International quarterly concerned with the role of language and other symbols in human behavior and human affairs.

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ETC.: A REVIEW OF GENERAL SEMANTICS

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INTERNATIONAL SOCIETY FOR GENERAL SEMANTICS. President: ANATOL RAPPORT, Palo Alto, California. Vice-President: A. W. PEARSON, M.D., Sherman Oaks, California. Secretary-Treasurer: KARL G. HAUCH, Evanston, Illinois. Directors: DAVID M. BURRELL, Freeport, Illinois; S. I. HAYAKAWA, San Francisco; WENDELL JOHNSON, State University of Iowa; EARL C. KELLEY, Wayne University; KENNETH S. KEYES, Miami Florida; IRVING J. LEE, Northwestern University; MARTIN J. MALONEY, Northwestern University; ANN DIX MEIERS, New Jersey State Teachers College, Montclair, N.J.; RUSSELL MEYERS, M.D., State University of Iowa; CATHERINE MINTIEER, Chicago Public School; RUSSELL F. W. SMITH, New York University; PAUL A. WITTY, Northwestern University. Executive Secretary: JEAN TAYLOR. Membership Secretary: EVELYN ROCHETTO. Information about membership in the Society may be obtained from the membership secretary, 400 West North Avenue, Chicago 10, Illinois.
It is with deepest regret that the Editors announce the death, on May 23, 1955, of Irving J. Lee, professor of public speaking in the School of Speech, Northwestern University, and long a leader in general semantics. The regret is shared by hundreds of his students, his teaching colleagues, the readers of his books, the men in labor and management whom he taught to understand each other better, and police officers from all parts of the United States who had been his students in the Northwestern Traffic Safety Institute.

Irving Lee was born in New York on October 27, 1909. He attended New York University, where he majored in English and received his bachelor's degree in 1931. In 1932 he attended the Breadloaf School of English at Middlebury, Vermont. After three years of teaching the social sciences at Boonton (N.J.) High School, he went to Northwestern University as instructor in public speaking in the School of Speech. He received his M.A. degree at Northwestern in 1935, his Ph.D. in 1938. He became assistant professor in 1942, associate professor in 1947, and professor of public speaking in 1950.

It was during his early years in Evanston that Dr. Lee first became interested in general semantics. In the autumn of 1939 he took his first intensive training seminar under Alfred Korzybski at the Institute of General Semantics (then in Chicago). He early became convinced of the value of general semantics in the improvement of public speaking, discussion, and debate, and in giving insight into the problems of communication which underlie human relations. It was in February, 1940, under the direct influence of general semantics, that he introduced his famous undergraduate course, "Language and Thought," which increased steadily in popularity, so that in recent years as many as 275 students have been enrolled in it at one time. In 1940 he also wrote his first book, *Language Habits in Human Affairs: An Introduction to General Semantics*, (1941) in which he undertook to explain in simple language the fundamental principles of general semantics, with an abundance of narrative and literary illustrations. This book continues to be the clearest and best introduction to Korzybski's basic ideas.

Irving Lee was both interested and active in civic and national affairs. In
1937, for example, he became consultant and lecturer for the National Safety Council and the Northwestern University Traffic Safety Institute, assignments that he continued to fill during the rest of his life. He became a member of the psychological warfare committee of the Office of Civilian Defense. Both his civic concern and his command of general semantics are reflected in a pamphlet published in 1939 which he wrote for the National Safety Council, *How to Make the Safety Speech*. His use of general semantics for the purposes of political insight is shown in an article, "General Semantics and Public Speaking: Perspectives on Rhetoric Compared—Aristotle, Hitler, and Korzybski," published in *The Quarterly Journal of Speech* in December, 1940. He also wrote at about this time the pamphlet, *A Way with Prejudice*, for the Social Action Pamphlet Series (1941).

_In June, 1942, Dr. Lee was appointed chairman of the department of public speaking in the School of Speech at Northwestern, but by July of that year the Pentagon had summoned him to help solve an embarrassing problem, one that was later—in Africa, Sicily, and Italy—to loom in tragic proportions. How could American pilots learn to distinguish enemy aircraft from, say, C-47's?_  

In 1942 the standard system for recognizing aircraft was known as the WEFT system. The letters stood for "wings," "engines," "fusilage," and "tail." The theory was that if American pilots or anti-aircraft gunners were to find aircraft near enough to constitute either a target or a threat, the pilots or gunners were first calmly to analyze silhouettes of these aircraft, taking due note of the sweep and dihedral of the wings, the number of engines, and the shape of the fusilage and tail. Reliable decisions about friend or foe were to rest on such analysis. Someone in the Pentagon got to thinking that such analysis, in a pinch, just might take up too much time.

The Renshaw System of recognition, by contrast, was psychologically sound in that it availed itself of the findings of gestalt psychology. It was semantically sound as well in that it did not assume that a person would have to be able to say what he saw in order simply to recognize what he saw. Moreover, a person trained in this system could make these recognitions in as little as one-hundredth of a second. But the Renshaw System was still largely on paper. There was urgent need of a school where the Renshaw technique could be taught to young intelligence officers who would then return to their units and, by benefit of slides, slide-projectors, and variable-speed shutters, train the men behind the guns. Lee's initial assignment was, in part, to help organize such a school.

The assignment was shortly realized in the Army Air Forces School of Applied Tactics at Orlando, Florida, where Dr. Lee, now a 1st Lieutenant acting the role of a dean, took on the task of teaching intelligence officers to be teachers. It was not easy. Lieutenant Lee and his young wife, Laura Louise, would, on occasion, greatly ameliorate the morale of some lonely student by inviting him
to a home-cooked steak dinner, but the technical problem could be solved neither so easily nor convivially—the technical problem lay in teaching intelligence officers to talk.

For untying the tongues, Lieutenant Lee launched a series of daily lectures on lecturing. He gave no rules. Indeed, he broke all the rules that a student might have supposed would apply to the lecture situation. Sometimes he would stand still, sometimes he would gesture. Sometimes he would turn his back on his audience, and sometimes he would pace the floor of the stage from which he spoke. On one occasion he roved the aisles of the auditorium. Not a single stereotype of the "proper platform manner" would he permit to crystallize. And yet, he remained at all times fascinating, forceful, in complete command of attention without either ordering or beseeching it. So challenging was all this to the student that—safely back in his own bailiwick—each must have felt compelled to try it for himself. Only the topic would be different. Instead of a talk about lectures, a talk about airplanes.

But though Lee mentioned no rules, he used them; they were the principles of general semantics. Though he did not utter the name of Korzybski, his technique was Korzybskian. Had Lee's students known of general semantics, they would have recognized this. One of them did—in March, 1943—and, toting a copy of *Science and Sanity*, told Lee so. The audacious student, a 2nd Lieutenant at the time, was graciously offered the steak dinner and the hospitality of the Lee home; and there occurred a spark of friendship that spanned a decade—even though communication was actively resumed only after the student, by a sequence of fortuitous steps, became an assistant editor of *ETC*.

There were, of course, other matters than identifying aircraft that the school dealt with. Lee remained with the U.S. Army Air Forces until 1946, attaining the rank of Major. When Dr. Lee returned to civilian life and to his duties at Northwestern, the Headquarters of the U.S. Air Force in Washington retained him as consultant on communication problems, and he was recently appointed Lecturer to the Air War College.

During recent years, Dr. Lee's concern, in addition to his teaching duties at Northwestern University, was the improvement of communication in administration and in industry. This concern is reflected, of course, in his principal writings: *How to Talk With People* (1952), *Customs and Crises in Communication* (1954), and "Procedures for 'Coercing' Agreement," published both in the *Harvard Business Review* and in *ETC.* in 1954. These interests resulted in his being called in as consultant or lecturer in such organizations as the Naval Gun Factory; National Safety Council; American Maize; Commonwealth Edison; G. D. Searle; People's Gas, Light and Coke Company; Wallace Supplies Manufacturing Company. At the time of his death, Dr. Lee had just completed a course of instruction in general semantics to supervisors and manage-
ment personnel over eight weeks at the Illinois Bell Telephone Company. The results of this course, given in co-operation with personnel representatives from American Telephone and Telegraph Company, were to be carefully assessed through interviews not only with those who took the course, but also with those who work under those who took the course. Early reports of the results of these interviews appear to indicate, the Editors learn, that people under the supervision of those who studied with Dr. Lee have noticed marked improvement in recent weeks in their supervisors' communicative abilities and comprehension of employees' problems.

Dr. Lee was widely known, too, for his activities as lecturer. He gave individual lectures or lecture series at Dartmouth, University of Denver, Harvard, University of Minnesota, University of Pittsburgh, Purdue University, the University of Wisconsin, as well as before numerous clubs and civic forums. In the summer of 1952, he was visiting professor at the University of Hawaii in Honolulu. He was past president and member of the executive council, and trustee of the Institute of General Semantics; charter member, member of the board of directors, and president (1947-48) of the International Society for General Semantics; member of the executive council, National Society for the Study of Communication; associate editor, *The Quarterly Journal of Speech*.

Family funeral services were held for Dr. Lee in Irvington, New Jersey; a memorial service was held at Lutkin Hall, Northwestern University, on June 2, presided over by Dean James McLeod and Rabbi Edgar E. Siskin, and attended by students, colleagues, and a delegation of uniformed police officers from many parts of the U.S. attending the Traffic Institute of Northwestern University. At a meeting of the Chicago Chapter, International Society for General Semantics, held at International House, University of Chicago, on May 27, S. I. Hayakawa gave a review of Dr. Lee's career and read the telegrams and letters commemorative of the occasion which had been received by the editorial office of *ETC*.

The communications occasioned by Dr. Lee's death, including the letters received by *ETC*., the statements read at the memorial service at Northwestern University, and other documents, come from many quarters and serve at least partially to document the breadth of his influence in academic life and scholarship as well as in practical affairs. The following are selections from communications received up to date of publication:

From Stuart Chase, Georgetown, Connecticut (telegram):

"Irving Lee was a brilliant and versatile teacher. His clear thinking and imaginative approach to problems of communication his determination to get down to cases contributed much to straight thinking when..."
IT WAS BADLY NEEDED HE WAS MY FRIEND AND I SHALL MISS HIM DEEPLY BUT THE WORLD WILL MISS HIM MORE."

From Wendell Johnson, Professor of Psychology, University of Iowa:

"In humanity's most exacting profession Irving Lee was eminently successful. He was one of the great teachers of his time. His ability to order knowledge and to clarify its significance was extraordinary. His capacity to inspire his students with a zeal for learning was remarkable. And as an agent of integrity and intellectual honesty his influence was and will continue to be tremendous. Irving Lee worked incessantly to discover the best, according to his lights, that had been thought and created by his predecessors and his fellows, and to improve upon it for the benefit of those whose lives he touched. Among his particular achievements one of the most significant is to be seen in the pervasive effect his writing and teaching have had on the field of speech education and public address. He has played a major role in bringing about a greatly heightened sensitivity to the semantic dimension of human discourse. The world is better because of what Irving Lee did and encouraged others to do. As a great teacher he will be remembered, and our memories of him will keep alive his teaching."

From Dr. and Mrs. Anatol Rapoport, Palo Alto, California (telegram):

"WE ARE SHOCKED BY THE NEWS OF IRVING'S DEATH HE WAS A KIND AND WISE MAN WHO DEVOTED THESE QUALITIES TO UNEXCELLED USE IN THE DEVELOPMENT OF GENERAL SEMANTICS ALL OF US WHO HAVE WORKED WITH HIM IN THE SOCIETY WILL SUFFER A FEELING OF LOSS BEYOND OUR PERSONAL SORROW PLEASE ADD OUR WORDS TO YOURS IN COMMEMORATION OF OUR FRIEND."

From Dr. James H. McBurney, Dean of the School of Speech, Northwestern University:

"Irving Lee was a brilliant man, one of the most skillful I have known in the art of human relations. His passing is a grave loss to the University and to man."

From M. Kendig, Institute of General Semantics, Lakeville, Connecticut (telegram):

BEYOND MY FEELING OF DEEP PERSONAL LOSS OF IRVING AS FRIEND AND COUNSELOR AND YET SO MUCH OF IT I MOURN THE LOSS OF LEE'S GREAT CREATIVITY—HIS GREATER CREATIVE POTENTIAL—HIS INTEGRITY AND INDEPENDENCE AND HIS SENSE..."
OF DEMOCRATIC PROCESSES DEMANDING DISCIPLINE NOT SENTIMENTALITY. HE KNEW HOW TO LEARN FROM KORZYBSKI AND HOW TO USE WHAT HE LEARNED. I CANNOT RECALL A SINGLE INSTANCE WHEN ALFRED DID NOT APPROVE WHAT IRVING WROTE, SAID OR DID WITH GENERAL SEMANTICS. LEE'S WAS A RARE DETERMINATION TO DOCUMENT BY PRACTICE AND RESEARCH WHAT HE SAID ABOUT THE DISCIPLINE. HE HAD A GIFT FOR LEADERSHIP AND TRAINING OTHERS TO FOLLOW HIS HARD PATH. HIS DEATH IS A MOST GRIEVOUS INCOMPREHENSIBLE WASTE FOR MANKIND."

From RUSSELL MEYERS, M.D., Professor of Neurosurgery, University of Iowa:

"I join in mourning one whose energy and skill will be gravely missed. Irv was at the height of his productivity, was highly respected as a teacher by his colleagues and students, and was implementing with vigor unusual sociopsychologic experiments in the orienting effects of general semantics on a variety of groups. That he should have been so soon cut down must inevitably affect all of us."

From DR. MELVILLE J. HERSKOVITS, professor of anthropology, Northwestern University:

"The quality in Irving Lee that, more than any other, struck me when I knew him as a student in 1933, was his ability to grasp new ideas and his enthusiasm for them. As I came to know him better, I realized that his thinking was disciplined by a profound intellectual humility, and his enthusiasms tempered by a lively sense of humor. It was these qualities that, developing out of a powerful mind, made of him the figure in American intellectual life that he came to be, and supported him in his struggle to establish the approach to the study of language processes and the nature of communication that came to be his major contribution and is identified with his name. . . . The efforts of Irving Lee were continuously directed toward alleviating conflict, misunderstanding, prejudice; toward encouraging clarity of thought and communication. The depth of his convictions, the honesty of his purpose, yet withal the humor he brought to his teaching carried over to those in the military, in administration, in business not less than to his students in the University. For to him, no one could be overlooked in a world where, through communication, men had not only contrived modes of living with one another, but had given form and meaning to the very universe in which they lived."
From Dr. Paul Schilpp, professor of philosophy, Northwestern University:

"Dr. Irving J. Lee was a hard-working student, and unusually superior mind, a fine scholar, and one of the greatest teachers Northwestern University ever had. He was the great teacher precisely because he never ceased learning, because he loved students and believed in them, and because—better than most of us—his success in communicating with them was phenomenal."

From Robert Chiaramonte, Sergeant, Ohio State Highway Patrol:

"Any time you are dealing with the public, you are dealing with the possibility of misunderstanding. Dr. Lee taught us to look for the intentions of people's words rather than react to the words themselves. He also analyzed for us problems of interrogation. But most of all he taught us to watch for our own miscalculations: allness, absence of dating, identification reactions, etc.

"Dr. Lee made a terrific impact on me as well as on the other officers who were privileged to take his course. He used examples from daily life to illustrate the principles he taught, so that we could recognize in them the people and situations we had known in our own experience. I came to have the profoundest confidence in Dr. Lee as a man who would understand one's problems, whatever they might be. I am sorry I did not know about general semantics earlier; I would have majored in the subject had I known of it when I was a student. On my return to Ohio, I am going to be teaching in some in-service training courses, and I am going to try to introduce some general semantics into that training."

From Gerald O'Connell, Director of Training, Traffic Institute, Northwestern University, and formerly of the Connecticut State Police:

"We have really cherished the contribution Irving Lee has made to our program. We have had measurable results from it. We have seen changes in personality; we have had evidence of changes in methods of work when our officers returned home from the Traffic Institute. We could see in the course of training changes in their vocabulary, language habits, and their approaches to their problems. Dr. Lee produced tolerance where there was none in many of our fellows. When our fellows have had the opportunity to influence training programs in their own departments, we have often seen them trying to bring semantics into their in-service and supervisory and command programs.

From James McLeod, Dean of Students, Northwestern University:

"Here was a man whose gifts were great and whose spirit was humble. He was a true scholar, a genuine seeker after truth. He had a persistent and deep hunger for answers to the questions life posed. But he always sensed that, being
human, he was part of the problem of life, hence sought to be part of the answer."

The Society joins the foregoing and many others who mourn the loss of Dr. Irving J. Lee. As a member of the Governing Board and an editorial advisor of ETC., his searching inquiry into the reasons for decisions and his wise insistence on referring problems of policy to the membership sometimes resulted in delays in action—delays that resulted in decisions which ultimately proved to be wiser than those originally proposed. We shall miss his speech. We shall learn to punctuate ours with the effective stillnesses he taught us.

BIBLIOGRAPHY OF THE WRITINGS
OF IRVING J. LEE

Books


Pamphlets


Articles

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TOWARD A BEHAVIORAL THEORY OF VALUE

HENRY N. PETERS *

The word "value" is an ambiguous term. There is the use of the word in mathematics, where it means practically the same thing as quantity. There is the meaning of an objective standard for judging the worth of anything, as for example, in the phrase "survival value." Then there is the sense of demand or cost, where value is usually stated in terms of money. Then there is the phrase "spiritual values," the sense of which is seldom made clear. While there has been a great deal written and spoken on the subject of value, primarily by philosophers, it is sometimes held not to be an appropriate subject for science. This opinion, of course, is being seriously questioned at the present day.

