The Message-learning Approach

The president awakens one morning to headlines announcing that research using laboratory animals has proven that a popular food additive causes cancer. Realizing that he will be questioned about the issue, the president quickly calls a breakfast meeting of his cabinet. At breakfast, he admits that he personally enjoys many of the foods that contain the additive and that, due to habit, his initial reaction is to support the continued use of the additive in foods.

The secretary of the Department of Health and Human Services immediately suggests that the president reconsider his position. The secretary argues that the food additive be banned immediately for reasons of public safety. Citing statistics from the study reported in the newspaper, the secretary offers many reasons for this recommendation. The secretary ends by stating that the president would do best politically and morally to ban the additive.

The president attends carefully to the secretary’s presentation, trying to comprehend and remember the secretary’s advocacy and arguments. From the president’s expression, the secretary’s appeal about the political benefits of the recommendation is weighing heavily in his decision. The president pauses, thinks of the issue, his old attitude toward it, and the new attitude and arguments that have been offered. As the president rehearses and learns the new attitude and arguments, the issue becomes more powerfully linked to them than to his old attitude. The president has been persuaded. The food additive is banned.

Skills Learning as a Model for Persuasion

This scenario of communication and attitude change exemplifies the message-learning approach championed by Carl Hovland and his colleagues at Yale University in the 1950s (Hovland, Janis, & Kelley, 1953). In this chapter, we discuss the influence of the Yale Communication and Attitude Change Program and their message-learning approach to the study of attitudes and persuasion.

The Yale group never proposed a formal “theory” of attitude change, but rather they were guided by “working assumptions.” These assumptions were loosely translated from principles of how people learn verbal and motor skills.
They suggested that a persuasive communication must gain a person's attention and must be comprehended. The person then must mentally rehearse the message arguments and conclusion, thereby establishing a link between the issue and these implicit responses. This rehearsal presumably established a memory trace for the arguments and conclusion, which was important because, for the Yale researchers, a communication had to be remembered to be persuasive.

Attending, comprehending, and remembering the message conclusion and arguments were only part of the story, however. Imagine for a moment that you are listening to a concert pianist teach a novice to play the piano. The pianist is playing at a very elementary level, displaying little of the skill that has gained her acclaim. She knows how to play the piano beautifully, but incentives in the present situation elicit none of her virtuosity. Incentives, which are promised or expected rewards, are also important in the Yale group's analysis of attitude change. Let's again consider our beginning example. The president may understand his secretary's advocacy and arguments but remain unconvinced until someone points out the political benefits of (or incentives for) adopting the advocated position. Hence, retention of the message arguments is important because it indicates that the person has attended, comprehended, and learned the persuasive communication. But Howland and his colleagues believed that attitude change would occur only if the incentive for the new attitudinal position outweighed those associated with the initial attitude. Thus, attention, comprehension, and retention are necessary but not sufficient preconditions for attitude change.

Determinants of Attitude Change in Persuasive Communications

Howland and his colleagues organized their studies of communication and attitude change around the question, "Who says what to whom with what effect?" (Smith, Lasswell, & Casey, 1946). They examined the effects on attitudes of the source (who said it), message (what was said), and recipient (to whom it was said). The effects of the channel (medium) of the communication and the persistence (durability) of message retention and attitude change were also studied. The interrelationships among these factors and the fundamental processes of attention, comprehension, yielding, and retention are illustrated in figure 3.1.

In sum, according to the message-learning approach, persuasive contexts (e.g., sources, messages) question a recipient's initial attitude, recommend the adoption of a new attitude, and provide incentives (e.g., promises to reduce an unpleasant drive-state such as fear) for attending to, understanding, yielding to, and retaining the new rather than the initial attitude.

Source Factors

The originator or source of a persuasive communication may be a person (e.g., the president of the United States), a group (e.g., your family), an institution (e.g., Stanford University), and so forth. Identification of the source provides the audience with information above and beyond the arguments presented in the message. The typical method of studying source effects is as follows: everyone receives the same communication, but different subsets of people are given different sources to which to attribute the message. For example, 20 students may be asked to read a newspaper editorial, but half of the students are told that the university president authored it, whereas the other half are told that a cook from a dining hall authored it. After reading the editorial, students are asked their attitude about the position advocated in the editorial. Any differences in attitude change between the two groups of students would be attributable to source factors, since all other features of the study are the same for both groups.

