

PREFACE

Nearly twenty-five years ago it occurred to me that we might gain considerable insight into the mainsprings of human behavior if we viewed it purely as a natural phenomenon like everything else in the universe, and if we studied it with the same dispassionate objectivity with which one is wont to study, say, the social behavior of bees, or the nestbuilding habits of birds. The present book reports the results of the extended inquiry that ensued in the course of those years, and which led to the disclosure of some fundamental principles that seem to govern important aspects of our behavior, both as individuals and as members of social groups.

1. The Question of Practical Application.

It is inescapable that the attitude of the natural scientist towards human behavior will differ from that of the man or woman of affairs who is faced with the practical need of solving urgent human problems, even though the two attitudes are by no means irreconcilable. Thus the scientist hopes that from an objective study of the actual ways that we human beings do in fact behave, he may disclose the nature of the underlying principles that govern our conduct. But though the scientist's interests are said to stop at that point, he must nevertheless admit that a knowledge of these underlying principles will inevitably help others to live *more efficiently*, whether as individuals, or as members of teams that co-operate and compete—and whether in the roles of those who primarily do the leading, or in the roles of those who primarily do the following.

After all, the basic natural principles that govern man's responses to the incentives of prospective rewards, or that govern the proportion of executive leaders to followers (in corporation, labor union, army, political party, or social club), or that govern the rise and decline of fashions, or that govern the distribution of relative power and control in any dominance system, from the family unit to the nation, or that govern the circulation of persons, goods, services, ideas, and information over the earth's surface in the exchange of the products of our labor—just to enumerate a few of the principles that we shall treat—are not likely to remain idle curiosities, so long as each man must daily co-operate and compete with others in order to live. Nor are these principles particularly out of place at the present time, when we seem to be faced with an impending planned economy in which a few persons will tell many others how they *should behave*—often perhaps without regard to how people *do* behave.

On the other hand, just because we treat objectively and dispassionately of the mainsprings of human behavior, without any particular reference to how people "should" behave, that does not necessarily mean that I for one

feel personally obliged to deprecate the almost universal belief that all mankind "should" co-operate and get along together like one happy team that is bent upon "social progress." Nevertheless I do note that, in spite of this universal belief, there is virtually no agreement as to the particular ways and means whereby the worthwhile objective of universal human co-operation is to be achieved.

It is obvious that some persons and groups have personal and group *preconceptions* as to precisely how the world "should" co-operate. These preconceptions are sometimes so deeply rooted that the individuals in question can barely talk with others whose similarly profound preconceptions happen not to agree with their own. In so doing they seem to block *communication*, and thereby to impede the better world understanding and co-operation they so fervently desire. It is further obvious that many of these persons and groups are so rigid and inflexible in their preconceptions that they are not to be budged from them either by incentive rewards of any amount or by threats of direst harm.

Neither the natural scientist nor the practical social engineer can afford to ignore the power of these preconceptions, to which even the best intended incentives are often subordinate and from which, only too often, the gravest individual and group misery can result.

Nevertheless, to the natural scientist, man's preconceptions do not belong to some other world, but instead are merely further natural phenomena. As such they are a part of the total natural phenomenon of human behavior and merit an investigation into their mainsprings quite as much as the rest of human behavior. Indeed, in many situations, the preconceptions involved are largely determinative of the rest of the behavior.

Our emphasis upon the effect of man's preconceptions is by no means new to present-day thinking, even though, in actual practice, a given person's attitude towards a particular *vocabulary* of individual or group preconceptions that confront him may depend upon what his particular problem is.

Thus, for example, the personnel man in a sizable factory, store, labor union, or armed group, who is obliged to deal daily with a large number of persons of diverse cultural and socio-economic backgrounds, has the continual task of understanding and of reconciling his group's conflicting preconceptions, so that the group can effectively *communicate* in reference to its common tasks, incentives, and risks. The personnel man does not need to be told that it is efficient for his group to have a common *language*, in the broad sense of having like responses and evaluations to like stimuli within the functioning of the group. His task is essentially that of understanding the existing diverse preconceptions, so that he can restructure them into a more harmonious whole.

The case is somewhat different, however, with the politician who wants votes, or with the marketer who invents styles or has something to sell. For here the game may be simply the most effective manipulation of the existing preconceptions, without any thought of altering them. A politician, though meritorious, who casually ignores his constituents' preconceptions,

or else tries to superimpose his own logic upon them, is only too likely to fall before another and even far less capable politician who knows the preconceptions of his constituents, and who says, in substance, "My friends, I understand your feelings perfectly, and am heartily in accord with them."