As long as values are treated, as they commonly are, as things separate from human beings who have them, they are not likely to become the subject of scientific inquiry. However, an attempted operational definition of value clearly points to the fact that they are human reactions, and cannot be sensibly discussed as something separate. For the purpose of the present presentation, value will be operationally defined as a symbolic utterance or act expressing choice or preference. Examples are: "A is good; B is bad; I prefer X to Y." "A B C is my order of preference for these three things."

It is worth pointing out that value statements are expressed in the form of a proposition, in which the predicate term implies a dichotomous classification, the subject term symbolizes a class of objects. The dichotomous classification is expressed as "good" or "not good," "pleasant" or "unpleasant," or any of their cognates. The subject term, for example "apple," always involves some degree of abstraction and thus some degree of class extension.

The behavioral theory to be discussed is an attempt to explain how these judgments come about. The theory may be briefly outlined as follows. Value judgments are correlated with approach and avoidance reaction tendencies. When an individual says, "This is pleasant," he is expressing the fact that he

* Research Psychologist at Veterans Administration Hospital, Jefferson Barracks, Missouri. This paper was read as part of the program of the Second Conference on General Semantics at St. Louis, Missouri, June 12, 1954.
tends to seek or prolong the experience. And of course the opposite holds for things he judges unpleasant. While some few of these reaction tendencies may be produced by instinct or inherited structure, the vast majority are conditioned by experience. That is, in the course of the business of adapting to the environment, the individual has to approach some things and avoid others, and these reactions leave traces in the form of corresponding tendencies.

There are several things worth noticing in the beginning about this theory. For one thing it involves an apparent reversal of a common-sense sequence of events. Ordinarily it is thought that one seeks a thing because it is good; this theory in contrast commits us to the belief that a thing is good because one seeks it. Actually the common-sense view does not necessarily contradict the theory. Given that an individual has the values (that is, he makes the judgments and has the reaction tendencies), he will plan his behavior accordingly. Thus the values operate as causal agents on the abstract planning level. At the same time, on the level of overt reaction to particular events, the reactions made to objects cause the tendencies, which in turn cause the judgments.

It is important to note the self-reflexiveness which this theory involves. This is a concept familiar in general semantics. The value judgments are in reality reactions of the individual to his reactions. In some way the overt reactions of the individual are classed on the level of reaction tendencies, and when the individual makes his judgments he is further classifying.

To my knowledge the first person to express this view of value was Sir Francis Galton [3]. In his memoirs he describes a simple experiment performed on himself in an attempt to answer a question which puzzled him. The question originated in his wondering about the worshipful attitudes of primitive people toward their idols (at that time being collected in the British Museum), which seemed ugly, grotesque and ridiculous to him. His experiment was an attempt to develop worshipful attitudes (and of course positive evaluation) in himself toward an object which he considered to be ridiculous. He chose a picture of Punch as the object of low value. According to his account he set this picture up in a separate room in his house and began a daily ritual of obeisance, prayer, and worship toward it. He reported that to his surprise after several months of this routine he found himself actually feeling the experience of reverence, awe, and high evaluation toward the object. He would catch himself turning toward it when he passed the room, with an impulsive tendency toward bowing and obeisance.

I believe that this conception of value was first presented as a theory of value by Dr. Harvey Carr in his introductory textbook in psychology [1]. His is so simple a view that it is easy to read it into the words of others, but I have

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1 The numerals in brackets indicate bibliographical references listed at the conclusion of this article.
not found it followed consistently in any other source. When another writer seems to be expressing this view he usually contradicts it a few pages later, or considers some problem which, in Carr's conception, could never arise.

In 1935 I set about testing this theory in a number of experiments. Unlike those in Galton's study, these experiments were typical of modern experiments in psychology in that large numbers of subjects were involved, with test and control groups. In all, a total of nine experiments were performed over a period of nine years [4, 5]. The essential feature of each of these experiments was that the subjects were called upon to judge a series of objects in a manner which allowed quantitative treatment; then they would be put into a situation where they had to learn to make positive reactions to some of the objects and negative reactions to others. Then a second recording of value judgments was taken. These value judgments were usually stated in the form of pleasantness or unpleasantness. The objects used in these experiments were colors, pictures, and Japanese words. The reactions required in the learning problems were pronouncing (in the case of words), naming the colors, reaching and pulling some of the pictures, and symbolic reactions of pointing. In the case of the symbolic, or non-manipulative, reactions, the overt pattern of response required was varied. All that the reaction symbolized was choice.

The results of all nine experiments verified the hypothesis. That is, for objects reacted to positively there was a reliable shift in frequency of judgments toward the pleasant end of the scale, and for objects which had received a negative reaction in learning, a shift toward the unpleasant side. Introspective reports taken from these subjects showed that none was aware of his reactions being a determinant of his judgments. But while the statistical trend of results in these experiments showed the generally enhancing effect of positive reactions, it was not shown by all of the subjects.

In several of the experiments, reports were taken from the subjects as to their basis of judgment. These reports seemed to the experimenter to fall clearly into two types, namely, a concrete type in which the subject judged on the basis of immediate sensory experience. And an abstract type, in which the subject based his judgment on associations, or symbolic meanings. With colors as stimuli, an example of the first type was a report of judging deeply saturated colors as pleasant. An example of the abstract type was to judge the blue as pleasant because one looked good in blue dresses. Or, as one subject said, because "it stood for true." When those subjects who based their judgments on concrete experience were considered as a separate group, it was found that the hypothesized shift in value was marked. On the other hand, the judgment of those subjects who judged on an abstract level did not show a reliable change.

If the behavioral theory of value here discussed is valid, the reaction tendencies toward the objects as indicated by the preliminary judgments should
affect the learning process. That is, it should be easy to learn a positive reaction to a pleasant object and rather difficult to learn a negative reaction to a pleasant object. This was verified in two experiments, and again it was found that those subjects who judged on a concrete level showed the effect to a much greater extent than did those who judged on an abstract level.

These experiments have shown that the learning effect on judgments is retained over the period of a week but with decreasing strength. And they also show repeatedly that the enhancing effects of approach reactions are greater than the depressing effects of avoidance reactions.

The types of objects judged in these experiments have been relatively indifferent ones, and the judgments have been in terms of pleasantness and unpleasantness. What about social values, art objects, or moral values, in which the judgment is made in terms of "good" and "bad"? That is what we are really interested in. While the experiments permit confident conclusions only with respect to words, colors, and picture post-cards, it is plausible to extrapolate from these to more interesting objects.

When we extrapolate, the situation is not to be conceived as of the laboratory, but as a social situation, such as the family, gang, church, or business associates. The powerful motive in the situation is the desire for approval of others, something which begins in early infancy. The positive and negative reactions, of either overt manipulation or symbolic statement, are made to win approval. With repetition these end up by becoming his values. It seems likely that this is what happens in the case of music, especially "good" music—that which improves with repetition. For the vast majority of people good music is not naturally sought. One finds that the people he admires and whose approval he seeks do approach this type of music and express approval. Accordingly one makes similar reactions in order to be accepted. Something of the same kind happens with moral values, although I am inclined to think that many of these values deteriorate to pure stereotypes in which there is very little relation between overt reaction and the abstract ideas. Here the positive and negative reactions are really to ideas and not to sensory experience.

When we turn to the applications of this behavioral theory of value, we find that to a great extent the view stated here has actually always been in operation, although without explicit acknowledgment. In all strong social groups there is a great emphasis on ritual. According to a behavioral theory, ritual is the obvious method for developing values. In the field of education emphasis is placed on a behavioral approach, especially in the very early years when the child is not considered capable of understanding. However, it is questionable whether the planners of education are fully aware of the importance of overt behavior in molding attitudes or values. As far as I know, the most com-
prehenssive application of an essentially behavioral view of emotion was given by Denison in a book entitled *Emotion as the Basis of Civilization* [2]. Although he uses the word "emotion," he emphasizes the overt behavior and, in general, treats the term in a manner quite different from the way it is treated in psychology. In this book he traces the development of civilization from the dawn of western history to the present, pointing out the important role of common values, with, of course, uniform behavior, as a cohesive force in maintaining the strength of cultures. He recounts how the Romans amalgamated conquered peoples by placing the idols of the conquered in the same temple with the Roman gods. Kinship between the gods of the conquered and the Roman gods was traced by the priests, and in the temple uniform rituals were observed by both conqueror and conquered. This also makes clear why the Romans had so much trouble with the Jews, who, as is well known, refused to share their values.2

In the field of mental health the most direct application of this theory of value is that stress should be placed on overt action. Here the obvious technique is the psychodrama, play therapy, or the various action methods. Fairly direct implications are also to be found for propaganda or the changing of human values. Here emphasis should be placed on overt behavior, and the experimental result show that the attempt should be made on as concrete a level as possible. If one can change the concrete reactions of a person, the more abstract values will change accordingly. Experimental results also suggest that in controlling human attitudes, stress should be placed on nurturing positive (approach) reactions rather than inculcating negative (avoidance) reactions.

In the more general field of mental hygiene this behavioral view implies that more attention should be directed toward the values which a child develops as a result of the behavior patterns he is required to perform and less attention should be given to the recitation of abstract value-formulas. If the child's reaction patterns are consistent, he is not likely to reach adulthood with conflicting values.

*It may be pointed out in support of Dr. Peters' argument that the Jews did not have idols, so that the policy of fraternization of the deities could not be applied. [Ed.]*

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**SEMANATICS EXORCISED**

*(For Irving J. Lee)*

The word is not the thing;
The name is not the man.
The word-world that I form
Will not be he.
O conjure, if I only can,
His optic image in a verbal rhyme,
Or if I call it clarion-clear
Could name be man,
And dated time
Stand still, come near
So what was then is now,
And word be thing
And name be he?

MARY JANE MORROW ROTH

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SILENCE

MARVITA BELLE ELEY

What gives speech truth is silence.
Welling through the images, the sensations
That deck the soul's interior
The silence swells and rolls,
Now like the mood of an evening
When leafy boughs mass softly against the far-away
Flying blue, their skeletons distinct and intricate,
When the soft rippling of grass over the sags
And heaves of the earth flies out, too,
Drawn by the speechless distances the night suggests.

Or now like the live touch of enchanted walls
In a room where words like these
"You are so very beautiful it is not you
I love at all, but Beauty, where I find it,
Everywhere," are whispered,
Welding two whom love has melted
Into a third being that the eye sees not,
And never shall,
But trembles, moves, thereafter,
At every sight of unity.

It can never be spoken and hence
The self, secure in it, is inexhaustible
To plunge in spume and massive, roaring action
Like the great walls of Niagara,
Or hover in gestures like the waxen light
The magnolia gleams in,
Or speed in words through the kaleidoscope of days,
A falling shower of restless, urging patterns,
Or glide, a sheathed seed, through death's lips.

Its gift is value.
What it does not touch is like the mismatched shoe,
The part, precision made, a thread too gross,
The national double talk of peace by arms.
What it enhances becomes style,
Whether the speech of private citizen,
Or national utterances like the shocked outcry
Radios flashed the morning Roosevelt died,
That told how mankind's heart loves liberty,
Yearns to be proud through goodness and not power.

It does not force itself,
Nor can it take its place on charts and graphs,
A national resource of definite magnitude;
It is not brain power, will power, personality;
Nor can its meaning be shored up in Eastern disciplines
That still the tumult in the death of sense.

Its way is simpler, native like the delicate ferns
That thrive in moist, cool lowlands
And expire in the publicity of the sun;
Its neglect produces a slow pellagra
Of the senses, heart, and mind,
And in the social body, force and terror;
It merely means, although it cannot say,
That if we do not pause in our careening action
To heed its timeless, seething, aboriginal beat,
We shall not know ourselves, and our deep longings,
Shorn of root and seed,
Shall soon become the pawns of chattering powers
That froth in purposeless rage above a dead, shocked orb.
THE ROLE OF SYMBOLS
IN HUMAN BEHAVIOR

ANATOL RAPOPORT

Many definitions of "man" have been proposed by serious thinkers—proposed with the best intentions to call attention to a feature of man's existence which is crucial, the essence of humanness, as it were. If only man could say what man is, it was felt, man could understand man, and thus achieve Socrates' criterion of wisdom—self-knowledge.

And so man has been called a featherless biped, a rational animal, a copy of God, a combination of body and soul, and a possessor of "free will." Yet man's self-knowledge did not make much headway even amid an abundance of definitions. Except for the facetious "featherless biped" label, which, as N. Wiener remarked, made man indistinguishable from a kangaroo or a plucked chicken, none of the definitions pointed to anything which could be unambiguously recognized. One cannot identify rationality, observe God, isolate the soul, or test the existence of a "free will."

The first significant definitions of man were given by those philosophers who recognized that significant definitions should be given in terms of what the thing defined does rather than in terms of what it is. Such definitions are called operational. They call attention to actual events or experiences characteristic of the thing defined. I will say more about operational definitions in a while. To my knowledge, the first operational definitions of man were given by John Dewey and Alfred Korzybski about 1920. They both defined man by his most characteristic and unique observable activity, namely, the preservation of past experience, not only in individuals but also in the species. As far as is known, no other species possesses a store of knowledge which is transmitted to successive generations by other than genetic means and accumulated in the process of transmission. This process of transmitting accumulated knowledge, which Korzybski called "time-binding," is accomplished by the use of symbols. Since the use of symbols, like time-binding, is also a crucial and unique characteristic of man, it is proper to call man a symbol-user and to make the study of the symbolic process central to the study of man.

A symbol can be most vividly defined by contrast with another form of communication called a signal. By a signal I mean nothing more than a stimulus to which a response has been conditioned. Thus to a dog the sound of
a bell may be a signal for secreting saliva, a whistle may be a signal to come running, the command "Sit!" a signal for sitting down on the haunches. It follows that for any organism capable of conditioned response, signals can have meanings.

By a symbol I mean something else. A symbol evokes response only in a relation to other symbols. Thus the "same" symbol in different contexts can elicit essentially different responses, or to put it in another way, a given symbol cannot be properly defined outside of a context.

To see what this means, let us examine the repertoire of conditioned responses in a well-trained dog. A dog can be taught the meaning of a number of commands. He can be taught to sit at the command "Sit!" He can also be taught to approach or to bark at a chair at the command "Chair." But having taught the dog the meanings of "sit" and "chair" you cannot expect that he will thereby acquire the understanding of the command "Sit on the Chair."

The same holds for a dog's expressive ability. A dog can say a number of things, perhaps "Hark, some one is coming," or "Don't come near me if you know what is good for you," or "Open the door," or, perhaps, "I love you," or even "I am lonesome." But no dog can re-combine these ideas to say, "Some one who is lonesome, and whom I love, is coming through the open door."

In other words, dogs don't know grammar. All human language, on the other hand, is grammatical. Its meanings reside not only in separate utterances but also in relations among utterances—not only in expressions of experience, but also in assertions about experience.

Another thing dogs cannot do is reason. Here I use the term "reasoning" not quite in its conventional sense. The conventional meaning of "reasoning" implies a close relation to "intelligence." There is no question that dogs possess somewhat of something we vaguely call intelligence. But intelligence need not depend on reasoning in the sense we use the term here, which makes it somewhat akin to reckoning, that is, making chains of assertions according to certain prescribed rules. This "reasoning," like "long division," is a rather mechanical procedure, which requires only the application of specific rules to specific situations. Both reckoning and "reasoning" (as we use the term) can be performed by properly constructed machines. When we say that we can reason and dogs cannot, we mean this "mechanical" aspect of reasoning which is made possible by our symbolic language to the operation of which general rules can be applied.

This, then, is the second characteristic of symbolic languages: they are logical, that is, certain relations among certain assertions in it are prescribed.

I should like to digress for a moment to point out some implications of the grammatical and logical structures of symbolic languages. It may be argued that the use of grammatical and logical forms is simply a matter of conditioning
(as to a great extent it doubtless is), and that therefore grammatical and logical speech is in principle no different from other conditioned behavior. There is an important difference, however. What gets impressed is not simply isolated instances of usage but rules of usage, which would not be impressed unless a certain capacity for abstraction were present. To give an example, consider the frequent consistent mistakes in grammar made by young children, particularly in the speech-formative years. Frequently a young child will say "I knowed" instead of "I knew" or "two sheeps" instead of "two sheep," even if everyone around the child talks "good English." It is obvious that "I knowed" and "two sheeps" are instances of logical extension of grammatical rules of English for forming the past tense and the plural. It shows that abstract rules do impress themselves at a very early age and also that already concepts of quite prodigious abstractness (such as the time sense and the notion of plurality) are already operating. Similar instances of logical generalization can also be observed.

This takes us to the third characteristic of symbolic language—its abstractness, which allows humans to acquire symbolic repertoires quite immense compared to the signal repertoires which constitute the languages of other animals. This is so because words can be associated with objects, actions, qualities, and situations without a separate conditioning in each instance.

But aside from this quantitative advantage of symbols as elements of communication, there is a vital qualitative one. You may condition a dog to respond to the sound of a bell as to a signal for food. The bell comes to "mean" food to the dog. However, there is a most significant limitation to this "meaning." No matter how hungry a dog is, he will not think of ringing the bell himself to make food appear. True, the dog can be taught to ring a bell to obtain food, but this act has to be taught separately. It will not occur to the dog as a by-product of the "idea" that bell means food. When a dog learns signals, he does not thereby learn to use the same signals to communicate to others. Signals do not become symbols to him. But we do learn that words not only stand for events but also that words can be manipulated to bring events about. We learn word magic.

