities, but I let the government worry about it."

"I let the people who are qualified in those things do the worrying. I am just one of the many people who accept circumstances as they are. To me, it is just like if you were living in a country where there were earthquakes. What good would it do you to go to bed every night worrying whether there would be an earthquake?"

It may be argued that in the face of a danger that is real, imminent, people are likely to worry *because* they feel they can do nothing to avert it. Hence these disclaimers may be construed as an indication that the bomb danger has little reality even in the minds of those who appear to be aware of it.[3] But what is perhaps more significant in these remarks, particularly because they are as characteristic of informed people as of uninformed people, is the attitude they reveal toward the citizen's role in our democracy. The belief that all a person can do is "let the government worry" extends to the threat of war, as well. The majority of the people believe that there is nothing they can do to help prevent war. Except in extreme emergencies, our government functions with few direct calls upon the people's attention. It is not surprising, then, that most people have little conception of

[3] It may be argued, of course, that there is much more anxiety than people admit, but that it is repressed. A much more intensive probing would be required to demonstrate whether or not this is so.

how they participate or might participate in governmental policy-making, except for choosing at long intervals among candidates for elective offices. Accordingly there is a great psychological distance between the people and the world issues that concern their government.

50. WAR AND PEACE

This is an excerpt from the address by the 1948 president of the Society for the Psychological Study of Social Issues. He had just returned from a six-months' tour of duty in Paris with the Social Science Department of Unesco (the United Nations Educational, Scientific, and Cultural Organization). The notion of war as instinctive is challenged. Both war and peace are the results of learned behavior.

PSYCHOLOGY WORKING FOR PEACE *

Hadley Cantril

I can both illustrate the work of Unesco[1] and my conviction that social scientists have something to contribute toward developing a scientific morality by reading to you a statement framed by eight social scientists called together in Paris for a two weeks' conference this summer. While the statement may seem at first blush somewhat platitudinous, a full realization of many of the points made would show that if they were really taken seriously they would have profound implications.

All the participants were people who were not only knowledgeable but who had gained some wisdom from experience. Four of them had been in jail sometime during their lives for sticking to their points of view, two had had to leave their mother country, two had been physically tortured.

The eight men who signed the statement were: Gordon Allport, Professor of Social Relations, Harvard University; Gilberto

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* From "Psychology Working for Peace," by Hadley Cantril, *The American Psychologist*, 1949, Vol. 4, pp. 71-73. Reprinted by permission of the publisher and author.

[1] United Nations Educational, Scientific, and Cultural Organization.

Freyre, Professor of Sociology at the University of Bahia, Brazil; Professor Georges Gurvitch, of the Department of Sociology, University of Strasbourg and Director of the Center of Sociological Studies in Paris; Dr. Max Horkheimer, Director of the Institute of Social Research, New York City, who had spent most of the summer on a special mission surveying the needs and problems of social scientists in Germany; Dr. Arne Naess, Social Philosopher from the University of Oslo; Dr. John Rickman, Editor of the *British Journal of Medical Psychology;* the late Harry S. Sullivan, Chairman of the Council of Fellows, Washington School of Psychiatry, and editor of the journal *Psychiatry;* and Professor Alexander Szalai, Sociologist from the University of Budapest, President of the Hungarian Institute of Foreign Affairs and one of the ablest Marxist sociologists in Europe.

Here is their statement, agreed on after many hours of discussion.

CAUSES OF TENSIONS WHICH MAKE FOR WAR

"Man has now reached a stage in his history where he can study scientifically the causes of tensions that make for war. The meeting of this little group is itself symptomatic, representing as it does the first time the people of many lands, through an international organization of their own creation, have asked social scientists to apply their knowledge to some of the major problems of our time. Although we differ in the emphases we would give to various parts of our statement and in our views as to its comprehensiveness and implementation, no one of us would deny the importance of any part of it.

We agree to the following twelve paragraphs.

(A) To the best of our knowledge, there is no evidence to indicate that wars are necessary and inevitable consequences of 'human nature' as such. While men vary greatly in their capacities and temperaments, we believe there are vital needs common to all men which must be fulfilled in order to establish and maintain peace: men everywhere want to be free from hunger and disease, from insecurity and fear; men everywhere want fellowship and the respect of their fellowmen; the chance for personal growth and development.