Yet just because one man's preconceptions often flaunt another man's logic in what seems to him to be a highly capricious manner, we may by no means suppose that man's preconceptions are random and haphazard, and without a certain logic of their own. On the contrary, in our study of the dynamics of language and the structure of the personality, we shall find that a vocabulary of preconceptions is quite orderly and is governed by quite definite underlying principles. Nor are we in any way disposed to argue that the deliberate use of these underlying principles by the personnel man, politician, and marketer will not help him to alter or to manipulate more effectively the particular vocabulary of preconceptions with which he happens to be confronted.

It is perhaps well at this point to elucidate our more general terms *language* and a *vocabulary of preconceptions*, lest they be confused with the more familiar terms, *words* and *speech*, with which, incidentally, they are intimately related.

To this end, since we have just spoken of the marketer's problem, let us by way of illustration begin with a "brand name" of goods (for example, G.E., Frigidaire, Chesterfield). A given brand name may be so favorably known that many persons will prefer, and even pay more for, the brand goods than for unnamed goods, although even a connoisseur could not tell the difference. In short, *a specific brand name tends to evoke a specific response in reference to human wants*, and in so doing may be said to represent a sort of preconception.

Let us note, however, that a brand name is also a *word*, and nothing but a *word*. Whatever the principles may be that govern the behavior of words in their favorable and unfavorable connotations, and in their fashionableness and obsolescence, will also govern to a considerable extent the ups and downs and competition of brand names. (Hence our later study of *words* and *speech* is germane to a study of fashions and preconceptions.)

But let us go further. Instead of a brand name, let us consider a trademark which identifies a particular product or service quite as effectively as a brand name, but which contains not a single word. This trademark is a *sign* or a *signal* which, like a brand name, evokes a more or less stereotyped response. Although a trademark is not a word, and therefore not an element of speech, we shall later see that it is in fact an element of what we may call the group's language. (And we shall attempt to demonstrate that things like trademarks will behave in a manner quite similar to that of words.)

But we do not need to stop with the trademark. There are many stereotyped things, such as kinds and qualities of clothes, ways of doing one's hair, manners of gesticulating and of talking, places and times where one is seen or not seen, which convey information about the person in question. Although these things are neither words, brand names, nor trademarks,

they tend to evoke more or less stereotyped responses and, in so doing, they belong to the *language* of the group in question—quite as much as the group's words, and phrases, and sentences.

To illustrate the import of this broader concept of language, let us paint a picture. It is evening; a costly automobile with liveried chauffeur drives up before the opera house; and out steps milady elegantly gowned and jeweled. She fumbles in her purse and conspicuously gives the beggar a coin, and then skips up the stairs. That is the picture.

All the parts of this picture relate to the problem of the production and distribution of goods and services and of rewards. Yet, as we shall note in detail, all parts of the picture—the car, chauffeur, opera, woman, gown, jewels, coin, and beggar—are *also* problems in *language* (and in *preconceptions*).

And so if at times in the opening chapters of our demonstration, we seem to be almost pedantically concerned with the phonetic and semantic minutiae of human speech which are apparently of little importance in the robustness of everyday life, may the reader of imagination reflect that we may thereby be gaining insight into the total *language* of the group, whose minutiae may at times be extremely important in everyday life, in politics, in marketing, or in just plain getting along together.

In thus placing a study of the principles of language before that of the economy of geography, or of the distribution of economic power and social status, or of the waxing and waning of prestige symbols and cultural vogues, we perhaps confess to a certain personal preconception as to what is likely to be most important in the difficulties of actual everyday practical human problems, from which confusion, heartache, and misery arise.

2. The Question of Natural Science.

Although we have not evaded the question of the possible practical value of scientific principles in the solution of actual problems in human behavior, we nevertheless must point out that the present study is offered purely as a work of science.

More specifically, it is the expressed purpose of this book to establish The Principle of Least Effort as the primary principle that governs our entire individual and collective behavior of all sorts, including the behavior of our language and preconceptions.

An investigator who undertakes to propound any such primary scientific principle of human behavior must discharge three major obligations towards his reader. First, his argument must be supported by a large number and variety of verifiable observations of relevant phenomena. Second, his theory must be logically self-consistent throughout, with all terms and operations relating to his observations explicitly defined. Third, his entire demonstration should be presented in such a way that it will be readily understandable to the reader who, in the present case, is assumed to have a genuine interest in the underlying principles of human behavior, without necessarily having any specialized or technical training in the fields in question.