The fourth characteristic of a symbolic language is that it is metaphysical. That is to say, a particular language imposes on its user a framework of perception and reasoning into which his observations of the events around him must fit. This characteristic of human languages has been most brilliantly discussed by Benjamin Lee Whorf and Alfred Korzybski. It now forms one of the basic precepts of modern anthropology.

Finally, symbolic languages are characterized by being psycho-logical (the word is hyphenated as in Korzybski's writings). That is to say, a language impresses on us not only a metaphysical framework but also an affective one. It does not only a good deal of our thinking for us but also a good deal of our feeling. The distinction between "thinking" and "feeling," which I seem to be
making here, is only an artifact. It serves to emphasize one or the other aspect of what is in reality a single process, more properly called evaluation.

These, then, are the characteristics of languages composed of symbols which distinguish them from other means of communication among living things. Symbolic languages are

1. grammatical,
2. logical,
3. abstract,
4. metaphysical,
5. psycho-logical.

Now it is interesting that these characteristics of human language form the basis of what has become the "liberal arts" curriculum. In medieval universities, the four years of the baccalaureate program have often been built around "grammar," "rhetoric," "philosophy," and "theology," respectively. Logic, of course, was included in rhetoric, and metaphysics in philosophy. Theology was considered as the discipline probing into the most important category of knowledge—the knowledge of God and of man's relation to him. Inherent in this program was the conviction that the understanding of the nature of language was of fundamental importance. The relation of grammar and rhetoric to linguistics is obvious. But even in philosophy, awareness of linguistics and symbolic matters was discernible already in the Middle Ages, as for example, in the intellectual struggle between the Nominalists and the Realists concerning the reality of universals—an early preoccupation with semantic problems. And in theology one has the magnificent efforts of Anselm and Aquinas to derive theological theorems by means of the deductive apparatus of formal logic and the mystic obsession with the power of the Divine Word.

Today, although we certainly have come to realize that no understanding of man is possible without a systematic inquiry into man's non-human environment—the subject matter of natural science—still the old feeling that symbols and language are of fundamental importance has been amply vindicated. Today we would call the "symbolic universe" the man-made "non-material" part of man's environment—as much so as the web is the most important spider-made part of the spider's environment or the metabolic products released by the bacteria in a bacterial culture are a vital part of the bacteria's environment. All these "secreted" environments play a decisive role in the subsequent fate of each organism.

Man in society "secretes" his symbolic environment, that is, his culture, in which he must continue to live (a fortunate coincidence in two meanings of the word "culture" referring to a bacterial colony and to human society makes a lively metaphor possible). This symbolic environment is instrumental in
shaping man's natural environment, and is, in turn shaped by it. Hence its crucial importance.

I would like to describe the modern counterpart of the medieval curriculum by a similar hierarchy:

1. Grammar.
2. Logic.
4. Metalinguistics.

The first two disciplines are purely formal. They deal with the explicit rules of speech. Grammar is entirely empirical (noting how in fact words are put together in various languages to form assertions and other modes of communication). Logic, on the other hand, is entirely deductive, like mathematics. It is concerned with rules governing the relation of assertions to each other and with techniques of forming new assertions from the given ones by applying the rules.

The last three disciplines, semantics, metalinguistics, and neuro-linguistics constitute together the subject matter of what is known as general semantics.

Semantics deals with meaning, defined as a relation between names or assertions and their referents. (These relations are of no interest to either grammar or logic). For instance, the question whether a definition is or is not meaningful is a semantic question. It is examined with reference to the referents of the terms involved in the definition. In the light of such analysis, there arose, especially in physical science, the operational method of making definitions. A term is defined operationally as far as possible in terms of observable effects, which exhibit sufficient invariance under certain conditions to warrant the application of the term to each manifestation of the effect.

The practice of defining an electric current by the deflection of a magnetic needle associated with it, a chemical by means of its behavior under certain conditions, a disease by consistently associated syndromes or by the presence of identifiable micro-organisms—such practice adheres to the principle of operational definition.

Another subject of interest in semantics is the analysis of the truth content of an assertion. A distinction is made between logical validity of an assertion (which depends only on its relation to other assertions) and the truth content, which is established by empirical tests of the asserted relations among the referents or of predictions implied by those relations.

Metalinguistics deals, as we pointed out, with the frameworks of thought which the structure of our language imposes on us. Thus if situations are described by nouns, we tend to concretize the situations (e.g., place heaven above the clouds and hell beneath the earth.) We tend to separate in our minds what is separated in our language (e.g., time and space, body and mind, eco-
nomics and politics). We tend to confuse the literal and the metaphorical use of prepositions (we think that the assertions “The chalk is in the box” and “Evil is in man” refer to similar relations).

Neuro-linguistics deals with such evaluations on the level of individual psychology. It seeks, in particular, the physiological components of symbolic behavior. Some effects of symbols on the nervous system can be directly demonstrated, as with measurable physiological changes accompanying the awareness of certain words or with the phenomenon of the person allergic to roses sneezing at the sight of artificial roses. Hypnosis, faith cures, the effectiveness of word magic and, by extension, the entire area of psycho-somatic phenomena, as well as the psychiatric components of the culture profile, constitute the subject matter of neuro-linguistics.

Now I have outlined the disciplines which deal specifically with symbols in the order of increasing involvement with the problems of human behavior. Perhaps the importance of symbols in human behavior is already apparent from the description. Nevertheless, I should like to conclude by emphasizing some, perhaps obvious, considerations.

If it were not for our ability to use symbols and to react to symbols, we would be no better and no worse off than the other animals. That we would not be any better off (in our anthropocentric sense of “better”) is quite obvious, since our incomparably greater control over our environment results directly from the process of time-binding, the power of transmitting (by symbolic language) accumulated racial experience to succeeding generations. But it is important to note that we would also be no worse off than the other animals. For this “secretion,” as I have called our symbolic or semantic environment, doubtless contains, in addition to “growth hormones,” also powerful “toxic products.”

To give an example, a chimpanzee may, through his own, direct experiences with someone wearing a red necktie, come to the conclusion that people wearing red neckties are kind dispensers of bananas, or are cruel teasers. But we, through our experiences with symbols alone, come to similar conclusions about people, whose only distinguishing characteristics, as far as we can discern, are the symbolic labels attached to them, such as Brahmins or bigamists or people whose names begin with Z, quite independently of our actual experiences with the referents of these labels—and regardless of even whether the referents exist.

We can multiply the examples at will. A cat may learn to avoid food which gives out a characteristic smell. The smell becomes a signal for avoidance. But most of us will avoid a dish labeled “rat meat” regardless of its smell or taste or our lack of previous experiences with rat meat. Similarly, many of us automatically admire shiny stones labeled “diamonds” and music labeled “Mozart,” even though not nearly so many can distinguish a diamond from a piece of glass or Mozart from Clementi.
In other words, symbols enable us to learn with astonishing rapidity (by utilizing the experiences of others) not only a great many useful things but also a great many things that aren’t so. This applies to collective and to individual knowledge. A tribal chief who got a stomach-ache after a feast at which pickled tomatoes were served may have proscribed the pickling of tomatoes, and the taboo (eventually spreading to the pickling of all vegetables) may last for thousands of years, depriving millions of people of pickles.

On the personal level, verbalizations, as determinants of behavior, are equally important. The assertions, “My husband (or wife) makes me sick,” and “I react to my husband (or wife) by becoming sick” may have the same events as referents but say entirely different things and establish different orientations within the speaker, which may profoundly influence subsequent events.

On the level of community and national affairs, different political developments depend to a great extent on how people are classified: into rich and poor, or natives and foreigners, or pious and godless, or blue-eyed and dark-eyed. On the level of international affairs, the fates of populations frequently depend on how certain very high-order abstractions, such as “freedom” and “capitalism” and “aggression” and “balance of power” are manipulated.

GENERAL SEMANTICISTS have been gravely concerned with these matters. They have been impressed with the idea that both man’s greatness and his madness rest on his preoccupation with symbols. A symphony and a ritual of human sacrifice, the Gettysburg Address and the diatribes of a Joe McCarthy, the deductions of a paranoiac and those of the psychiatrist who diagnoses him as a paranoiac, the equations of quantum mechanics and the incantations of a shaman are all instances of symbol manipulation.

As you may have guessed from my choice of words, general semanticists do not confine themselves to the observation that the influence of symbols on human behavior is extraordinarily profound and diverse. Most general semanticists also make value judgments about this influence. They make rather definite distinctions between “good” symbolic behavior (or semantic reactions) and “bad.” Furthermore, they maintain that such value judgments are not matters of taste or even necessarily of cultural conditioning (as ethical relativists maintain) but that they are the inevitable results of the general semanticist’s analysis of the symbolic process. The general semanticist defines good symbolic behavior as the kind of behavior which is governed by “semantic awareness,” an awareness of the distinction between symbol and referent, between inference and observation, between a valid conclusion and a factually true statement; an awareness of the distortions which verbalization necessarily brings into our perceptions; an appreciation of the role of communication in human affairs and of time-binding as the unique survival mechanism peculiar to our species.

Most general semanticists believe that the construction of a universal supra-
cultural ethics is possible in the light of these criteria. They sometimes call this proposed supra-cultural ethics a scientific ethics, because the one area of human activity where semantic awareness is most pronounced is the area of scientific investigation.

Two standard arguments are usually brought forward against this point of view. First, that among general semanticists (or scientists) there is the usual incidence of behavior, which by the standards of "scientific ethics" is quite unethical. Second, that the proposed "supra-cultural" ethics is no more supra-cultural than any of the existing ones, since the general semanticist (or the scientist) is himself culture-bound, and therefore, so is the ethics which he calls his own.

The first argument is easy to dispose of. When the general semanticist says that the scientist's behavior is an example of good behavior, he does not mean Dr. A's behavior at all times. Dr. A, when he beats his wife, or when he is carried away by a demagogue, or when he subscribes to shabby notions about racial or social stereotypes, or when he accepts glib explanations of very complex events, is not behaving as a scientist. He is behaving as a scientist when he is objective in his evaluations, when he communicates freely with full awareness of what goes on in the communication process, when he is aware of the role of science in human affairs and has the courage to draw the proper conclusions. It is this kind of behavior, actually an abstraction from the collective behavior of men who created science, not the behavior of a particular Dr. A or even of the majority of scientists at a given time, which is held up as a model of semantic awareness and a basis for a supra-cultural ethics.

The second argument requires a somewhat more involved answer. The term "culture-bound" may be understood in two ways. Admittedly science is a specific product of the so-called Western Civilization. The scientist may be said to be culture-bound inasmuch as owing his outlook to science, he thereby derives it from Western Civilization. Therefore the ideals of "scientific" ethics are no more than the ideals of a particular culture—the western.

In answer to this, it must be pointed out that Western Civilization, profoundly influenced though it has been by science, is a great deal more (or less) than the "way of science." Among the features of that civilization are also found parliamentary democracy, money and credit, monogamy, the use of neckties and contraceptives, nationalism, mass entertainment, denominational religions, and competing business units. Someone who is culture-bound in western culture takes all these institutions for granted. The scientist, however, by definition cannot take any of these institutions for granted. He must analyze their structure, their relation to each other, their evolution and probable future. He must compare them with their counterparts elsewhere and he must consider existing or possible alternatives quite seriously. He could not do so if he were Western culture-bound. But it is his business as a scientist to do so. Therefore the business
of being a scientist is incompatible with being culture-bound with respect to a particular existing culture.

There is, however, another understanding of the term "culture-bound." It may be proper to call the scientific outlook a new emergent culture, in which, quite naturally an ethical system peculiar to it is developing. It is to this culture that the scientist may be said to be culture-bound. It would, however, be misleading to call this scientific culture, based on semantic awareness, just "another culture." If it is a culture, it is a culture with "another dimension," namely, the awareness of the limitations of the existing cultures. Elsewhere I have named the scientist's culture a culture-studying culture, a culture of the second order, as it were. This "other dimension" of the scientist's culture must be kept in mind when one asks oneself why the scientist's ideal of behavior is any better than that of an eleventh-century knight, or of the North American Plains Indian, or of the Prussian Junker, or of a Tibetan monk. The chances are that none of those gentlemen knew any of the others. Their outlooks were necessarily limited. Only the scientist, with his awareness of the relativity of knowledge, of the dependence of convictions upon the peculiarities of one's experience and milieu, with his analysis of how knowledge and beliefs are acquired, how rationalizations operate, with his experience in arriving at objectively verifiable conclusions from a pool of subjective observations and arguments, only he can compare different outlooks and thus obtain the essence of human ethics, from which the accidental, culturally-conditioned, subjectively-biased hand-me-down distortions, irrelevancies, and redundancies have been distilled away.

The scientist cannot, however, say a priori just what should remain and what be thrown away. All he can say is that good (or healthy, or characteristically human) behavior is the type of behavior which arises in the process of increasing semantic awareness, a growing knowledge of the nature of our symbolic environment.
"TRAGEDY":
A Study in Explication

JAMES L. JARRETT *

There is in Plato's Symposium one of those teasingly cryptic, offhand remarks that constitute not the least source of his—and many another author's—fascination for us. The discourses on love were at an end, Alcibiades had been silenced at last, the pace of the debauchery had slowed to a creep:

There remained only Socrates, Aristophanes, and Agathon, who were drinking out of a large goblet which they passed round, and Socrates was discoursing to them. Aristodemus was only half awake, and he did not hear the beginning of the discourse; the chief thing which he remembered was Socrates compelling the other two to acknowledge that the genius of comedy was the same with that of tragedy, and that the true artist in tragedy was an artist in comedy also. To this they were constrained to assent, being drowsy, and not quite following the argument.1

Just this much and no more. Alas! What did Socrates mean? What was he arguing? A fruitless question. Indeed, as Plato complained, that is the great fault of books: they do not answer your questions, but only go on forever repeating like a parrot their little sayings. And it is no good looking elsewhere in Plato, for the answer is not to be found.

It can be found, of course, in Aristotle; or, more properly, reasons can there be found for maintaining against Socrates that the genius of comedy is not the same with that of tragedy. About comedy there is a certain lowness, but tragedy is essentially noble. "Tragedy is an imitation of an action that is serious, complete, and of a certain magnitude . . . through pity and fear effecting the proper purgation of these emotions." 2

Aristotle wrote no words more provocative than these. If one should call the roll of the literary critics who have praised and abused, explicated, amended, abridged, and adopted this definition, the list would omit the names of but few who count. Among the heterodox there have been numerous attempts to shorten

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1 Jowett translation, p. 233.
2 S. H. Butcher translation, p. 1449b.
the list of the genuine essentials of a tragedy. Some would extend the genre to include prose narrative; some would excise "purgation"; others think that length is a matter of indifference. Perhaps of all parts the listing of the pair of emotions, pity and fear (or terror), has gained widest accord—though even here there is by no means unanimity. In Webster's we find for the very first definition: "A literary composition, esp. a narrative, which excites pity or terror by a succession of sorrowful events, miseries, or misfortunes, leading to a catastrophe." To a strict Aristotelian the admission of narrative is heresy: the "esp." almost insulting even though in medieval times "tragedy" typically referred to epic and narrative work, and today the word may well have the usage the dictionary contends for. But more important is the disjunction, "pity or terror"; probably the weight of critical opinion today would scout the "or" on the ground that otherwise pathos would become indistinguishable from tragedy.

Of those who have held with Aristotle, Joseph Wood Krutch has made the most startling use of the famous definition. Whereas the tendency has been, in the history of literary criticism, always to soften the rigid specifications of the aristotelian list of requirements for a true tragedy in order to make room for a new work, not quite conforming to the Aeschylean model, but withal certainly "tragic"; Krutch says, in effect, Aristotle is right and the fact that recent literary works do not meet his specifications means simply that there are no tragedies in our time. Not just that there do not happen to be any—there cannot be any: the spirit of our era does not allow such—amongst us the idea of nobility has no place; we have no capacity for religion and so on. . . . I break off because my immediate interest is elsewhere. I would point not to Krutch's interesting sociological theory, but to his way of defining. His way, that is, and the way of nearly all of those who dispute with him, both those who argue that truly there is still possible a hero whose fall evokes pity and fear and those who insist that Aristotle's definition must be adjusted to make room for, say Mourning Becomes Electra or Kaffka's The Trial. What I would ask is just this: how can one tell whether a given definition of "tragedy" is right or wrong? What is one trying to do when he defines "tragedy"?

The easiest answer, of course, is Humpty-Dumpty's. This famous semanticist would say that there is no way of knowing what anybody means by "tragedy" until he has told you, and when he has told you, there is nothing further that you can reasonably want to know. This is the theory of the local self-determination of meaning and it has the great virtue of being a universal solvent of meaning problems. Aristotle meant such and such by "tragedy." Boileau meant so and so. Now, what would you like to mean?

But suppose the answer comes: Oh, I think I'd like to have "tragedy" mean a goat song.

*In The Modern Temper.*
"TRAGEDY": A STUDY IN EXPLICATION

—Oh, come, come. You can’t want to mean that.
—Why can’t I? I do. More and more I do. I will even cite you a great authority. In the first volume of *Principia Mathematica* it says:

A definition is a declaration that a certain newly-introduced symbol or combination of symbols is to mean the same as a certain other combination of symbols of which the meaning is already known. . . . A definition is concerned wholly with the symbols, not with what they symbolize. Moreover, it is not true or false, being the expression of a volition, not a proposition.