Components of the Source Variable

Why might attitude change be different among groups of people if only the purported source of the message, and not the message itself, differed? According to the message-learning approach, incentives, which are one of the final links in the chain of events leading to attitude change, are affected by source factors. Howland, Janis, and Kelley (1953) speculated about three source factors that would influence incentives and thereby influence attitude change. First, Howland
et al. noted that holding a “correct” attitude was associated with rewards in the past. They hypothesized that since experts are supposed to be more knowledgeable (and more often right) than nonexperts, advocacies by experts, all else equal, should be more readily accepted than advocacies by nonexperts. Second, Hovland et al. reasoned that being influenced by someone who was untrustworthy or who had manipulative intent has led to negative consequences for individuals in the past. Hence, recipients who thought the communication was untrustworthy, or who had suspicions about a source’s persuasive intent, should show less attitude change than recipients who were not suspicious. Third, Hovland et al. noted that social approval was rewarding. They suggested that when adoption of a new attitude would gain the approval of others, attitude change would occur. Furthermore, similar communicators should be more persuasive than dissimilar communicators, since people seek the approval of similar people more than of dissimilar people.

In the following sections, we examine the evidence for these hypotheses. In the early studies, expertise and trustworthiness were manipulated together under the heading of “communicator credibility.” We begin our review with these studies.

Communicator Credibility

The attitudinal effects of communicator credibility, or overall believability of the source, have been extensively studied. Most of the early research showed that a high credibility source was more persuasive than a low credibility source if attitudes were measured immediately after the message. For instance, Lorge (1936) found that people agreed more with statements attributed to respected and trusted sources, such as Abraham Lincoln, than with the same statements when they were attributed to nonrespected, nontrusted sources, such as Vladimir Lenin.  

Hovland and his colleagues suggested that a low credibility source cues the recipients that the conclusion of the message is not to be believed. The Yale group examined this notion using a variety of communications and communicators. For example, Hovland and Weiss (1951) presented a message about the practicality of building an atomic-powered submarine. Half of the subjects were told that the message was from U.S. physicist Robert Oppenheimer (high credibility), whereas half were told that the message was from the Russian newspaper Pravda (low credibility). In a different study (Kelman and Hovland, 1953), subjects listened to a message in which more lenient treatment of juvenile delinquents was advocated either by a prestigious juvenile court judge (high credibility) or by a man who had recently been arrested for peddling dope (low credibility). Generally, these studies found that a high-credibility source was more persuasive immediately following the message than a moderate- or low-credibility source.

Contrary to the message-learning approach, however, later research has shown that high-credibility sources are not always more persuasive than moderate or low-credibility sources. For instance, if you are approached by and freely choose to listen to a person advocate that nuclear power plants ought to be banned entirely, you might be more persuaded if the person is unattractive or moderate in credibility than if the person is attractive or high in credibility. We shall postpone discussion of these more complicated processes until chapters 5 and 8.

To summarize briefly, people sometimes accept or reject an advocacy immediately following its presentation on the basis of source cues rather than on the basis of the content of the message. This is especially likely to occur when (a) the source clearly possesses either high or low credibility so that the recipient need not carefully attend to how to react to the advocacy (Husek, 1965); and (b) the communication pertains to an issue that is not personally relevant or significant to the recipient so that there is little reason to devote much attention to the message (Petty & Cacioppo, 1981; Sigall & Helmreich, 1969). We should note that most of the research issues employed by the Hovland group were specifically selected to be of a low-involving nature. When the messages are on personally involving topics, the credibility effect is less pronounced (see chapter 8).

Aspects of Communicator Credibility

Initially, researchers didn’t distinguish among the attitudinal effects of the various characteristics that contribute to a communicator’s credibility. For instance, in Kelman and Hovland’s (1953) study, a juvenile court judge (high credibility) and a person who had recently been arrested for drug peddling (low credibility) served as the sources of a message about the treatment of juvenile delinquents. The judge and drug peddler might differ in terms of credibility for a number of reasons (Liska, 1978). The judge differs from the drug-peddler in terms of knowledge on the topic of treating delinquents (expertise), motive to speak honestly about the topic (trustworthiness), and so forth.