(B) The problem of peace is the problem of keeping group and national tensions and aggressions within manageable proportions and of directing them to ends that are at the same time personally and socially constructive, so that man will no longer seek to exploit man. This goal cannot be achieved by surface reforms or isolated efforts. Fundamental changes in social organization and in our ways of thinking are essential.

(C) If we are to avoid the kind of aggression that leads to armed conflict, we must among other things, so plan and arrange the use of modern productive power and resources that there will be maximum social justice. Economic inequalities, insecurities and frustrations create group and national conflicts. All this is an important source of tensions which have often wrongly led one group to see another group as a menace through the acceptance of false images and over-simplified solutions and by making people susceptible to the scapegoating appeals of demagogues.

(D) Modern wars between nations and groups of nations are fostered by many of the myths, traditions and symbols of national pride handed down from one generation to another. A great many current social symbols are still nationalistic, hindering the free movement of thought across political boundaries of what is, in fact, an interdependent world.

(E) Parents and teachers find it difficult to recognize the extent to which their own attitudes and loyalties—often acquired when they were young and when conditions were different—are no longer adequate to serve as effective guides to action in a changing world. Education in all its forms must oppose national self-righteousness and strive to bring about a critical and self-disciplined assessment of our own and other forms of social life.

(F) The development of modern means of swift and wide range communication is potentially a great aid to world solidarity. Yet this development also increases the danger that distortions of truth will reach a great many people who are not in a position to discriminate true from false, or to perceive that they are being beguiled and misled. It must be a special responsibility of U.N. organizations to utilize these means of mass communication to encourage an adequate understanding of the people in other countries. This must always be a two-way traffic. It will aid the

cause of peace if nations are enabled to see themselves as others see them.

(G) The prospect of a continuing inferior status is essentially unacceptable to any group of people. For this and other reasons, neither colonial exploitation nor oppression of minorities within a nation is in the long run compatible with world peace. As social scientists we know of no evidence that any ethnic group is inherently inferior.

(H) Many social scientists are studying these problems. But social scientists are still separated by national, ideological and class differences. These differences have made it difficult for social scientists to resist effectively the emergence of pseudo-scientific theories which have been exploited by political leaders for their own ends.

(I) Objectivity in the social sciences is impossible to achieve whenever economic or political forces induce the investigator to accept narrow, partisan views. There is urgent need for a concentrated, adequately financed international research and educational programme.

(J) We recommend, for example, the cooperation of social scientists on broad regional and international levels, the creation of an international university and a series of world institutes of the social sciences under international auspices. We believe that international scientific fact-finding studies could contribute useful information concerning the cultures of all nations and bring to light dangerous insecurities and sources of tension, as well as legitimate aspirations of people all over the world. Equally certain to be rewarding are studies of educational methods in the home, the school, and in youth organizations and other groups by which the minds of the young are oriented toward war or toward peace. From the dissemination of the information resulting from these studies, we may anticipate the emergence of concrete proposals for the guidance of national programmes of education.

(K) The physical and biological sciences in recent years have provided impressive demonstrations of the effect of research. Some of the practical results have been rather to dismay and disquiet the civilized world than to reduce its tensions. The scientists whose research has been used in the development of atomic and

biological warfare are not themselves responsible for launching a curse upon the world. The situation reflects the forces now determining the uses to which science can be put. While other factors are concerned, we hold that the chances for a constructive use of the potentialities of scientific and technological developments will improve if and when man takes the responsibility for understanding the forces which work upon him and society both from within and from without.

(L) In this task of acquiring self-knowledge and social insight, the social sciences—the sciences of Man—have a vital part to play. One hopeful sign today is the degree to which the boundaries between these sciences are breaking down in the face of the common challenge confronting them. The social scientist can help make clear to people of all nations that the freedom and welfare of one are ultimately bound up with the freedom and welfare of all, that the world need not continue to be a place where men must either kill or be killed. Effort in behalf of one's own group can become compatible with effort in behalf of humanity."

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