So I will make “tragedy” equivalent to “goat song.”
—But nobody means that.
—You mean, I suppose, nobody but me. But there is some slim evidence that that is what the word originally meant.
—Who cares about etymology?
—Not me. No indeed. But who cares about other people? In fact, I’m worried about those early Greeks’ agreeing with me. So I’m going to change. I will now mean by “tragedy” the same as is meant by “Positivism.” Tomorrow, of course, I may change.

This may not be a *reductio ad absurdum*, but it is certainly a reduction to absurdity. All the same, in its unreduced sense, there is much nourishment in this way of defining. More of that later.

Now what of the dictionary way of defining “tragedy”? The dictionary maker, I take it, is an empirical worker. He says to us something like this: “Among persons who use this word there appears to be consensus that the following is an equivalent expression.” Or perhaps he says, “Among persons articulate about what they mean . . . ” Or possibly he means, “Among persons of a certain status . . . .” Thus, provided there is some understanding about what the dictionary’s claim is, it is evident that the assertion may be right or wrong. If, for instance, a dictionary should define “frog” (of a violin bow) as “the tip,” the definition could be shown to be in error by making a survey among violinists and violin makers; and if it should fantastically happen that the guilty lexicographer made reply that he had no interest in such evidence because he, and not those who commonly deal with violins, is the authority on this as on all other words; or if he should reply that he had the right to define words any way he wanted to; we would then lose our respect for and our trust in his enterprise. But in fact all of us have a very large confidence in one or more of the available modern dictionaries and for most of the words we have occasion to look up, the evidence afforded by its listing a given definition is much stronger than other evidence we are likely to have access to as to the way or ways the word is in fact used.

But of course when the person wondering about the meaning of “tragedy”
is already aware of the difference between Euripides and Aristophanes, has read
the Poetics, and is well acquainted with the reasons typically given for calling
Macbeth a tragedy and The Merchant of Venice not a tragedy—for this person
the dictionary definition of "tragedy" is not likely to be very helpful. He does
not want empirical information about how the word is used, but insight into
tragedies. He knows what a tragedy is, but doesn’t quite know at that. He has
experienced tragedy but has trouble in knowing just what this experience was.
Seeing Hamlet in that notable production was a moving, an intense, almost
certainly a tragic, experience, but why? How? If one poses to himself the ques-
tion, "Is Death of a Salesman a tragedy?" or "Is Job a tragic character?" or
"How is it possible, as it is, to derive satisfaction from witnessing the perform-
ance of a tragedy?" he is not going to find any answers in dictionaries.

Besides the local self-determination way and the lexicographer’s way, how
is one to go about defining "tragedy"? Well, there is apparently Aristotle’s
way. Instead of deciding about and naming this way at the start, let us look
at it for a bit. Imitation, Aristotle tells us, is natural to man, and no less so,
a tendency to delight in imitation. In this fact are buried the roots of literature.
But imitation is of various kinds, two of the most important kinds correspond-
ing to two kinds of human character. It is the graver kind of poet who is
pleased to imitate noble actions of noble persons. It is he who writes epic and
tragedy.

The forerunner of tragedy was dithyrambic improvisation. And tragedy
itself has had a history, the poets of each generation improving on what they
had inherited from their predecessors. "It was in fact only after a long series
of changes that the movement of Tragedy stopped on its attaining to its natural
form." 4 What is its natural form? The answer is, of course, the famous
definition:

A tragedy, then, is the imitation of action that is serious and also, as
having magnitude, complete in itself; in language with pleasurable access-
ories, each kind brought in separately in the parts of the work; in a
dramatic, not in a narrative form; with incidents arousing pity and fear,
wherewith to accomplish its catharsis of such emotions. 5

It is a highly condensed sentence. Aristotle goes on to expand it in many
directions, giving instructions about the construction of the perfect plot, about
proper diction, about the best type of character, about the most effective sort
of peripety and so on. And, significantly, he criticizes certain tragedies for con-
taining "untragic" elements, thus lessening the tragic effect. Yes, effect; for the
proof of the tragedy is in the playing, in the audience reaction, as we would say.
No matter what the critics say, Euripides is right in his plot lines.

The best proof is this: on the stage, and in the public performances, such plays, properly worked out, are seen to be the most truly tragic; and Euripides, even if his execution be faulty in every other point, is seen to be nevertheless the most tragic certainly of the dramatists.\(^6\)

This is what Aristotle explicitly calls *fact confirming theory*.\(^7\)

Now, what is Aristotle doing in this discussion of tragedy, what sort of definition is he making? One might say that he is empirically describing Greek Tragedy. But this answer misleads, for he is not merely reporting, but also normatively judging. He is continually concerned with what the tragic poets *should* do and *ought not* to have done, even more than with what in fact they did do and were doing. Characteristically he was seeking to corral a universal, a form. It was the "natural form" of tragedy his defining powers aimed at.

Did his work yield up the natural form? Is there a natural form? How can one answer and yet be not crassly cavalier? Well, this much at least seems easily defensible: plays like the *Agamemnon* of Aeschylus and *Oedipus the King* of Sophocles and Euripides' *Hippolitus* impress us as being similar not only technically and formally (diction, choruses, divisions, etc.) but also in the nature of their effect upon us. Probably we will not much squirm to speak of words' "tragic effect." Now it would probably be a typically modern heresy to say that for Aristotle whatever produces this tragic effect is a tragedy, yet as we have already noticed, what is "truly" tragic is what is seen and felt to be tragic, directly, in the presentation of the play. Tragedy, as an art form, is a literary imitation of a tragic action of a tragic hero, which imitation evokes a tragic feeling in the spectator; and if there is doubt about whether the action was tragic, or the protagonist was tragic, the crucial decision is made by turning to the audience: was the aesthetic experience a tragic one, was there catharsis?

Thus Aristotle was doing something like this: he concentrated his attention on a group of dramas already called "tragedies"; he noticed that this art form had had a certain period of development; he asked what it was that distinguishes tragedies from epics, comedies, and other types of poetry; he found an answer both in the form (the means of the imitation) and in (shall we say?) the matter (what was imitated, that is, noble personages passing from fortune to misfortune), but he found an even more fundamental answer by locating the distinctively tragic feeling which is the proper end of the tragedy; finally, he found that actual tragedies differ in the effects which they produce on audiences,\(^8\) so that it is possible to speak of more tragic and less tragic tragedies,


\(^8\) Not that Aristotle was concerned about individual differences within an audience; he seemed to be thinking of a standard perception, a standard response, a normal emotional experience.

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with some plays which are imperfect in this or that formal respect still being very tragic, even more tragic than formally flawless models.  

Let us suppose that Aristotle was truly reporting his own and others' experience in the Athenian theater and that in comparing those plays which evoked the most "truly" (intense? pure?) tragic effect with those in some degree deficient in this power, he correctly attributed the virtue of the former to their having the kind of plot, of character, of peripety, of language, etc., that he apprisingly describes. Will we then be granting that he correctly describes the form of Tragedy?

It is easy enough to imagine Aristotle's having so located a complex sort of esthetic experience (as we might say) and naming it, arbitrarily, "type 1-a." Then he might offer as an empirical generalization that the most effective means for inducing this sort of experience is a dramatic production "serious, complete, of a certain magnitude..."

But what he did, was to take the name which had come through the accretions of tradition to be applied to (and how, now, am I to give a neutral description?) the serious sort of drama of the Athenian theater and to use this name for a certain quality of experience he abstracted from various experiences with plays by Aeschylus, Sophocles, Euripides, Agathon, and some others; and to use the name too for components of these plays, such as the principal character, the situation he is in, and so forth.

Yes, but what about post-aristotelian tragedy, tragedy so-called? Shakespeare wrote tragedies and Corneille wrote tragedies. Chaucer wrote something he (mistakenly?) called a "tragedy." And Ibsen wrote tragedies—or did he? Theodore Dreiser indisputably wrote An American Tragedy, though only disputably, an American tragedy. And none of these is Greek Tragedy. Is Shakespeare as author of Hamlet and Othello to be admitted into the ranks of the tragedians simply because he "imitated" the serious actions of a noble person falling upon misfortune. No, surely this net is too wide-meshed. Are we then to say that since he did not write plays formally similar to Greek Tragedy, he wrote no tragedies? For some reason, we hesitate to go that far. Well, perhaps Shakespeare accomplished the same or very similar effects as did his Athenian opposite numbers, but by different means—without using choruses, or quantitative meter, or plots furnished by Greek legend (except in Troilus and Cressida). That is, certain of Shakespeare's works do effect a purgation of pity and fear. If this is enough to make these works tragedies, then we blame Aristotle's account only for its failure to see beyond the practice of the Greek playwrights into new styles and forms. But now how far can we carry this principle of subordination of form? If we can find a sonnet which seems to purge by

*This, of course, implies that form was not exclusively judged by its capacity for evoking tragic feelings.
arousing our pity and fear, shall we call it a Tragedy? A novel? Perhaps a symphony or a painting? A course of psychoanalytic treatments? A pill?

Let us try another supposition. Let someone say that Aristotle's primary mistake was not in supposing that to be a tragedy a literary work must be formally very similar to the winners of the tragedy contests in Athens; his great mistake, rather, was precisely in his theory of catharsis. The tragic effect is something quite different; it is... Is what? Is anything you like. Is the feeling of the unresolved antithesis of powerful forces. Is the sense of the waste of human potentiality. Is the perception that true nobility rises above even the greatest adversity. Is the feeling that ultimately man's problems are insurmountable. There are many possibilities.

But isn't that annoying? Such ambiguity is intolerable. Isn't it? Why does it occur? And if it really does, shouldn't we merely scrap the word "tragedy," just get rid of it and use other words, even if we have to coin them?

PART OF THE TROUBLE is tradition. Tradition villainously establishes certain artistic forms and genres and then proceeds to make them almost uselessly vague. "Tragedy" is not the only troublesome word. Virtually all types and forms and genres blush and stammer once we cock an eye at them.

Among the many problems which can be raised about literary (or any other kind of) genres, there are two in particular which I choose just now to press. The first has to do with the vagueness which, I believe, invariably attends a conception of a genre. The second concerns the honorific quality some genres have attained.

One would think that part of the definition of "string quartet" (as a type of musical art work) should be a specified number of movements; but in compositions called "quartets" we find some composers getting along quite nicely with a single movement and some, like Beethoven, using as many as seven. Is a symphony still a symphony when no semblance of the sonata-allegro form remains? How long may a short story be without becoming a novel? The primary reason why such problems are insoluble is that though theory here follows practice, practice does not reciprocally follow theory. It is of course elementary that creative artists of all kinds in matters of form and style do not begin from scratch but, no matter what their particular bent for innovation, reflect to a degree their masters. It is reasonable to suppose that the particular form in which an artist chooses to fashion his expression is largely determined by environing circumstances: no more than a comfortable stretch of the imagination is required, to think of Chaucer writing plays, Sophocles novels, Joyce epics. How these forms rise and fall is a subtle and difficult problem which fortunately for present purposes I need not try to solve; rather do I want to suggest that the popularity of a certain form at a certain time is a kind of social habit. So too with the popularity of a genre, which, having become a habit with the con-
suming public and with the producing artists, elicits the efforts of a theorist for its definition. Let us suppose that our theorist is determined to report practice and that he is a sensitive enough observer to penetrate through the host of accidental differences to the essential likenesses in the works of art which by now are called by the name of the genre whose denotation they constitute. The theorist announces his results as follows: In order to belong to such and such genre, a work of art must have the following characteristics: A, B, C, and D; I know this because works of art Alpha, Beta, Gamma, and Delta, all of which belong to this genre, have these and only these characteristics in common. And how did he know that these cited works belonged to the genre prior to the formulation of the definition? Well, people called them by the same name; and in fact they were discovered to have striking similarities! All right. Fine. We know what Genre Q is. And so does artist Aleph: the only trouble with him is that he does not, perhaps, care and proceeds to demonstrate his indifference to the academic life by creating a work which conspicuously bears the marks of A, B, and C and just as conspicuously the very antithesis of D. Re-enter the theorist, his brow now a little fluted with worry, to decide whether D after all and in the face of the decided success of the new work is truly essential. And you know of course that next comes a work seemingly characterized by A, B, and D, but lacking C; and still another work with attributes E and F, which a new theorist finds to be importantly present also in the prototypes. Extend this example indefinitely and you begin to approach the state of vagueness in which the typical genre-conception gets itself.

The resultant confusion would not, perhaps, much matter except for the fact that after the genre has come to include by general agreement many distinguished instances, one likes to put his new favorite into such company. An up-and-coming composer might understandably want to call his new work his first symphony even though it is in one movement, a scherzo, and scored for strings, oboe, and tympani. This desire by artists and by critics to include more and more works in the traditional and honored category results—since innovation is part of creativity—in a greater and ever greater diversity of works bearing the label; and the job of empirical definition gets even harder.

It is a good thing to write a tragedy—if it really is a tragedy! But what if there are humorous scenes included in your so-called “tragedy”? What if the protagonist is of the bourgeoisie or the proletariat? What if the work is written in prose? What if there is no individual-hero, but a group-hero? What if the attractive cause is hopelessly crushed? What if the work consists of a single act? What if it is narrative rather than dramatic? What if it excites hate more than terror? Each of these questions—and dozens more like them—institutes a crisis. And if you, for instance, say that a novel may under certain conditions be genuinely tragic and I deny it, on what principle is the debate to be settled?
Ordinarily, the activity of defining "tragedy," as this defining activity takes place within an essay in esthetics or literary criticism, is (1) not merely a matter of volitionally stipulating equivalence between two sets of symbols; because the word "tragedy" already carries a heavy freight of meaning in our minds, and a mere stipulation cannot interest us; (2) not merely a matter of reporting actual usage, for the way the word "tragedy" is commonly employed it means hardly anything more definite than, say, "sad" or "regrettable."

But what we may want to do, are entitled to do, and possibly will succeed in being interesting and helpful in doing, is to define "tragedy" by remaining reasonably close to traditional definitions, close enough, at least, to be able to include among our denotata Oedipus the King, Medea, Hamlet, and any such other works as have almost always been regarded as high examples of tragedies; and by then going on to specify (persuasively define?) other qualities which we would like to call special attention to by calling them "tragic qualities," qualities like "cathartic" or "sense of waste" for instance. But in any case we ought to remember that there are an indefinite number of possible definitions, some of which may make tragedy impossible in our time, some of which may include the "group hero," some of which may require "truly" tragic conclusions to be positive and spiritual. We will doubtless continue to define "tragedy," to use the word this way and that. And there most certainly are a host of interesting and important questions which can be raised and more or less adequately answered about the means and ends of artistic works. But I confess that after I know a critic's views on the nature of the work and perhaps on its relations of similarity and difference to other works, I shall be anticlimactically indifferent to the conclusion that therefore it is—or is not—a "tragedy." And ditto for "comedy, history, pastoral, pastoral-comical, historical-pastoral, tragical-historical, tragic-al-comical-historical-pastoral, scene indivisible, or poem unlimited..."
TWO POEMS

CLAUDE COLEMAN*

OSMOSIS IS THE WORD

As I looked up from my work he was standing there,
Friendly, his tail wagging like a salesman’s.
“What do you think you are doing?” he said.
I said, “Dammit, man, I am setting out trees.”

I had figured out that answer long before
Knowing that he or someone else would come;
And, as I knew he would, he changed the subject.
Anyone will who understands it fully.

There was just no more to say about that subject.

What else can one say about setting out trees?
One digs a hole and thrusts the tiny roots in,
Steps on the dirt around the tiny trunk,
Goes away ten years, and bingo, tree.

Procedure known—results known—technical terms known.
Thrust the roots in the damp earth, let them drink;
Thinner solution flows toward thicker solution.
“Osmosis” is the word, as everyone knows.

The branch thrusts out a leaf in the spring, a green
Leaf with a lot of lovely green stuff in it.
Chlorophyll’s the stuff and photosynthesis
The word for the mystical process. Nitrogen
From the air turns into fiber, cambium layer,
Scarcely a word about the whole procedure
That I don’t know. I think I know the language.

But why does the thinner solution go to the thicker?
Why does this thing go on in the little leaf?

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I know all the words, I can tell you at any moment
The right word, the special sound to utter,
The little marks to make on the white paper,
Even when I set out trees.

Who or what decreed this osmosis thing?
Why does it always work? How did it start?
Some time ago when the first little tree stuck its nose
Skyward, how could it know about osmosis?
How could it be so sure about photosynthesis?

The ignorant and devout will utter the sound
Or make the marks or the signs of the name of God.

My friends are in love with words. They love their language.
Happy to know the names of birds and trees.
They all know beans when the beans grow in my garden;
If they said "Beans" and pointed toward sweet potatoes,
They would hurt deeply. "Beans," one says and points.
"Mocking-bird" says another, tilting his head.
"Glacier" one says, reading the tag on my rose.
"Goldilocks" says another, reading another tag.

We have a lot of fun saying the names of things,
But what do we know, I wonder? What do we know?
TO A VETERAN
WHO DIED YOUNG

The old poets asked questions when their friends died
Taxing the gods with neglect or malice or ignorance.
I shall not ask questions.
A silly question begets a silly answer.
The old nonsense no longer suffices.

I talk to you because it pleases me
But you do not hear me, for you are gone,
You are gone, you do not return and shall return no more.

I shall not send flowers,
But I shall stand at the window, staring at the snow,
And I shall think of you lying cold and still
With your hands together in your dark narrow room
With the snow sifting silently on the mound.