As to the first point—the number and variety of observations—we may claim in all modesty to have increased the number of our observations to such a point that they may be viewed as empiric natural laws, regardless of the correctness of any of our theoretical interpretations. In other words, by means of the accepted methods of the exact sciences, we have established an orderliness, or natural law, that governs human behavior. Moreover, the variety of our observations, which extend from the minutiae of phonetic and semantic behavior to the gross distributions of human populations, goods, services, and wealth, is sufficient, I believe, to give pause to the superficial opinion that the observed orderliness on these fundamental matters has nothing to do with the practical affairs of everyday life. We stress this fact in the hope that any person who may sincerely wish to apply these findings to the solution of his own problems may do so with a feeling of confidence, even though some of the findings may not be entirely in line with current preconceptions about how people "should" behave.

As to the second point—the theoretical aspect of the study—that is, the theoretical demonstration of the Principle of Least Effort—we submit that our theory, *like all other theories in natural science*, does *not* claim either that no other theory can be found that will also rationalize our data, or that no other data will ever be found that do not controvert our theory. On the contrary, the reader is invited not only to weigh our own theory, but to find a more cogent theory and more instructive data. To this end, we have tendered suggestions for further elaborational research, and have tried to open further theoretical vistas for the possible use of others, whether these others be professional students who are interested in original research of their own, or nonprofessional laymen who simply like to adventure with new ideas.

As to the third point—the manner of presentation of the material— we have prepared the manuscript in such a way that it will be entirely understandable to anyone interested in the topic, regardless of his previous training. In short, every step in observation, analysis, and statistical description has been explained simply and in detail for the reader's complete comprehension if he has only a modicum of patience. Nor is this simplified presentation entirely amiss for the specialized reader, not everyone of whom may be supposed to be familiar with all the fields upon which the present study touches (e.g., economics, sociology, cultural anthropology, psychology—both general and Freudian—linguistics, and semantics). In this connection it might be remarked that we have restricted our bibliographical references to those publications germane to the discussion at hand and which will serve to orient the reader further in the bibliography of any of the special fields.* We have not tried to present exhaustive

* Because the preparation of our manuscript was essentially complete at the time, we were unable to include a discussion of the recently appeared "Kinsey Report" in connection with our own discussion of an individual's homosexual-heterosexual balance, in which we have arrived at conclusions—on the basis of entirely different kinds of data—that undeniably support the "Kinsey" findings. Hence reference is here made: A. C. Kinsey, W. B. Pomeroy, and C. E. Martin, *Sexual Behavior in the Human Male*, Philadelphia: Saunders, 1948.

bibliographies of the fields in question, nor exhaustive discussions of the materials in the fields.

In the course of the many years of research that is reported in the present study, I have been deeply indebted to many persons for their wise counsel and their much needed encouragement. Chief among these have been Dr. J. L. Walsh, the Perkins Professor of Mathematics and former Chairman of the Division of Mathematics at Harvard University; Dr. M. H. Stone, now Andrew MacLeish Distinguished Professor of Mathematics and Chairman of the Department of Mathematics at the University of Chicago; Dr. John C. Whitehorn, Professor of Psychiatry at the Johns Hopkins Medical School and Director of the Henry Phipps Psychiatric Clinic; Dr. George H. Chase, Dean of the University, now Emeritus, at Harvard University; Dr. Abbott Payson Usher, Professor of Economics at Harvard University; and Dr. George A. Lundberg, Professor of Sociology and Chairman of the Department of Sociology at the University of Washington.

Thanks to the cheerfulness and managerial skill of my good wife, who effected drastic domestic economies, it was possible for me to engage some clerical help for the investigation of types of problems for which research grants are by no means plentiful.

Many of the observations reported I owe to the generous and enthusiastic help of my undergraduate and graduate students at Harvard University and Radcliffe College, as more particularly mentioned in the text. I am grateful to the Clark and Milton Funds at Harvard University for a much appreciated grant that aided in the preparation of the manuscript of this book.

This book, which has been nearly six years in the writing, has been read in its entirety by Professor J. L. Walsh, who has discussed with me all important aspects of the theory and who has gone over all the data carefully. Without his constructive help and continuing encouragement, I doubt that I could have seen this book to an end.

I am also grateful to several friends, who prefer to remain anonymous, for helping to make this book understandable to the general reader by reading substantial portions of it in their capacities as "intelligent laymen."

To all these is dedicated with gratitude and affection whatever may be found of value in the following pages. The errors therein, however, remain in all cases my own.

GEORGE KINGSLEY ZIPF

Newton, Massachusetts

April 19, 1948.

The number of pages are same as original printed book in 1949. Don't hesitate to send me* questions and corrections about this part of e-book.

*osmantunagokgoz[at]gmail.com