

THE ORDER OF PRESENTATION IN PERSUASION

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PREFACE

FOR THE LAST TEN YEARS the writer and his colleagues have been engaged in a program of research seeking to improve our understanding of human psychological processes through the study of the effects which communication stimuli have upon attitudes and behavior. Our research on these problems began in a practical setting—in studying the effective utilization of training and indoctrinational films by the armed services during the war. Studies carried out under military auspices by Hovland, Lumsdaine, and Sheffield, were reported in 1949 under the title *Experiments on Mass Communication* (Princeton University Press). Opportunity for broader investigation of the influence process was afforded by a series of grants from the Rockefeller Foundation. Studies done under this program have been reported in a variety of technical journals. A progress report covering some of the highlights of the research program was presented by Hovland, Janis, and Kelley, in *Communication and Persuasion* (Yale University Press, 1953). Since then a sizable number of further investigations have been completed on a variety of interrelated topics. In the more recent studies an increasing emphasis is placed on evaluating the mediating processes involved in attitude change.

In considering plans for the publication of further studies it appeared to us wiser to have related researches reported together in monograph form rather than to have them scattered throughout a number of different technical journals.

Accordingly, a series of monographs has been planned which will contain related research studies or new analyses of research problems. The present volume is the first of this projected series, and is devoted to an analysis of the effects upon opinion and attitudes of different sequences of presentation of communication materials. Subsequent volumes will deal with personality factors in persuasibility, judgmental factors underlying attitude change, and similar topics.

It is recognized that the type of publication involving concentration on a small delimited area represented in this series is rather atypical in the field of social sciences, where publications ordinarily treat topics of broad scope and generality. The present pattern is more commonly employed in the natural sciences. The authors believe, however, that systematic exploration and variation on a single delimited topic is particularly needed in the social sciences, where it often takes a large number of related studies on a single issue to define the major variables and to test some of their important interrelationships. Repetition with strategic variation is also needed to test the generality of propositions suggested by a single study. Only through the development of small well-analyzed systems will larger, more comprehensive, future systematizations be possible. By concentrating a series of coordinated studies on a limited set of problems, such as that of primacy vs. recency in persuasion, it becomes possible to explore the values and limitations of a variety of theoretical approaches and to obtain the necessary empirical anchorage for developing fruitful theoretical innovations.

The authors are indebted to a large number of individuals and groups. First of all we are grateful to the Rockefeller Foundation for generous support of our work, which has enabled us to develop a long-range program rather than hav-

ing to conform to the frequent pattern of financing separately single small-scale projects. Their grant enables us not only to carry out the program of studies here at Yale but to support studies by investigators elsewhere who wish to carry out researches that can be coordinated with our own. Thus the studies reported in the present volume by Abraham Luchins of the University of Oregon were supported by funds supplied through our grant. The advantages of this type of cooperative research appear to us very substantial.

We are also indebted to Mark A. May, Director of the Institute of Human Relations, for facilities for prosecuting our studies and for support of the present volume. The cooperation of teachers and principals of the large number of schools in which the studies were carried out is gratefully acknowledged; without their support research of this type could not be effectively prosecuted. Rosalind L. Feierabend helped greatly in improving the style and readability of many of the chapters, David Horne of the Yale Press was responsible for the preparation of the manuscript for publication, and Leonard Doob contributed substantially as a general reader-critic. Fred Sheffield and Robert Abelson also deserve our thanks for careful reading of the manuscript and for numerous helpful suggestions. Finally our gratitude is expressed to Marcia Ennis and Sally Wilson for the typing of the entire manuscript and to Jane Olejarczyk for assistance at the inevitable critical phases of preparation.