And I shall remember how gleaming once were those eyes,
How active once were those lips,
How the electrons in the brain once made those intricate contacts
And the thoughts came trooping out in living language.

I shall write Helen a letter
Saying what she knows already,
And when the boys are tall and strong I shall tell them about you.
I shall say you died because your heart gave out,
Weakened by the strain of Tinian and Saipan and Iwo Jima;
I shall tell them how you strove upon your return
And pounded out story after story, hoping for fame and fortune
for their sakes.

They will be proud of you but you will not know this.
They will wonder why you are gone while I remain;
But I shall not tell them what I do not know.

And all of us will go after many days and be forgotten,
You will be forgotten with us,
Others will come and go and be forgotten
And so on and so on through the etcetera of time.

And always some will ask why.
But I shall not ask why, because
A silly question begets a silly answer.

So long, boy.
HOW SCIENTIFIC IS SOCIAL SCIENCE?

RAYMOND W. MACK *

How scientific is social science? It seems to me that the way to address this question is to determine what we mean by "science" and by "social science" and then to see to what degree each of the several so-called social sciences meets the criteria of our definition—in other words, to what degree the field is scientific.

What is the unifying factor which leads us to classify certain bodies of knowledge as sciences? It is the way in which the body of knowledge was obtained; the unity of the sciences lies in their method. Knowledge obtained by this method is referred to as scientific; men who utilize the method to add to a body of knowledge we call scientists; a body of knowledge compiled by the method is designated a science.

The scientific method itself consists of seeking knowledge on the basis of three assumptions. The scientist does not say that no data gathered outside this framework can be true or useful; he does claim that only knowledge gained in this manner is scientific. To proceed scientifically, he assumes that:

(1) The most reliable method of gaining knowledge is through the human senses: sight, hearing, taste, smell, and touch. When a person "just has the feeling, deep inside him" that the Cleveland Indians will win the World Series in 1959, he does not have scientific knowledge. When Aristotle assumed that a horse had a certain number of teeth because that seemed a reasonable number of teeth for a horse to have, he did not add to scientific knowledge. Had he looked inside the mouths of some horses to find out how many teeth were there, or reach inside to touch and count them, he would have had a scientific datum, straight from the horse's mouth. It is true that scientists often use instruments in their data-gathering, but these are nothing more than devices to aid them in their sense perceptions. The most refined of gauges must be read by a human eye if it is to contribute to the storehouse of human knowledge. The thermometer does not feel a temperature; the ruler does not measure a distance;

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the stethoscope does not hear a heartbeat. Each is an auxiliary to the human senses, but it is the eye and ear of the person using them which makes of their sensitive indications a scientific observation.

(2) The most reliable method of organizing knowledge is through the use of human logic. There is a widespread belief that scientists are persons who "let the facts speak for themselves." Facts never speak for themselves, if by this it is meant that a datum has meaning without interpretation. Facts have no meaning unless they are presented as statements of relationship to other facts. During our lives, each of us has acquired a considerable store of knowledge which he is accustomed to bring to bear upon each new fact he acquires. It is easy, therefore, to be unaware on many occasions that our human brains are cataloging the newly presented information with reference to other information which we already possess. If, for example, a friend informs us that the temperature outside today is 74°, we are inclined to think that this fact is meaningful all by itself. Actually, it would take pages to list all the facts to which we relate this one. First, obviously, each word in his sentence has a meaning to us because we were socialized in a culture where English is the standard language. Then, too, we are familiar with a Fahrenheit scale for measuring temperatures, and are aware that it is customary in ordinary conversation to refer to this scale rather than to a Centigrade one. We know that water boils at 212°, that it freezes at 32°, that normal room temperature in our society is about 68°. Our reaction that it is unseasonably warm today, or unseasonably cool, or about what one would have expected, indicates a knowledge of the time of year, the geographic location, and some information about temperatures in this area at this season in previous years. This simple illustration points up what we mean when we refer to a science as a body of knowledge: it is a body because it consists of facts which have been organized in relation to one another by human reason.

(3) The most reliable method of checking knowledge involves the independent conclusions of other competent observers. The reason we sometimes have to wait so long to gain access to the startling medical discovery announced in the Reader's Digest or some other well-known medical journal is that a relationship between facts seems apparent in the experience of one competent observer, but it has not been validated by others, and hence is not yet accepted by scientists as part of a body of scientific knowledge. It is not unknown in human experience for one observer to see small winged beings descending from the clouds, to hear them speak to him, and even to touch them. But because other competent observers cannot see or hear or touch them, their existence cannot be accepted as a scientific datum.

In summary, then, when (1) an observer gains knowledge through one or more of his senses and (2) he uses his human reason to interpret his observation (i.e., relates it to other facts), and (3) other persons sufficiently well
trained in the area being studied see or hear or touch or smell or taste the same things as the first scientist and, using their human logic, organize the knowledge they have gained in the same way as the first observer (i.e., reach the same conclusions), we have a scientific fact.

HAVING answered the question, "what is science" (at least to the satisfaction of the writer), we are faced with the question: can there be such a thing, then, as social science? By "social sciences" we mean those bodies of knowledge compiled through the use of scientific method which deal with the forms and contents of man’s interaction. To be social is to interact, to participate in group life. It is true that textbooks in the social sciences sometimes detail the social interaction of living beings other than humans, such as ants or apes, but this is usually for the purpose of illustrating, drawing analogy, or in some way attempting to understand better the social behavior of human beings.

All human beings are social. People have to interact with other people in order to survive. Since all human beings live in a society, which is to say that every person is a member of some human group, it is just as reasonable to speak of a social environment as to talk, as people more often do, of their physical environment. People are, after all, much more profoundly influenced by their social surroundings than by their physical ones. The three-year-old son of a steel mill laborer in Pittsburgh who is taken from his home and reared by foster parents in a steel mill laborer’s family in Birmingham, England, will not only talk and act differently than he would have had he remained in Pittsburgh; he will even think differently. The change in his physical environment will have been minimal; the alteration in his behavior will be traceable to the difference in the two social environments. As the physicist, the chemist, the astronomer, the biologist study the universe in which we live and the elements of which it is composed in an attempt to understand our physical environment and to predict what will happen in a given set of circumstances, so do social scientists study the social environment in which we live in an attempt to understand human society and to predict how people will interact in a given set of circumstances.

Can there be such a thing as social science? There are those who answer, "No!" I have here in my hand (as it seems fashionable to say) a statement by Raymond Moley, whose views on this matter will probably not surprise those of you acquainted with his views on other topics. In his column in Newsweek, Mr. Moley says:

...foundation-supported research should probably limit itself to the field of health and the more exact physical sciences. When foundations enter the still cloudy field of what is quite incorrectly called "social science," they ask for trouble. For such investigations almost certainly get into ideological and controversial matters. Since every dollar spent by a tax-
exempt foundation must be made up by the generality of taxpayers, those who strongly disagree with the point of view of the foundation can well object to a requirement that they contribute thereto. . . .

Tax-exempt foundations might well limit themselves or be limited to the war against disease, to the natural sciences, and to grants without strings to established institutions devoted to higher education, religion, or true scientific research.¹

My answer to the question, "Can there be social science?" is, "Why not?" We can observe human beings; we can organize the data which we observe; we can have them checked by other competent observers. Why not social sciences? Other than to say "There is no reason why not," there are only two answers to my question, as far as I know. One is a matter of one's personal belief system, which can be answered pragmatically to my satisfaction, but not, I hasten to admit, to everyone's; the second answer to the question reveals, not a different belief system, but simply ignorance.

One set of answers in opposition to the application of the scientific method to the understanding of human beings boils down to this: God did not intend us to understand man; it is evil to attempt to do so. This is the same point of view that was expressed in criticism of Galileo for studying the physical universe. New knowledge is always threatening to vested interests; we are less than sophisticated if we express surprise, much less horror, at opposition from persons and groups to the pursuit of knowledge. It was only three decades ago that a teacher was tried in court in this country for teaching his students the theory of evolution. This trial occurred after Einstein had published his now-famous formula; it occurred in the lifetime of Luther Burbank. We do not have to lean on Galileo or other medieval examples for this point. Last year a lady came to Northwestern University and withdrew her 20-year-old son from one of my lasses because the textbook mentioned the theory of evolution. If you believe in a God who created man slightly higher than the beasts and slightly lower than the angels and who looks upon the study by such a man of the behavior of his fellows as a moral outrage, then I have no answers for you other than those to be found in the historical development of man's thinking on this topic. I can disprove by the scientific method neither the existence of such a God nor his disapproval of social science.

The other usual objection to the existence of social sciences, which I characterized earlier as revealing ignorance, is that there cannot be social sciences. Sciences of social life are impossible, say the proponents of this view, because human nature is unpredictable. You cannot generalize about how humans will behave. This would be a very damaging argument except for one thing: it is not true.

The social behavior of human beings is patterned, and hence can be described in general principles. All societies are structured, all societies are stratified, all societies implement a division of labor on the basis of age and sex: these are general sociological principles. Anthropology offers similar principles of culture: all societies have value systems, consisting of ideal patterns which are taught each member of the society, and normative patterns, which are actual behavior; all cultures exhibit some degree of variance between the real and ideal patterns of behavior. Psychological research indicates that all societies have persons who deviate from the norms, all societies contain individuals with varying capacities for learning; individuals in all societies feel hostility, and if one hostility-focus is removed, they will find another.

The above are general descriptive principles; more important for our case that social sciences already exist is the ability in various fields to make predictive statements: if this, then that. When one culture is exposed to another, new technology will be diffused faster than new value patterns—the principle of cultural lag. As a social group loses functions, it will lose stability: a brief description of the modern urban-industrial family. People will migrate a distance which is inversely proportional to the number and magnitude of intervening economic opportunities.

Finally, and probably most convincing to the layman, it is possible to predict specific behaviors in a certain society at a specific time. The population of the U.S. in 1950 was predicted on a percentage increase basis to a decimal of accuracy in the 1920’s. We can give paper-and-pencil questionnaires to convicts and predict recidivism and success among parole applicants. Burgess and his associates have designed questionnaires on the basis of which they can

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5 Davis, op. cit., pp. 392-432.
predict the probable marital success of engaged couples. Production rates in industrial environments can be altered by the implementation of changes in personnel policies.

I am saying that there not only can be social sciences, there are social sciences. I have still not addressed the question: how scientific are the social sciences? The answer, of course, is that some are more scientific than others. The social sciences have come a long way in the past three decades, and they have a long way to go. Among those which have the longest way to go are those schools of political science whose primary concern is scolding (or attempting to reform) the world from the point of view of private sets of values. In some areas of economics (for example, market research), psychology, and sociology, there has been marked progress in scientific rigor and predictive power, largely because of a willingness to employ quantitative techniques. But as for those areas of the social sciences which are not yet sufficiently scientific, what are the deterrents that are holding them back?

The first deterrent to progress in social science—and in the past the most important—is ethnocentrism. Members of any society tend to believe that their way of thinking, their way of doing things, is not only the best but the right way. The Navajos refer to themselves as “people” and to all outsiders as “others”; Jews have classified all others as Gentiles; in ancient Greece there were only Greeks and Barbarians. The belief that one’s own way of thinking is the proper way still influences the social sciences. Last week I heard a political scientist in a curriculum discussion say that his job was to guide his graduate students into the execution of research projects which would “prove that democracy is the best form of government.” I happen to believe that democracy is indeed the best form of government, but I do not think that this sort of research design is going to advance social science. There is no such thing, scientifically speaking, as Catholic sociology or bourgeois genetics, and until social scientists free themselves from this mode of thinking, there will be obstacles to scientific progress.

A second deterrent to scientific research is the confusion of engineering with science. Scientists assume that any knowledge, whether or not it is “practical,” is worth while. There is a crucial difference between the scientist, who discovers knowledge, and the engineer, who applies it. The physicist discovers the laws of mass and volume; the engineer applies them in constructing a bridge. The social worker does not test hypotheses in order to evaluate a scientific theory;


he applies the knowledge presented to him by sociologists and psychologists. In other words, he is a social engineer. No invidious comparison between scientists and those who apply scientific knowledge is intended. I am saying simply that pressures upon scientists to engage only in "useful" research can do much to deter the development of science.

A third deterrent to the development of social science is often erected by social scientists themselves—or else by their over-enthusiastic disciples. I refer now to crazes or fads for certain techniques or approaches. Consider, for a moment, the Rogerian school of non-directive interviewing as a research device and non-directive therapy as an applied or engineering technique. I do not deny the utility of these techniques, either in research or in therapy. It is possible, however, for one to become so exclusively enamored of a technique (as are some of Rogers's disciples) that he can see no other way of approaching a problem. Instances of dogmatic over-enthusiasm are likewise not unknown among students of general semantics. In all such cases, science is the loser, for designs and techniques are matters of strategy, not morals.

A fourth impairment to social science I would call conceptual inefficiency, the employment of concepts with vague or untestable referents. A necessary requisite for the emergence of an exact science is a clear and unambiguous terminology. I have already cited the hazards of equating the implementation of principles, or engineering, with the discovery of principles, or science. Psychoanalysis, for example, is still largely a technique, an engineering practice, a case of the implementation of principles which have not always been precisely formulated. Almost classical examples of entrapment by inefficient concepts can be found in its literature. The misleading images conjured up by such concepts tend, inevitably, to dominate the beliefs.

I do not mean to suggest that solid empirical research has not been accomplished within the framework of Freudian psychology. That Freudian concepts can be given empirical referents, that they can be operationally defined, is adequately illustrated by such fine scientific work as that of Winch and his associates. This, and other endeavors of like caliber, are pioneering work, expanding the frontiers of social science. There is a real danger, however, in lumping with this work non-scientific pursuits which have been incited by

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Freudian writings, as the public is wont to do. As long as engineering activities, such as psychoanalytic therapy, are confused with science, they will serve to impede the progress of science.

I will mention, briefly, only two more deterrents to the development of social science. The first is a tendency to substitute exactitude for meaningfulness—in other words, to follow the safe course by studying what is easy to study, even if this means ignoring problems which are more pressing for the furthering of theory because they are harder to solve. Psychology is probably the worst offender here, though many sociologists are making a noble attempt to hold onto second place. This tendency is summed up in a comment contrasting the exactitude of American social science with the European tendency to grapple, however, inexpertly, with basic theoretical problems. It has been said that the European social scientist doesn't know what he is talking about, which is a great deal, while the American knows precisely what he is talking about, which isn't much.

The final deterrent to scientific endeavor in the area of human interaction is an unpleasant one to have to mention: it is fear. The view is growing that one is wise to avoid "controversial issues": a redundant term, since if a topic is not controversial it is not an issue. Issues cannot be omitted from science except through falsity, distortion, and concealment. If an issue is presented as though it were not one—that is, as if there were only one side to it, that is not science, it is indoctrination. The intimidation of foundation research programs attempted this year by the Reece Committee—the intimidation of research scientists at Harvard attempted by Senator Joseph McCarthy—these do not bode well for the development of a vigorous social science research program in the United States. If we really want social science, we must, as citizens, demand the fairest possible exploration of all sides of a social problem. Such exploration is not fostered by vocal pressure groups who want only their side presented and who are able to threaten with possible loss of his livelihood and reputation anybody who suggests that there is another side.

If we really want social science in this country, we will have to insure social scientists the freedom that their work demands.
DANGER: MEN TALKING (IV)

WILLIAM H. SCHNEIDER *

THE WORLD'S MOST POWERFUL NATION REACTS TO A CERTAIN WORD

* This is the fourth series of caricatures by William H. Schneider, graphically illustrating semantic ideas. Mr. Schneider is art and copy director and vice-president of Donahue and Coe, New York.
OVERCOMING SALES RESISTANCE

FLATTERY DOES IT TOO
A SPADE CALLING A SPADE A SPADE

MOUNTING TENSIONS REACH AN IMPASSE
Political Party Trying to Co-ordinate Its Left Wing With Its Right

So an Idea Disappears In a Sea of Words
DANGER: MEN TALKING (IV)

GOSSIP COLUMNIST AVOIDING LIBEL

EUPHEMISM AND THE FOUR-LETTER WORD

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A nineteen-year-old boy I know told me recently about getting into a conversation with a girl of decidedly odd, but to him attractive, appearance in a drugstore where most of his friends gather. Members of his gang, assuming that he was unhappy about being seen with so odd-looking a girl, brought him a fake telephone message. "We saw you were stuck with that freak," they explained, "so we thought we'd help you out." When he said that he didn't want to get away and went back to her, they looked at him as if they thought he had gone crazy. He tells me that his gang has been kidding him about his "peculiar tastes" ever since.

What's wrong with my friend's gang is the same thing that is wrong with an appalling majority of American young men. Their minds are so stuffed with the standardized notions of beauty given them by the movies, the magazine covers, the soft-drink advertisements, the winter-resort publicity shots, and the innumerable starlets and "contest winners" of the daily newspaper cheesecake, that they have no minds of their own when it comes to deciding whether a girl is or is not beautiful.

In other words, if a girl is noticeably thinner or stouter than the "popularity queen" of her college or high school, if her proportions of weight and height are not comparable to those of the local Lana Turners because she was born an entirely different breed of kitten, then, in the brutal language of most of the boys, she is a dud. The majority of young men display a regimentation in their tastes in feminine beauty that could be no worse if it had been dictated by a Ministry of Aryan Culture.

Young men seem either to be afraid of, or incapable of, looking at girls for themselves. They look, not with private eyes on what should be a matter of private choice, but with public eyes—as if they were picking a prom queen or selecting some one to photograph for a poster. They seem to think that the way to pick a girl is not to please oneself, but to please everybody else.

Conventionality of masculine taste has, inevitably, an effect on the girls.

* Reprinted by permission from the November 1945 issue of Junior Bazaar.
I recall vividly the marked change that used to come over freshman women during their second semester at the University of Wisconsin where I taught for some years. In September they came to us from Eagle River and New Freedom and Green Bay and Eau Claire, some came from Chicago, Los Angeles, Philadelphia, Nashville, and New York. Most of them brought with them something of an unregimented quality, expressive in some cases of the region from which they came, in other cases of the kind of family background they had had, or of a private personality and style which they had developed into a unique individuality during the freedom of adolescence.

When the second semester rolled around, however, they were inducted into sororities. The upperclassmen in a sorority want their freshmen to be popular, and they are well schooled, of course, in what men want in their dates. They therefore invariably jumped on those of my nice freshman students whom they had elected as sisters and went over their wardrobes, their hairdos, their carriage, their conversational style, and even their opinions and attitudes and their choice of friends, suggesting reforms in all departments.

As the second semester proceeded, one could see the individual personalities and styles of these freshmen gradually being disciplined out of existence. By the time they became sophomores, they ceased to be people and were campus smoothies. But the system worked, of course. The girls were popular as all get-out. They got the men that common opinion held to be the most desirable.

I mention sororities only because they carry out with more deadly efficiency than other agencies the prevailing male demand that girls be standardized. The demand, and the resultant tyranny, are no less effective elsewhere in American life. From Maine to California, girls starve themselves, overeat, pull themselves in here and push themselves out there. They put themselves at the mercy of fiery chemicals and burning irons to achieve that surface brilliance, that prepackaged and prefabricated look, that prevailing taste requires.

Somewhere in a forgotten file drawer I have a photograph of my sister in her wedding dress—the kind that is prescribed in an old-fashioned, formal Japanese ceremony. (She was brought up in Japan; I in America.) According to the traditional requirements she is dressed, coifed, powdered and lacquered to perfection. She looks so artificial and so much like an eighteenth-century Japanese print that had she not written a message on the back of the picture for me I should not have recognized her at all. As I looked at it, I suddenly realized why all the Japanese beauties in the woodcut prints of Utamaro and Harunobu and other artists are so much alike. They lived a completely standardized life where not only the exact amount of lacquer on their hair but their ideas were decided by the feudal lords. When American young men of today insist on the regimentation of feminine attraction they are insisting on a dictated design for living where personal decision and individuality are submerged.
Once a man is the slave of this standardized taste, what does he miss? The first and most obvious thing he misses is nine-tenths of the beautiful women in the world. There are many times more beautiful women than he thinks there are. Ask any artist. Few of the great painters and sculptors have ever chosen conventionally pretty girls for their models.

Beauty to a true artist (and I don't see why all young men shouldn't be artists in this respect) is not defined by the United States Bureau of Standards. Beauty is a set of relationships. Therefore any given feature which, taken by itself, may sound "unfortunate," such as large hips or skinny legs or kinky hair, can be exquisitely right if it is in a thoroughly harmonious relationship with all other features.

Furthermore, these relationships do not exist statically. Feminine beauty is observable only in a girl in action: the way one girl flings out her arms when she is impatient, the way another hesitates over her words when she is thoughtful, the way still another dances or pecks at her typewriter or shields her eyes from the sun or offers her sympathy to a hurt child; the way a girl laughs or accepts an invitation or stares into space or brightens up when confronted by a dish of shrimp Cantonese style with lobster sauce. This network of dynamic relationships between face, figure, culture, background, glandular activity, state of physical and emotional health, personal idiosyncrasy, and goodness knows what else—the total pattern of the responsiveness of a living girl to the world and all that's in it—this is where beauty is to be found.

What young men need to know, and what women might help to teach them (with the possible exception of Grade A, Number One Prime glamour girls who may want to keep things as they are), is that one glance, or even several, does not provide a basis for deciding whether or not a girl is beautiful. Young men also need to learn more about their own emotional lives. They need to learn that any man's deepest needs are somewhat obscure to himself, and that there are not many girls in the world who can meet those needs.

Finally, men should know that girls who have had their own way because of their beauty ever since childhood and those who obviously spend the major part of their waking hours maintaining a breath-taking perfection of grooming and appearance are more than likely to be too madly in love with themselves to be seriously interested in anyone else's happiness. Languid, self-centered and infantile, they are capable neither of giving love nor of earning it.

Let young men reflect on the misery of playboys who marry one glamour girl after another and conclude that women are all alike. Let them ask themselves, as they go tearing breathlessly after the belle of the campus, whether they are in pursuit of their own heart's desire, or merely reflecting the results of a public opinion poll. Let them think over the charge made by the distinguished psychoanalyst, Dr. Karl Menninger, in his Love Against Hate, that
American women of the upper middle classes are among the most dissatisfied women in the world, largely because men lack the emotional insight that would enable them to fulfill their roles. Let them learn habitually to delay the decision on whether a woman is or is not beautiful until they have seen her many times, in many contexts, in many situations.

When enough young men are trained to think along these lines occasionally, girls will begin to have a fighting chance for liberation, to dare to be various and individual and interesting—even intellectual.

COMPULSIVE AND INFORMATIVE COMMUNICATION

RALPH W. SLONE *

IN WHAT way is individual behavior related to social behavior? Attempts to answer this question—the problem of "Freedom and Authority"—comprise, in one way or another, almost the whole of social science. Many people feel there can be no empirical answer, that the question concerns subjective ethical valuations not susceptible to scientific study.

I do not agree. I do not think there are any events in the physical universe not susceptible to scientific study, events so unordered that it is useless to hope we can ever make any predictive statements about them.

Possibly one reason this particular question has given so much trouble is that we are too close to it, too cognizant of its complications. It has been noted in this connection that astronomy emerged as a predictive science when almost the only thing known about the heavenly bodies was that they moved.

Perhaps if we stand far enough away, we may be able to see regularities in the actions of men and women, as the Chaldeans saw in the lights which moved in the sky, which will prove interesting and suggestive—the more so for being in a sense illusory.

IN the following paragraphs I am going to outline a simple model I have found useful in thinking about social behavior. This model is so abstract as to bear almost no recognizable relation to actual observed human behavior, yet it has been inductively derived, in a rather loose way, from a study of such behavior. In this model the relation of the individual to the group is almost wholly defined in terms of an ambivalent communication complex.

It is constructed as follows:

* Mr. Slone, of Homer, Alaska, is on the staff of Airways Operations Division, Region 5, Civil Aeronautics Administration. The opinions expressed herein are the writer's and do not reflect official CAA opinion or policy.
1.1. There are individuals, relatively ordered structures in a less ordered environment.

1.2. These individuals may maintain or gain order, which is success; or lose order, which is failure.

1.3. They experience sensation, conveying information about the environment.

1.4. In response to sensation, they show activity which is random and generalized except for a tendency to repeat specific successful activity, which I shall call compulsion.

1.5. The range of sensation and activity in the individual, capacity, is limited.

1.6. Communication, a form of activity and sensation, is possible between individuals.

1.7. Compulsive communication is received by the individual as a pre-formed compulsion toward specific activity.

1.8. Informative communication is received as information.

1.9. Two or more individuals in communication form a society.

Some, if not all, of these latter assumptions I think could be related to the initial premise in such a way as to form a tidier logical structure. I have not tried to do so, nor have I defined my terms too closely, because I feel the present value of this model, if any, is more suggestive than predictive. I want to focus on the operation of the compulsive/informative communication complex without being tied too closely to the exact mechanics of its operation. To this end I have tried to prune away all attributes of actual individuals which do not seem necessary to the bare picture of communication.

There are several interesting things about this model.

In the first place, the problem of value, of "right" and "wrong," "good" and "bad," has been sidestepped. I do not believe it is really any more necessary for the social scientist to worry about "human values," except as an objective fact, than it has been for the physical scientist. Heat and light, the sensations of falling and motion, are also "human values." Before physical scientists could work effectively with them, they had to be related to other objective phenomena. While individual subjective values operate in the societies described herein, the final criterion of behavior is not its subjective meaning, but its objective success or failure. In this model, from the viewpoint of the observer, there is no "good" or "bad" behavior, there is only successful or unsuccessful behavior.

Another point of interest is the model's wide applicability, its generality. In this simple form it is suggestive of relations observed in societies of insects, machines, men and insects, men and machines, men and trees—even societies of atoms, with some stretching of the terms. Such generality is not necessarily a recommendation. Very general statements are often very useless statements, they are useful only when they lead logically through more and more specific restate-
ment to close approximations of observed data. When they do this, they provide an important framework for comparison and synthesis of knowledge. This model is neither sufficiently rigorous nor well enough developed to qualify in this respect; but it is interesting to note that it shows, in the rough and intuitive way I have developed it, some promise in this direction.

However, its most important feature, I feel, is its emphasis on the ambivalent nature of communication. In social theory generally, communication is considered an integrative force, though it is recognized that this is not always “good,” and it is sometimes supposed that in specific situations there can be “over-communication.” In this model, communication may either serve an integrative purpose in the society, as compulsive communication, or it may be disruptive, as informative communication. The term “over-communication” seems meaningless in connection with this compulsive/informative ambivalence, though there can be over-emphasis on compulsive communication at the expense of informative communication, or vice versa.

This distinction between the two types of communication is, of course, arbitrary and dependent on definition. It is introduced to simplify logical manipulation, and is analogous to the use of such terms as “action” and “reaction” in mechanics. Even in very simple societies such as are discussed herein, it is hard to imagine a case of “pure” compulsive or informative communication. Communication itself is a specific activity, and informative communication must presuppose at least the presence of self-induced compulsions. In any complexity at all, it must be dependent on a compulsive communication which is highly enough developed to permit a common conceptual basis.

Conversely, since communication of any kind requires transmission of information, compulsive communication must at some stage be dependent on informative communication. It might be well to note that there is one point in the application of this last statement to “real life” which raises still another question. In living organisms, one of the most important mechanisms for compulsive communication is probably heredity. The germ plasm certainly carries information, but is it information in the imprecise sense in which I have defined it? That is, is it sensation, information about the environment, or could it be called such? I am no geneticist and cannot answer this question, but I suspect that my definitions of both information and compulsion need rephrasing to meet this difficulty, among others.

It is to circumvent such questions as this—since I want to see how the compulsive/informative complex might operate in a society, regardless of whether it does or does not so operate in any existent society—that I have defined the two types of communication in terms of the response they elicit in the recipient. The originator may “intend” any specific communication to be informative, and it may even have the form of an informative communication; but it may be re-
ceived as a compulsive signal. Contrariwise, an "intended" compulsive signal may be accepted as informative. While I shall speak of compulsive and informative communication in terms of both originator and recipient, it should be understood that the distinction is drawn always in terms of the recipient.

Now I am going to make some statements about how I think the compulsive/informative types of communication might tend to operate in a society derived from the assumptions listed above, together with some examples of how it may operate in observed societies. I have not analyzed the logical relations of these statements too carefully. This entire discussion is intended to be more speculative than exact:

2.1.1 We can say that an individual uses compulsive communication to extend his "will," to implement through the efforts of others activity "desired" by the originator on the basis of information available to him, which may or may not be available to the recipient.

2.1.2 Informative communication is used by the individual to extend his "senses" through others; to gather information which may be beyond his individual range of sensation, through displacement in time or space, or through other lack of individual capacity.

2.2.1 Compulsive communication is conservative of knowledge and energy in both the society and the individual, and is oriented inward, toward other individuals comprising the society, rather than toward the environment. Rather unexpectedly at first glance, however, in a highly compulsive society the individual has little value, being merely another additive unit-carrier of the common behavior.

2.2.2 In contrast, informative communication is exploratory and relatively inefficient, oriented outward toward the environment. There is a high degree of variation in individual response in the informative society which enhances the value of the individual, since he is free to make "decisions" which may affect the whole society favorably or adversely.

2.3.1 Through compulsive communication the individual may acquire skills, successful patterns of activity based on the experience of others, so complex as to be far beyond his capacity to develop individually, without himself undergoing the prolonged and dangerous trial-and-error process that led to their formulation.

2.3.2 Through informative communication he gains knowledge of his environment beyond that available to any one individual, broadening the area of "choice" in his activity; i.e., he may learn through informative communication that there is better "feeding" in another area of the environment than in the part he can sense directly, and must choose between moving to the richer environment at the cost of expenditure of energy, or remaining where he is at the cost of harder existence.
2.4.1 Compulsive communication is irreflexive, a one-way communication in the specific area it covers, applicable to a superior-subordinate relation. A reciprocal arrangement is possible, by which one individual trains another in one skill, and then accepts training from the second in another skill; but it should be noted that in general the establishment of compulsive communication requires an initial "willingness" in the recipient to accept the experience of the originator as "better" or more valid than his own. This habit of subordination, like any other learned activity, tends to persist in all relations of the recipient and the originator.

The tendency toward a hierarchal relation in a compulsive society may be masked by an apparently egalitarian structure in its temporal cross-section; but it still exists. Insect societies appear to communicate in an almost wholly compulsive way, through heredity. In any given generation, there is no conspicuous superior-subordinate relation. However, all of the members of that generation are acting under the "command" of previous generations.

2.4.2 Informative communication has no directional bias, individuals may exchange information freely. It relegates the activity of the originator to the environment, externalizes it relative to the recipient. It operates more freely in a non-hierarchic, individualistic society, tending to expand the range of individuals, and is disruptive to society, rendering response more "selfish," more heterogeneous.

2.5.1 Compulsive communication, consisting of relatively simple instructions about "actions to perform in response to signals" is little attenuated in transmission. In mammals, the information which can be contained in the sperm cell is limited; yet it is apparently sufficient to guide rather complicated animals through their entire development and life. On telecommunications circuits, the "operating procedures" which effect the coordination required for accurate transmission of masses of information can often be condensed to a few pages.

2.5.2 Informative communication, on the other hand, consists of knowledge about things which it is almost impossible to transmit completely, even through so flexible a medium as human speech. It attenuates highly in transmission. By putting information in a pseudocompulsive form—abstracting and putting it "operationally"—this attenuation can be partly overcome, and this has been the important achievement of human science. Men can say: "To get two, add one and one," and in this way transmit accurately through any number of relays the gist of knowledge derived from innumerable observations.

We should remember, however, that this method has limitations, as anyone who has ever tried to practise a trade on the basis of what is "scientifically" known and published about it in books can testify. Apprenticeship and schools affording compulsive as well as informative communication are still necessary. It might be interesting here to combine some of the above thoughts into a sketch of what we might call a "standard pattern of social development."
A society of individuals in a very hard but stable environment. There would be few possible successful responses, as against many possible failures. However, since the environment is stable, a successful response once achieved would remain successful.

It seems likely that in such a society compulsive communication would tend to overbalance informative communication. There would be elaboration of specific activity conforming to a standard pattern. Little energy would be wasted in the random responses evoked by informative communication.

There would be little interest in the general environment. Rather, the tendency would be to narrow and sharpen the focus of sensation on the signals which triggered successful activity. We would expect a talent for precise identification of such signals to develop. Other signals would be lumped together and greeted by increasing insensitivity. The society would tend to show a narrow, stereotyped, but efficient sort of behavior, with more attention paid to "things"—property or symbols—than to "persons."

The societal structure would tend to be hierarchal, either in time or space or both.

Now suppose this society finds itself in a still difficult but different environment. The specialized behavior this society has developed is no longer successful, activity tends to regress to the generalized response, though not too effectively because of the compulsions still present, and the society tends to disintegrate. However, if this society has developed an adaptability to informative communication, it may lose the most compulsive aspects of its structure. The original random nature of response will tend to reappear—random, that is, in the society; it may be highly specific in individuals—and new successful responses will be discovered. These will spread rapidly but not too efficiently by means of informative communication (which involves "explaining" and self-consciousness of process), more slowly but thoroughly by compulsive methods. In such a "pioneering" society the emphasis will tend to be on free informative communication with little attention to conformity. Individuals will tend to be curious about their whole environment. The attention of the whole society will be focussed outward.

In this period there would probably tend to be inefficiency and waste in individuals, a high rate of obsolescence in ideas and symbols and property. The individual would be important as a potential discoverer of valuable new information or technique. The societal structure would probably tend toward anarchy and "flatness."

As successful responses are found and disseminated, it again becomes easier for the individual to find success in "copying" already successful responses rather than initiating new and possibly disastrous responses of his own. A tendency toward conformity, compulsive communication, and specific activity reappears.
Success may now be seen as a reward for precision in copying "right" behavior. Random exploratory activity by individuals, always more often unsuccessful than successful, is discouraged as a drag on the society.

If the environment changes again, however, as it may through no more than the efforts of the society to adjust to it, the once successful responses which have become the societal norm eventually lose their validity. Since they are compulsive, they persist past their actual usefulness and may even narrow further as individuals sense that they are no longer achieving successful response and make their activity more and more specific in an effort to regain the success originally gained by "right" behavior. Because of this, the inevitable disintegration and restructuring of a society settled in a highly compulsive mold may often be violent.

Any number of variations on this basic "picture" of social development may be developed, and I have found it enlightening to apply it to many different aspects of social behavior. The "fit" may not always be exact, but it seldom fails to suggest interesting parallels. Almost anyone interested in social or historical process will, I am sure, find it rewarding as an intellectual exercise if nothing else.