CARL I. HOVLAND

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CONTENTS

Preface	v
Chapter 1. Introduction.	1
Carl I. Hovland	

PART ONE. ORDER EFFECTS IN SUCCESSIVE COMMUNICATIONS

Chapter 2. Is There a "Law of Primacy in Persuasion"?	13
Carl I. Hovland and Wallace Mandell	
Chapter 3. The Effects of "Commitment" on Opinion Change Following Communication	23
Carl I. Hovland, Enid H. Campbell, and Timothy Brock	
Chapter 4. Primacy-Recency in Impression Formation	33
Abraham S. Luchins	
Chapter 5. Experimental Attempts to Minimize the Impact of First Impressions	62
Abraham S. Luchins	

PART TWO. ORDER EFFECTS WITHIN A COMMUNICATION

Chapter 6. Need for Cognition and Order of Communica- tion as Determinants of Opinion Change	79
Arthur R. Cohen	

Chapter 7. Order of Presentation as a Factor in "Conditioning" Persuasiveness	98
William J. McGuire	
Chapter 8. Effects of Alternative Ways of Ordering Pro and Con Arguments in Persuasive Communications	115
Irving L. Janis and Rosalind L. Feierabend	
Chapter 9. Summary and Implications	129
Carl I. Hovland	
Appendix A. The Representation of Order Effects in Communication Research	158
Norman H. Anderson and Carl I. Hovland	
Appendix B. Motivational Effects of Different Sequential Arrangements of Conflicting Arguments: A Theoretical Analysis	170
Irving L. Janis	
Appendix C. Questionnaire Used in Chapter 4, Experiment 3	187
References	190

CHAPTER 1

Introduction

CARL I. HOVLAND

MANY FACTORS INFLUENCE the effectiveness of a communication: the reputation of the communicator and of the medium which he employs, the receptivity and predispositions of the audience, the actual content of the message, and, importantly, matters of organization and procedure.

This book is concerned with one of the major organizational, procedural factors: the effect which order of presentation has upon an audience. When the problem is stated in this general form, it is clear that "order" can refer to two different kinds of variation: (1) the order of presenting a series of communications and (2) the order of presenting the various elements within a single communication. The investigations here reported include phases of both variations.

An example of the first is one where a controversial issue is being discussed in which the advocates of both sides seek to present their views as forcefully as possible. An important question for research here is to determine the circumstances under which it is advantageous to present a communication before the opposition has an opportunity to reach the audience or afterward, in order to have "the last say." Involved is the relative impact on opinion of "primacy" and "recency."

The second type may be illustrated by situations in which one side of an issue is being advocated by a single communicator. Here he seeks the optimal organization of his material. He must decide, for example, whether he should begin with those arguments which favor his side of the issue and subsequently refute opposing arguments or whether he should dispose of the opposition before offering his own positive arguments.

At present scientific principles in the field of communication are not sufficiently developed to provide clear-cut answers to such problems and further research is required. As the authors stated in *Communication and Persuasion* (18):

Answering questions of this sort at present is much more of an art than a science, but the underlying factors upon which the effects of alternative ways of organizing a message depend are ones which are of considerable concern to the scientist interested in communication.

The theoretical factors underlying the choice of alternative organizations do not constitute a closely integrated system, but require reference to a large number of principles of attention, perception, motivation, and learning. . . . [These problems] are theoretically complex and only a small beginning has been made in unraveling the numerous factors involved. [p. 99]

The present series of studies is devoted to the task of helping to unravel some of these complexities.

Order Effects in Presentation of Successive Communications

Interest in the problem of order of presentation in the type of communication situation where both sides of a con-

controversial issue are presented goes back to the publication in 1925 of a study by Lund (34). On the basis of his research he enunciated a Law of Primacy in Persuasion, stating that the side of an issue presented first will have greater effectiveness than the side presented subsequently. He had given his classes of college students a mimeographed communication in support of one side of a controversial issue (e.g. "a protective tariff is a wise policy for the United States") and had then presented a second communication advocating a diametrically opposed stand on the same issue. He discovered that the communication coming first (whether pro or con) influenced the students significantly more than the one coming second.

Subsequent experiments, however, have not always obtained this outcome. Cromwell (7), for example, performed a study in which affirmative and negative speeches on socialized medicine and labor arbitration were presented to groups of students whose opinions were measured before and after the talks. A significantly greater change was produced in the direction of that side of the issue presented last. Thus this investigator obtained a "recency effect" rather than a "primacy effect."