Your Slant:
A PERSONAL NEWS MAGAZINE

Adrian Young *

I don't know if the editor of ETC. will print this. There are some who will call it advertising. Actually, it is advertising—for an entirely satisfactory weekly news magazine, such as I have never yet been able to find, nor, I suspect, has anyone else.

On every page of every news magazine I pick up, I run into some prejudice, political, national, philosophical, that annoys me. Some items strike me as trivial. Nonentities are given prominence for some sensational idiocy. A momentous discovery by a brilliant intellect is noted only in passing, and with flippant contempt. I do not think I am alone in being annoyed, and I am sure such annoyance is dangerous. It can produce rashes. It has been known to upset family relations. There is no telling what chains of causation these annoyances set off, leading to who knows what remote consequences—all because we do not get the news we want to read.

* Nom de plume of a Canadian writer whose first contribution to ETC. (Autumn 1945), "How Sane is 'Sane'?" is reprinted in the anthology, Language, Meaning and Maturity (New York: Harper, 1954). Mr. Young has also written film reviews for ETC.
It is high time that modern scientific methods were applied to magazine production. This is exactly what the publishers of *Your Slant: A Personal News Magazine* intend doing. They intend to bring out a magazine which *every* member of the reading public without exception will buy. The motives of the publishers in preparing such a magazine are, of course, mercenary. They see and see clearly that existing magazines—with their present leanings and slantings—attract always only a part of the reading public, while repelling another part. *Your Slant* will be designed for all the reading public. It will snugly fit every crook of every reader's crotchets.

How is this universally satisfactory magazine to be produced?

As follows: first, every subscriber will be asked to fill out a questionnaire which gives a full schema of his religious, political, philosophical, national, racial, and ideological loyalties and predilections. This information is coded on punch cards, with a separate card for each subscriber. These cards ultimately insure that *each* subscriber will get the tailor-made, individually-fitted magazine that follows *exactly* the contours of his attitudes and prejudices.

This does not mean that there will be as many different editions of the magazine as there are subscribers. The mass-producing tailors find that after being in business for a while they do not have to make any more patterns; every new set of measurements that comes in can be found already cut in their files. Just so, the editors of *Your Slant* have found in experiments that combinations of viewpoints recur often enough so that the number of separate editions required to capture the total audience can be kept within practical bounds. The number will be large but not staggeringly so, and at any rate it will be but a small fraction of the total number of subscribers.

The cost? Trivial, with modern production methods. News events are written up, separately interpreted from a wide variety of viewpoints. These viewpoints will also be expressed in numerous editorials, each giving a different evaluation of the world scene. The articles are then set and electrotyped on mats. The punched cards, serving as the memory of an electronic calculator, will control the selection and rejection of these mats at the rate of about 100,000 mats a minute. Every series of mats so selected by similarly coded cards falls into a neat stack, and each stack is automatically correlated with headings. An employee pages them. We have a magazine. Other stacks of mats form other editions of the magazine. From then on, everything is gloriously automatic—until the Post Office finally sorts the wrapped magazines.

Since the circulation will be world-wide, each of the separate editions will reap a profit. There will be an AFL-Republican-female-New England edition, a CIO-Democrat-Negro-male-Michigan edition, a New Zealand-industrial-cooperative-engineer edition, a Socialist-Scots-Oxonian-male-soldier-vegetarian edition, and a Texas edition. Plus a large but still manageable number of others.
What would be the outcome of this enlightened procedure? I will give just one example. A Russian communist might be glad to hear that Mr. Churchill was dead. The electronic censor would be quick to let this news item through to the Russian communist edition of the magazine, but any eulogistic comment on his career would be, just as promptly, tossed out. Now it may be argued that this sort of thing is already done. But it is done, after all, in a pre-scientific and slipshod manner. Even within the Soviet Union, there must be a dissident minority of Russian communists who break out in a rash as they read present Russian communist magazines. (I myself once heard an American capitalist executive of the kind celebrated in Fortune magazine excoriating Fortune as "run by a bunch of socialists"!) YOUR SLANT, with its scientific method of selecting the news and the interpretations thereof, will dovetail neatly with everybody's prejudices.

Some readers of ETC. may deplore the introduction of such a magazine. There are always captious persons to cavil at every forward step. They will say that such journalism will do nothing more than persuade people that the world is the sort of place they think it is, and that each reader will only become more convinced than ever that he is right and everyone else is wrong. Such a charge is, of course, absurd. The old journalism does that. The new journalism is really new, in that it builds on what has already been accomplished.

It has long been recognized that people's personalities take a set shortly after they have succeeded in discarding everything their fathers believed in and doing all the things their mothers considered disgraceful. From this point on their minds are closed. And since the age at which this closure occurs is gradually moving toward infancy, it is safe to suppose that the closed mind now characterizes practically the entire reading population. People with closed minds are, under present conditions, constantly being made uncomfortable by the barrage of other points of view. When they are uncomfortable they are disturbing to their friends and family. The new journalism avoids all this. Therefore the new journalism can bring nothing but happiness to humanity.

There may remain a few odd folk who like the jolt of a differing viewpoint now and then. Such people are so few that no system of mass production could properly be asked to cater to them. Fortunately, however, the new journalism is methodologically so sound that even for these deviates YOUR SLANT can be of service. For example, a Hindu-cooperative-pacificist-handweaver could put his name down for the Pakistani-militarist-industrialist edition. For a couple of weeks, until he came to his senses and canceled the edition, he would be able to peer with horrified disbelief into a strange and topsy-turvy world. Then, having returned to his own edition with a sigh of vast relief, he will forever after know better than to try that again.
BOOK REVIEWS

Whorf Re-examined


It has become fashionable in the last few years to hold conferences at which prepared papers are read and discussed, to record the discussions, and to print the whole in a substantial volume. Linguists and other anthropologists, as members of their society and participants in its culture, follow the fashion. In the case of the present volume, their doing so presents a good instance of various aspects of the problem they were discussing. The papers did not sound the way they read, and the discussions are far from reading the way they sounded. These aspects of things are alluded to in Hoijer’s Preface, but no one seems to have thought that the changes from written to spoken or from spoken to written forms of the language were important. The reviewer thinks they are, and suggests that an examination of just one discussion printed exactly as it was recorded might have been extremely illuminating in respect to the relations of language as a cultural system to language as an instance of institutional behavior. This relation, among other things, was what Whorf was trying to study.

Greenberg, in the first paper, seems to have missed an important point as to what Whorf was trying to do. He says:
Since natural language is not devised by philosophers but develops as a living instrument of a community in its adjustment to a variety of changing needs, one would not expect and, in my experience at least, one does not find any underlying semantic patterns such as would be required for the semantic system of a language to reflect some overall world view of a metaphysical nature.

This seems to contradict every sound anthropological notion of what language is. The semantic patterns of a language come out of the relation of the linguistic structure to the other structured systems of the culture of the society which speaks that language; the society's world view is this relation. Greenberg's essay reflects throughout a view that can only lead to closing the doors to language-culture studies.

McQuown's paper, on the other hand, shows real understanding of the problem. He starts by saying, "All cultural behavior is patterned," and expands this succinctly in a little over a page. Then we read, "All linguistic behavior is patterned." And there follows a concise statement of what is now known about the analysis of linguistic material. There is next a discussion of the kinds of units (segments) and their number (estimated) that one finds in language: 15-50 segmental phonemes, 2-15 suprasegmental phonemes (with say 250,000 phoneme combinations, including perhaps 75 accent combinations; from this may result up to half a million words, parcelled into possibly 500 constructions). The content of linguistic forms is of two kinds: that determined by the forms themselves, and that which is optionally determined by the non-linguistic selection of the forms. The investigation of the systems of a culture begins with the phenomena of the second type. And such investigation depends on a complete analysis of the items of the first type. McQuown finally offers some suggestions as to procedures for making investigations of this kind.

In the paper on Shawnee laws, Voegelin and his associates set up two categories of English legal terms—externally perceived and internally experienced, without, however, defining these categories or indicating by what subjective or other process they were arrived at. Then the Shawnee categories of animate nouns, intransitive verbs with animate actor, and transitive verbs that are non-passive and non-inverse are stated to define what is externally perceived; and transitive verbs with preinflectional passive or inverse marking suffix, intransitive verbs with inanimate actor, inanimate nouns, and free particles are all classed as defining what is externally perceived. There is a third category—neutral terms—that includes items that could not be characterized in either of the other two. Then a sample analysis (in translation) is given of part of the first law, in the form of an extensive "Scope note," and summary scope notes for the rest of the laws are given, leading to a classification of the laws as "Contemplative" or "Eventful." All of this is said to deal with Gestalt, and thus with Whorf's "Gestalt Techniques of Stem Composition in Shawnee"
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(Ind. His. Soc., Prehistory Res. Series, 1, no. 9.393-406, 1940). The reviewer must confess that he does not understand how one arrives at classifications like externally perceived and internally perceived, how this leads to discrimination between contemplative and eventful, or what Gestalt means as used here.

Fearing begins his paper by stating that Whorf, in brief, held that "language shapes our ideas rather than merely expresses them," and gives his purpose as "to examine Whorf's assumptions regarding the unique relationship between language and thought, in the light of relevant findings and theory in those areas of psychology which are concerned with the interrelations between symbolic processes, thinking and perception." The reviewer must point out that the words "ideas," "expresses," "thought," "relevant," and "thinking" in the preceding citations are not items in any science that he knows about, and he cannot understand them in a scientific context. Fearing's extensive quotations from psychological literature show erudition, but do not seem to have anything to do with anything Whorf may have said because they all exhibit basic ignorance as well as ignoring of language. The last sentence is "Whorf does not take these other forms of cognition into account, nor does he explore the relationships between linguistic processes and the dynamic properties of the communication situation." This seems to say, "Whorf does not do what he expressly sets out to be doing." Maybe so, but Fearing hasn't proved it by asserting it.

Stanley Newman's paper is a refreshing discussion of obligatory and optional categories as exemplified in Yokuts, and indicates how such distinctions can be used to approach the semantic analysis of a language; in doing so, Newman emphasizes the necessity of structural linguistic analysis as a prerequisite to further inquiry. He next describes his most recent researches on Zuni lexemes, showing by examples the kind of problems that arise, and the methods that can be used to elicit semantic information. He concludes by noting that linguists can utilize the data of other investigators as starting points for their semantic investigations, but they must devise linguistically oriented methods for their work. The reviewer would extend this emphasis to saying that for language-culture studies non-linguists too must be linguistically oriented if their methods are to be pertinent.

Hoijer's statement of the Sapir-Whorf hypothesis should, in the reviewer's opinion, have come first in the volume. It begins by quoting Sapir: "Language is a guide to 'social reality'" and goes on to define more explicitly what Sapir and after him Whorf meant. Examples from Navaho illustrate the exposition. At the end Hoijer suggests a project: comparison of Hopi and Navaho; then comparison of the Hopi and the Hano Tewa, two peoples living alongside each other, sharing a culture—at least in part—yet speaking languages which, though ultimately related, are yet far apart in structure; then contrasting of Hupa and Navaho—related languages spoken by peoples of very different cultures, and
finally contrast of Hopi and Southern Paiute. If projects like this were undertaken, there would be less of the verbiage and psychologizing that surrounds the discussion of Whorf's ideas.

The final paper, by Hockett, consists of two parts. The first treats points of contact between linguistics and ethnography. Hockett outlines these points thus: "I. Existential: A. General—for the whole human race; B. Specific—to one or another community. II. Methodological: A. Use of results attained in one field for purposes sought in the other; B. Development of methods for use in one field on the basis of methods already in use in the other." The discussion of these points is excellent. Whorf's work is stated to fall under I.B, and Hockett emphasizes that attention to it, however laudable, has led to neglect of the other three points. The second part of the paper deals with Chinese and English comparisons. A number of very interesting comparisons are made under the headings "Trains," "Cities and walls," "Fruits and nuts," "Random holes in patterns," "Subject of study and the study of the subject," "Instance and variety" and "Number," "Channels of metonymy for motion and locus" and "Taking and holding," "Breaking" "Handling time and space," "Pigeonholes and scales." Hockett summarizes by finding that the most precisely definable differences between languages are the trivial ones, that languages differ not so much in what can be said, but rather as to what is relatively easy to say, and that "the impact of inherited linguistic pattern on activities is . . . least important in the most practical contexts, and most important in such goings-on as story-telling, religion, and philosophizing. . . ."

Part II, the Discussions, occupies most of the book. By its very nature, this material cannot be summarized. Even to comment on it is difficult, for much of its is only partly pertinent, some of it is silly, and some of it is profound.

In passing, it may be noted that this volume contains no mention of the fact that Whorf's ideas have been stimulating in all kinds of "practical" or "applied" situations. The general semantics people, while perhaps not always understanding him too well, have reproduced his articles and based much teaching and discussion on them. The various courses in "language and culture" being given nowadays stem from the interest in Whorf's ideas. And the publication of the Collected Papers on Metalinguistics (Washington, D. C., 1950) by the Foreign Service Institute of the Department of State was not simply government spending; it was done because in the training of its students the FSI found Whorf's ideas stimulating and possessing real shock value, even if they should ultimately turn out to be only partly valid.

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Groups Within Groups


"THe general purpose underlying research in culture and personality is to learn how group life affects individual behavior."

Dr. Honigmann more specifically indicates the scope and objectives of his field of investigation in the following pairs of questions which are concerned with (a) modal personality and (b) ethos:

1-a: "How do individuals differ in socially standardized modes of action, thought, or feeling from one community to another?" 1-b: "What are the emotional aspects of [the] culture?"

2-a: "How are socially standardized modes of action, thought, or feeling acquired?" 2-b: "How are the emotional aspects of culture perpetuated from one generation to another?"

3-a: "How are particular patterns of socially standardized action, thought, and feeling related to each other and to facts of social structure and technology?" 3-b: "How are the emotional aspects of culture related to each other, to the covert personality features of the behaving individuals, or to other classes of facts?"

The content and scope of the field of culture and personality (Honigmann uses these three words as though they were one, or at least hyphenated) are developed in the first 85 pages of this book. There follows a section concerned with methodology and specific techniques. Currently available knowledge and interpretation, which these techniques have yielded within the scope of this field, are presented by Honigmann under three major headings: (a) "patterning of personality"—under the influences of the learning process, group memberships, cultural modalities of attitude and custom, and such agencies of patterning as family and peers; (b) "social differentiation and personality"—as reflected in the effects on personality of class, caste, region, occupation, and such factors as the homogeneity and heterogeneity of culture structure and rate of cultural change; and (c) "psychiatric problems"—as revealed particularly in the stress-producing and stress-relieving aspects of culture, personality disorder as related to group membership, and such mentally hygienic cultural factors as the adaptive adjustment of the individual through satisfaction of his basic needs, integration of the individual's drives with the demands and opportunities provided by his culture, and "cognitive adequacy," or knowledge and perceptions of reality that are sufficiently dependable or predictive for purposes of survival and growth. "Slavish conformity to cultural interpretations of reality in situations of social change is indicative of ill health when they reduce integrity or weaken feelings of self-realization."
THIS is a very substantial book. In it the author presents a pattern for integrating data and hypotheses seldom brought together by traditionally conditioned scholars. Culture-and-personality cuts across the artificial boundaries of biology, psychology, sociology, psychiatry, child development, education, and various related fields. The cross fertilization of these disciplines is highly stimulating. The general point of view to which Honigmann is brought by his relatively functional way of contemplating individuals within groups within groups is succinctly put in these words: "Personality largely becomes formed through group participation, which is to say that group membership standardizes individual behavior. Every individual participates in a number of subgroups..." And out of the conflicting, complementing, and otherwise mutually affecting relationships among these subgroups, acting together with biological differences among individuals, arise, according to Honigmann, the individualities as well as the modal personalities of the world's cultures.

A particularly significant aspect of this basic point of view is summed up by the author in the book's concluding statements: "Not only the normal modal personality represents the influence of group membership but also... group life contributes toward the patterning of psycho-pathological behavior." Honigmann bases this statement largely on the unequal distribution of "certain voluntary behavior disorders (like trance, drunkenness)" among cultures, on "evidence that culture influences the content of psychotic thought as well as psychotic activities," and on the fact that "studies of detribalized communities and other groups undergoing social change indicate not only a preponderance of stress in such cases but also an apparently high incidence of mental disease."

THE PEDIGREE of the book is generally indicated by the fact that in 37 pages of bibliography and 10 pages of index the writers most often noted include Gregory Bateson, Ruth Benedict, Allison Davis, Erik H. Erikson, Geoffrey Gorer, A. I. Hallowell, R. J. Havighurst, A. Kardiner, Clyde Kluckhohn, A. H. Maslow, and, with by far the most listed references, Margaret Mead. It is rather more striking than it would be otherwise, therefore, that among the missing are Benjamin Lee Whorf, George Miller, Charles Morris, Alfred Korzybski, Norbert Weiner, G. K. Zipf, S. I. Hayakawa, and Irving Lee, to mention a few of the more conspicuous absentees. The one reference to Dorothy Lee is to something other than her language studies, and the single reference to Freud to be found in the text is not concerned with his studies of symbolism or language, although his "The Interpretation of Dreams" is included in the bibliography. The index contains only one page entry for each of symbolism, symbols, and communication, and among the terms not to be found in the index are speech, language, speech disorders, semantics, semiotic, general semantics, abstracting, projection, identification, extensional, intensional, logic, linguistics, evaluation and attitude.

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Readers oriented to problems of symbolization and communication will necessarily note the lack of development of the more or less clear semantic implications of a considerable proportion of the material assembled by Honigmann. This holds especially for the discussion of psychiatric problems in Part V, the final 70 pages of text. Some particularly dramatic and theoretically significant examples of unconscious identification and projection are presented in the section headed "Thanatomania," pp. 382-384. "The term refers to illness or death resulting from belief in the efficacy of magic." The author asks himself, "How does thanatomania operate in the victim?" He presents an answer to the question in which no reference is made to abstracting and its disorders. The final two-thirds of *Culture and Personality*, in fact, would appear to be a magnificent harvest of grist for the semanticist's mill, and the grinding of it that Honigmann has done with his own mill has rendered it none the less suitable for semantic re-processing. *Culture and Personality* should prove most intriguing and valuable to any serious student of the process of symbolization and its intricate self-reflexive manifestations. The problems which Honigmann discusses and the data he assembles for the purpose are as relevant as any could ever be to the preoccupations of such as have become engrossed in the contemplation of the ever momentous interplay between man and his symbols.

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**Plays for a New Public**


As in his *Preface to Poetry* so in his new and better *Preface to Drama* Professor Charles Cooper begins where the novice is. He assumes that the student may have had little or no experience seeing stage plays and has read possibly only *Julius Caesar* in high school English. Without talking down to the student, at least after the first page or so, he proceeds to tell the student about the play as story to be read, as something acted by actors and seen on the stage, about the playscript, the stage setting, costuming, props, and all the steps from the author's manuscript to the producer's presentation of the characters on the stage from which the playgoer reconstructs his own image of the whole.

To illustrate the elementary aspects of the drama and dramatic types he accompanies each chapter with a notable one-act play. Following these, he presents, as text material, eight full-length plays, each prefaced by an introductory biographical and bibliographical note and followed by two critiques of from one to four pages each.
The plays span the widest range possible. The one-acts include *The Happy Journey* by Wilder, *The Long Voyage Home* by O'Neill, and Gilbert's *H.M.S. Pinafore*. The text plays are *Antigone*, *Othello*, Molière's *The Ridiculous Precieuses*, Hedda Gabler, *Candida*, *Life with Father*, *The Glass Menagerie*, and *The Crucible*. Half of these longer plays are modern, and only the Gilbert libretto among the one-acts antedates the twentieth century. Thus on two counts—the variety of types presented and the number of points of view from which the play is examined—this text is superior to most in the field. As a part of the introductory matter also there are brief statements about dramatic types and the major historical periods. The appendix contains outline suggestions for the student to follow in making his personal inventory of play experiences, suggestions for study, and guides to further reading on writing, production, dramatic theory, and related topics.

The whole of the Preface to Poetry was built up around the sequential processes of experiencing a poem described in I. A. Richards' *Principles of Literary Criticism*. In this present volume Cooper alludes to Richards' ideas only in Chapter IV, "The Play." He refers to "tied" and "free" images and to Richards' four levels of meaning—more recently Richards has doubled the number—*sense, tone, feeling and intention*. And it is precisely at this point that Cooper grows vague, because Richards is vague, as he must be. It is easy enough to talk about the "sense" of a piece of writing, as both Richards and Cooper do, but the distinction between "tone" and "feeling" lies only in the object of the attitude. They cannot be distinguished by the mode of expression, but neither Richards nor Cooper make clear this fact. "Intention" is something else again. Always to be inferred unless the author tells it in an added essay, the intention is to be surmised only about the whole work after it is experienced entire. Always we must make clear this point to the student.

The critiques that Professor Cooper selects to reprint following each major play serve a useful purpose, but they are not all chosen according to the same plan. The best choices, perhaps, from a teacher's point of view are those accompanying *Othello* where Rymer's sarcastic denunciation is placed side by side with favorable excerpts from Goddard's *The Meaning of Shakespeare*, suggesting that *Othello* is a war play. These two critiques suggest points of departure that are both antithetical and provocative and well calculated to start vigorous class discussion and an intent rereading. If all the critiques could be and were so selected, the whole work would be infinitely enhanced.

The weakest part of the book is to be found in the author's own analyses of the introductory plays. These analyses are rarely more than a page and are too general and impressionistic to be as useful as they might be. They contain very little about dramatic structure—the author once refers to the "three unities"—and refer only vaguely to the means the author has employed to reveal char-
acter and motivation. Thus there is too little actual application made in the
text of the materials in the discussion to the plays themselves.

It is a question how far one can go in a Preface to the drama in introducing
the student to theoretical material, but I miss any reference to Francis Fergusson's
The Idea of a Theater (perhaps it came too late) or to his master Kenneth
Burke. He does make several bibliographical allusions to the older Anatomy
of Alan R. Thompson, and there is enough material to keep any student busy.

Each teacher will need to supplement the actual material in the volume all
the way through, but the author leaves leeway, even at times, invitations to do
so. Here is a core, however, of useful information and points of view that make
the book a good introduction.

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The Substance of the Dream

AMERICAN LIFE: DREAM AND REALITY, by W. Lloyd Warner, The University
of Chicago Press, 1953. 267 pp. $3.75.

PROFESSOR WARNER is a social anthropologist of wide experience in both
teaching and research. In this volume for the non-specialist he has assembled
some major conclusions about American society, culled from extensive studies
in the United States of America.

This is required reading for anyone interested in the objective analysis of
the contemporary American scene. The presentation is such that the average
reader's appetite for further information will be aroused and he will utilize
the well-documented Reader's Guide which helpfully lists references and
sources, gives page notations and abstracts of the material cited. This is not
light reading, but the writing is lucid and easy, avoiding both clichés and sci-
cific jargon. The vocabulary is "popular" in the proper meaning of the word.

Warner did pioneer work in extending anthropological methods and field
techniques to the American social scene. Field work among the Australian
aborigines was succeeded by research among southern Americans, Chicago's
Negroes, New Englanders, and middle westerners. The "Yankee City" series
starting in 1941, summarizing intensive studies of Newburyport, Mass., under-
taken by a large team of social scientists headed by Warner, and Democracy in
Jonesville (1949), the study of a mid-west community, have had a tremendous
influence on the form and content of community studies. At its first presentation,
Warner's formulation of social class structure in American society aroused con-
siderable theoretical discussion, but through the years the concept has demon-
strated its usefulness to sociological thinking.

As professor of anthropology and sociology at the University of Chicago for
almost twenty years, Warner has exerted profound influence on the training and research projects of many social scientists. He has had a hand in an astonishing number of diversified research projects, and among his publications are studies of factory workers, "soap opera," class distinctions in public education, etc.

To some extent this volume is an expansion of lectures delivered at various universities, and some of the chapters reveal their source, for they read like essays and make their points separately. However, the material is unified by its subject matter: it all deals with the data and conclusions of sociological-anthropological research in the United States. The initial chapter on Memorial Day illustrates the type of insight which anthropological methods can contribute to our understanding of American mores.

The Memorial Day rite is a cult of the dead, but not just of the dead as such, since by symbolically elaborating sacrifice of human life for the country through, or identifying it with, the Christian church's sacred sacrifice of their god, the deaths of such men also become powerful sacred symbols which organize, direct, and constantly revive the collective ideals of the community and the nation.

After outlining the practical and theoretical amendments necessary in adapting anthropological methods to the complex American scene, he proceeds to discuss social classes and how they are ascribed and function. The Negro "caste" in the south is contrasted with the class structure, and the mobility and viability of the American "system" is described with verve, the best and most interesting of the sociological data being utilized.

Both the analysis of the family and the discussion of class differences in child-rearing hold some surprises.

The values of the developmental type of child training still need to be tested against the hard facts of social reality. We know from our own studies that the upper-middle class tries to maintain and reinforce the basic virtues of the society, emphasizing pragmatic goals. The continued development of American society and its technological progress are highly dependent upon people who have been trained by the traditional values of this group. The emphasis upon restraint and restriction on the individual's free movement and the emphasis upon putting off today's pleasures for tomorrow's gain are the very essence of the middle-class ethic and have been principally responsible for maintaining the continuing drive of individuals to advance themselves.

Whether these middle-class values are good or bad, they are deeply ingrained in the culture; despite the present popularity of the new ideology of the pediatrician, it seems unlikely that the new faith in how to rear a child is likely to survive the opposing social necessities of the middle class and the larger American society.

Ethnic groups, described as functioning minorities, the place of associations in American life, status and role, change and persistence—a quarter-century of
research on these subjects is summarized. New approaches to old problems are indicated in such statements as: "The problem of the social scientist is not the false one usually posed of how humans become social beings, but rather how they learn to become autonomous individuals."

Throughout the work, Warner's respect for democratic processes and his faith in democratic ideals vivifies the data. His devotion to the democratic beliefs which cement our society are especially apparent in the discussion of Mass Media, in which he deals particularly with "soap opera" and its function in reinforcing middle-class mores. Mass media, generally, are described as "symbolic devices used by a complex society to achieve communication with common meanings permitting thoughtful and emotional collaboration for common ends. . . . Mass media are products of technical invention and the increasing efforts of modern society to develop better methods for interrelating the peoples of the nations and the world into a closer community. Increasingly they are being influenced by the attitudes and needs of the Common Man. The rise of the masses is not purely a political and economic process, but more and more it means the use of symbol systems formerly confined to the top levels of society."

Martha Champion Randle

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The Red and the Black


Most Americans are aware that the Communist Party has made special efforts to convert American Negroes. The press often carries reports that Kremlin propagandists in the Soviet Press or in the United Nations use the treatment of the American Negro, suffering under Jim Crow and other restrictions, to "prove" the "two-facedness" of American policy or administration of underdeveloped or underprivileged populations. The thoughtful white citizen may wonder about the effect of such propaganda on American Negroes; he may even worry about the headway the C.P. may have made among the Negro tenth of our people.

The American Negro population would seem to offer a fertile field for skilled agitators and organizers of the C.P. Occasionally one hears that the C.P. has a Negro candidate or party official, but no indications of mass Negro support of the C.P. appear in the press. What has prevented or thwarted the Communists in their efforts to win support from the American Negroes?
Mr. Record's book answers this question, tracing in detail the various changes in policy and tactics applied by the C.P. to the American Negro problem during their thirty-year attempt to win mass support.

This is a lively account, gleaned from an intelligent and objective study of the documents. It is the type of social history which commands our attention, for the record of the relationship of the Communists and the Negroes gives us valuable insights into both problems separately, problems which continue to have timely importance.

Here are the details of the shifting theories of Moscow, the various rationalizations of the Party in this country, the slogans, the campaigns, the *causes célèbres*, the Communist-inspired organizations. In his last chapter Record analyses the causes of the C.P.'s failure. It is a penetrating and well-written summary of the Communist ideology as illustrated in this particular field.

It is not possible to characterize any specific interpretation of the Negro question in the United States as the Communist analysis. For the Party, analysis is a *function* of immediate program rather than its *cause*. This is amply illustrated by the Party's approach to American Negroes over a period of time. The real Negro question has remained essentially the same for decades: it is the persistent issue of basic economic and political equality for our largest racially differentiated minority group. . . . And yet, with each shift in the Party line, the analysis offered by the Party has suggested that the Negro question then became something fundamentally different.

The cold shoulder which black America has turned toward the Red enchantress cannot constitute a source of comfort for the reactionary defender of the status quo. As Jackie Robinson pointed out, "Negroes were stirred up long before there was a Communist Party, and they will stay stirred up long after the Party has disappeared—unless Jim Crow has disappeared by then as well." Nor can the lukewarm reception which Negroes have given the Communists be taken as an indication that Negro leadership is lacking in political awareness or acumen. On the contrary, in using the Communist Party when it could serve their immediate interests and in rejecting it when it tended to separate them from their friends, Negroes have displayed a rare political sharpness.

The failure of the Stalinists to capture the allegiance of colored America can be explained largely by the Party's umbilical attachment to the Kremlin, which inevitably relegates the question of Negro rights to a position of secondary importance. . . . A striking paradox inheres in the fact that the most convincing demonstration of loyalty to the American system has come from a group which has reaped the least from it. Because of this orientation the Negro tends to define the "Negro question" in simple terms; namely, the attainment of full status, of all the rights and privileges and responsibilities of citizenship. When this goal is reached there will still be problems; but the Negro will attack these problems, not as a Negro, but as a worker or as a citizen.
The recent Supreme Court decision on educational equality for Negroes has focused attention on the attainment of Negro goals through constitutional means. It is obvious that, so long as the promises of American democracy continue thus to be gradually fulfilled, the vast majority of American Negroes (like the vast majority of all other Americans) will continue to seek advancement within the framework of American laws and institutions, rather than through revolutionary action.

Martha Champion Randle

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CORRESPONDENCE

Debate on Debates

Sirs: I realise that I have not the terminology of the trained general semanticist, but there is a subject which is, I feel, of some importance, at least to secondary education, here in New South Wales. There may be a similar problem in the United States for ought I know.

In each of the past two years it has been my lot—and, indeed my pleasure—to judge a debate between teams consisting of senior pupils of two high schools. On the first occasion, the topic for debate was drawn from a hat only an hour before the opening of the debate. On the second occasion, the debaters had been apprised of the three titles from which one would be selected, the selection being a chance one, one hour before the debate. I enjoyed each of these experiences, but they gave me cause to wonder as to the ends for which such debates are designed and the actual results accruing from them.

I do not doubt the desirability of the team spirit, the seeking to do one's best for the good of one's side. But I wonder if the desire to win an argument is itself conducive to the search for truth. In the hour prior to the two debates there was an almost palpable emotional charge in the atmosphere, and some of the pupils were later to rely largely on their histrionic prowess—hoping that the judge would applaud their ability to sway the emotions of their hearers. It is widely believed, I think, that the ability and value of a public personage is measured by his capacity to make people think his way. This belief is, in my opinion, a handicap to democracy and must retard the formation of a large body of well-informed public opinion and of habits of thoughtfulness amongst the citizen body. Would it not be better that a man be judged according to his ability to approach problems objectively, in the modest belief that he does not already know all that is to be, or ever will be, known?

As I see it, training in impromptu or hastily-prepared speech-making cannot approach, in value, training in the careful accumulation of facts and subsequent consideration of these facts in an open discussion from which "the need
to win" has been removed. Another disadvantage of conventional debating in high schools may be the tendency to adopt an "either-or" attitude. For the purpose of winning a debate, one must be 100 per cent "for" or "against." Would it not be wise for pupils to realize that things are often, as it were, of varying shades of grey rather than definitely black or white? Again, a position which is taken up because, at the time and from the available evidence, it appears the best position, should be susceptible to change or even abandonment should fresh evidence suggest that the original position is untenable.

Debating, to me, seems to force one to adopt a dogmatic attitude, and I cannot feel that it is an altogether good thing to have to attempt to argue for a contention in which one does not believe. Does not the latter approach intellectual dishonesty?

Is conventional debating conducive to the formation of the best possible thought-habits, or would it be wise to replace it in our high schools by supervised discussion, the teacher acting simply as an efficient chairman?

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[Editor's Note: Mr. Grant's questions about the value of school debates have, we believe, often been pondered by teachers of discussion and debate in U.S. colleges and high schools. We also are under the impression that there have been many changes in speech instruction in the U.S. in recent years as the result of such questions. We invite our readers' comments on Mr. Grant's letter.]

Semantic Orientation Toward Chess

Sirs: For a student oriented in general semantics, there are no separate or isolated sciences; no thing exists in isolation from its environment; observer and observed, subject and object, inner and outer—these are but aspects of an over-all situation. Basic to scientific thinking is the axiom that everything changes but the law of change. Amid symmetry, it is important to have an awareness of universal asymmetry—to recognize that no two objects are ever identical and that no two events are exactly the same. Now, how does all this apply to the game of chess?

First of all, no player can ever repeat his behavior identically as in a previous game; no two players can ever be "equal" in personality, temperament, background, experience, mood or attitude. No two playing sessions can ever be alike, for either or both players. The weather, the time, the onlookers, the mental state, the physical health of each participant will inevitably affect the strategy, and this, in turn, will be influenced by the opponent's response.

Chess is basically a game of communication by moves and countermoves of various symbolic figures across the board. It is here that an awareness of the
fact that a "pawn" is not always the equal of an opposing pawn is vital. The same holds true of a bishop, rook, knight, queen, or king. Theoretically, they have the same value and powers as the opposing "equivalent" pieces, but a knight is not just a knight when it stands on a strategic square while his opposing piece has not even started out from its home square. Moreover, a player's position cannot be evaluated by a mere counting of pieces. You simply cannot say: "White's strength is equal to Black's because they have the same number of pieces and men." Or, if you say it, you will be misled.

Where do the pieces stand? Where are the pawns and what is their positional relationship to one another and relative to the opponent's distribution of his forces? And who are the players who manipulate these game-symbols? What is A's state of mind vis-a-vis player B? That is going to influence his handling of the pieces and determine whether he is a match for his opponent.

Frequently, the players will be affected, particularly in an important match, by a surrounding group of interested and knowing spectators. Though silence may prevail and the spectators realize that their comments or opinions would be unwelcome, nevertheless, something in the tenseness of the situation, something in the attitudes of these onlookers, is communicated to the principals in the game. The players can no more be oblivious to this "spectator-influence" than they can ignore an opponent's face when the latter registers elation, perplexity, worry, or fear.

An awareness of all these factors is conducive to a realistic attitude towards the game of chess and can be of some help to the player where, otherwise, novel eruptions of emotional and nervous behavior might betray him into defeat.

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