The difference in the outcome of these two experiments and the pronounced variability in results obtained in a replication of the Lund experiment by Hovland and Mandell have led the present authors to the conclusion that it is premature at present to postulate a Law of Primacy.¹ Rather

1. Lund's factor of "primacy in persuasion" should be distinguished from "primacy" in serial learning, in which early parts of a serial learning task are better remembered than the middle of the series (cf. 16, pp. 623-4). The tendency for the first items to be remembered best was thought to be a manifestation of a general "law of primacy." The last items in a list are also better remembered than those in the middle. This was then ascribed to a "law of recency": cf. Carr (5). Lund's analysis involves only two communications, one pro and one con. So if either the first or the second is superior, we

they believe an attempt should be made to determine the conditions which operate to make the first side more effective under some circumstances, the second under others, and both sides equally effective under still others. Accordingly a series of experiments was conducted to assess the influence of certain variables on the relative prevalence of primacy or recency effects in persuasive communications. These studies are reported in Part I (Chapters 2, 3, 4 and 5).

The general problem raised in the experiments reported in Part I is the influence of various activities and instructions which are introduced before the presentation of alternative sides of an issue or during the interval between the two communications. In the research described in Chapter 2 the effect of inserting an anonymous questionnaire between the pro and con communications was investigated. Expressing one's opinion on a questionnaire after only a single side has been heard might "commit" the recipient to the position he adopts after the first communication. Since the Lund and the Cromwell studies differed with respect to whether they did or did not incorporate an intervening questionnaire, it was hoped that this study would help to explain the different outcomes in the two experiments. A more intense type of commitment to a position after hearing only one side of an issue was also investigated. Primacy effects were investigated among (a) experimental subjects who were asked to write out their opinions for subsequent publication in a magazine read by their peers, and (b) control subjects who wrote their opinions under conditions of anonymity (Chapter 3).

The activities introduced in the preceding experiments would be expected to *increase* the extent of primacy effect. Activities and instructions which would be expected to *de-*

are bound to have either primacy or recency: the question is, which of the two has the greater impact on opinion.

crease the amount of primacy effect were also studied, and these experiments are reported in Chapters 4 and 5. Contradictory communications about the personality and behavior of an individual unknown to the subject were presented successively with and without prior warning as to potential conflict in the material. Warning as to the fallibility of "first impressions" was given to one group before either communication and to another group between the two conflicting blocks of information.

Order Effects within a Communication

The second general class of problems is that concerned with the order of presentation within a single communication. These investigations are reported in Part II (Chapters 6, 7, and 8). There are also, of course, a very large number of possible variables in this situation. Only three are chosen for investigation here:

(1) When a presentation on one side of an issue involves both arousal of "drive" and giving of information concerning the issue, what is the effect upon opinion change of drive arousal followed by information as compared with presentation of information followed by drive arousal? A study of this problem is reported in Chapter 6. The author also analyzes the relationship between the order of presentation of these elements and the motivational pattern of his subjects.

(2) When the same communicator transmits a series of messages involving several different attitudes, some of which the audience finds highly desirable and others undesirable, what are the effects of introducing the desirable first and then the undesirable as compared with the reverse order? Experimental data bearing on this problem are discussed in Chapter

7.

(3) When a communicator who is highly respected by his

audience wishes to include both pro and con arguments on the same issue, what is the effect of introducing the pro arguments first as compared with that of introducing first con arguments which are not initially salient for the audience? An investigation of this topic is presented in Chapter 8. The theory underlying this research is elaborated in Appendix B.

Practical Implications

The problem of order of presentation in communication is of more than academic interest. Should primacy obtain to any significant extent, there would be important practical implications for a variety of situations. Doob, for example, postulates the operation of primacy in propaganda:

The propagandist scores an initial advantage whenever his propaganda reaches people before that of his rivals. . . . readers or listeners are then biased to comprehend, forever after, the event as it has been initially portrayed to them. If they are told in a headline or a flash that the battle has been won, the criminal has been caught, or the bill is certain to pass the legislature, they will usually expect subsequent information to substantiate this first impression. When later facts prove otherwise, they may be loath to abandon what they believe to be true until, perhaps, the evidence becomes overwhelming [10, pp. 421-2].

Another propaganda device which assumes primacy is that used by politicians in "smearing" an opponent. Their expectation is that even if the evidence subsequently refutes the allegation, the initial charge will still have inflicted considerable damage. Political beliefs have been attributed in part to primacy effects:

Whether we are democrats or republicans, Protestants or Catholics, is frequently observed to be a consequence of paternal or ancestral affiliation. However, it is doubtful whether family ties or family considerations are nearly as important determinants as the fact that we *first* become familiar with the beliefs and the defenses of the beliefs of our family [34, p. 191].

The primacy effect could also be a factor in determining the outcome of opinion changes following debates. In such situations the conditions for the operation of primacy are closely approximated, since one side first presents its position and then the second side offers a view in direct opposition to that of the first. Elaborate precautions to counterbalance the order effects would be required in order to equalize the persuasive potentiality of the two sides.

Of even greater concern would be conditions for equitable administration of justice. In the presentation of court cases it is generally the rule that the prosecution presents its case and the defense follows. If the law of primacy is operative, we would find a constant bias in favor of the prosecution's position, since it always has the advantage of first position.

While the lawyer of the plaintiff is reviewing his case and making his appeal, the belief of the jurors is already in the process of formation, and they are not to be dissuaded from their position by an equal amount of evidence or persuasive appeal on the part of the defendant's lawyer, according to the law of primacy [34, p. 191].

Scientific Implications

While there are practical implications derivable from many of the studies in this volume, the "applied" utility of the re-

search is secondary. The factor motivating the present studies has been the opportunity afforded by research in this area to examine some of the basic theoretical problems involved in the process of influence and persuasion. It will become evident from the different chapters what a variety of theoretical issues are involved in the relatively straightforward problem of order of presentation. Thus Hovland, Campbell, and Brock use this framework for a better understanding of the process of commitment to a particular point of view, a factor which increases one's resistance to subsequent influence. A comparison is made between the type of commitment involved in an anonymous and in a public statement of one's position. Social psychological factors of commitment could be said to interact with the problem of order of presentation, since there may be a tendency in many primacy-recency situations to respond with a committing type of action after hearing only one side of an issue.

Luchins utilizes order of presentation to analyze the phenomenon of "set" in a communications framework. He finds many points of similarity between the persistence in personality studies of impressions created by the first material presented and the persistence of set in problem-solving situations (30). Luchins attempts to use the principles derived from some of his earlier studies of set (or "Einstellung") in problem-solving in order to eliminate primacy effects in personality judgment.

A theory of "cognitive need" is employed by Cohen to interpret the effects of different orders of motivational appeals and informational material. In utilizing this type of formulation he is able to relate the problem of order to the personality characteristics of the recipient. He compares individuals with high interest in understanding (high cognitive needs)

with others whose interest in understanding is low and easily satisfied with only superficial comprehension.

McGuire utilizes a stimulus-response theory of learning to analyze the effect of order of presentation in the communication-persuasion process. His prediction from the theory is that when a series of communications, some desirable to the recipient and others undesirable, are to be transmitted, it will be more effective for the desirable to precede the undesirable than to reverse the order. He regards the communicator (or source) as a stimulus to which an agreement response can be conditioned. This response is the final unit in a chain of responses (like attending, comprehending, etc.) intervening between the initial stimulus and the response of agreement with the source. When the desirable messages are communicated first, the intervening and final responses are followed by reward and hence conditioned to the stimulus, but when the undesirable ones are first, no reward follows and extinction of these responses is to be expected.

The Janis and Feierabend experiment may be cited as a final example of the manner in which important aspects of psychological theory may be tested within the framework of organization of communications. These authors see an opportunity for analysis and extension of theories of conflict in the setting of order of arguments within a communication (Appendix B). They view positive ("pro") and negative ("con") arguments in a communication as placing the recipient in an approach-avoidance type of conflict, wherein the positive arguments motivate him in the direction of accepting the communicator's position (approach behavior) while the negative arguments motivate him to reject these recommendations (avoidance behavior). Two methods of influencing this conflict are compared: strengthening approach tend-