Could expertise alone account for the facilitating effects of communicator credibility? This question was addressed by Bochner and Insko (1966). They presented a written communication to subjects under the guise of a reading comprehension test. The message concerned the number of hours of sleep per night that people actually needed and was attributed to either a Nobel prize-winning physiologist (high expertise) or a YMCA director (low expertise). Although the arguments contained in the message were identical in all instances, some subjects read that people needed eight hours of sleep per night, others that people needed seven hours, some six hours, and so on down to zero hours of sleep per night. Note that the Nobel prize–winning physiologist and the YMCA director both are trustworthy sources. Neither has any apparent motives for misleading subjects. Nevertheless, Bochner and Insko found that the more extreme the advocacy by the highly expert source (at least until he argued for zero hours

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of sleep), the more attitude change that was produced. Similarly, when a low expert source moved from advocating positions that differed slightly to moderately from the recipients' (people need only five hours of sleep), more attitude change was produced; but as the less expert source advocated more and more extreme positions (two hours of sleep per night), less and less attitude change was produced. Expertise was therefore important in inducing attitude change especially when the advocated position was quite different from the recipients' initial attitude. In the next chapter, we will see how another theory—social judgment theory—can account for the interaction of credibility and discrepancy. The data from the Bochner and Insik study are graphed in figure 4.3 in the next chapter (p. 105).

What are the effects of trustworthiness? Howland and his colleagues initially believed that greater trustworthiness produces greater attitude change. To test this notion, Howland and Mandell (1952) manipulated trustworthiness while keeping the expertise of the sources approximately equal. Subjects heard a communication attributed to either an academic economist (high trustworthiness—high expertise) or the head of an import firm (moderate trustworthiness—high expertise) that advocated devaluing U.S. currency. (Devaluation would increase the profits of the import firm, so the head of the firm had something to gain by recommending that the U.S. devalue the dollar.) Howland and Mandell found no differences in the attitude change produced by these two sources.

This study suggests that communicators arguing for their vested interests can sometimes be just as persuasive as those who have nothing to gain or lose by the advocacy. In most instances, however, whether or not a source is arguing for personal gain does make a difference. First, as the topic becomes more personally involving to the recipients, the source's trustworthiness becomes a more important determinant of attitude change (e.g., Cho, 1964; Craig & McCann, 1978). Second, Andreoli and Worcel (1978) have suggested that trustworthy sources (e.g., newscasters) are particularly persuasive compared to untrustworthy sources (e.g., candidates) when they deliver their message through a medium that highlights source characteristics, such as when they deliver the message on television rather than in printed form. This effect may be related to the increased attention and thought given to source characteristics that result when the communicator is visible throughout the message (which is more common in the audiovisual than the print medium). Third, sources arguing against their vested interests are more persuasive than ones arguing for their vested interests, especially when the sources initially appeared untrustworthy rather than moderately or highly trustworthy (Walster, Aronson, & Abrahams, 1966). In other words, the source who violates our expectations by being trustworthy when we expected untrustworthiness is especially effective. (We discuss this effect further in chapter 6.)

**Intent to Persuade**

Trustworthiness has also been examined by varying whether or not recipients were told that the source wants to persuade them. A source who has persuasive intent is presumed to be less trustworthy than one who simply wants to communicate some message to the audience. What are the attitudinal effects of persuasive intent? The initial studies of this question produced what appeared to be a flurry of conflicting results. Several studies indicated that persuasive intent reduced attitude change (e.g., Hass & Grady, 1975; Kiesler & Kiesler, 1964), whereas other investigations found no effects for persuasive intent (e.g., McGuire & Papageorgis, 1962). Papageorgis (1968) noted in an early review that the attitudinal effects of persuasive intent appeared to depend upon the involvement or personal importance of the issue to the recipient. Experiments that used involving issues demonstrated that foreknowledge of persuasive intent reduced the effectiveness of the message, whereas studies that used issues of low personal involvement indicated that a source's intent had no effect—the same pattern of findings that is observed for sources who argue for their own vested interests.

Petty and Cacioppo (1979a) tested the notion that issue involvement altered the attitudinal effects of persuasive intent. Students were told that they would evaluate radio editorials. Half were told that “the tape was designed specifically to try to persuade you and other college students of the desirability of changing certain college regulations,” whereas others were instructed that “the tape was prepared as part of a journalism class project on radio recordings,” which served to disguise the persuasive intent of the communicator. After these instructions, all subjects heard a three-minute message advocating that university seniors be required to pass a comprehensive exam in their major prior to graduation.

Involvement was manipulated by changing the introductory paragraph of the communication. Some subjects were told that these exams might be instituted at their institution by the end of the year, thereby making it likely that the proposal would affect the subjects. Other subjects were told that these exams might be instituted elsewhere by the end of the year; and still other subjects were told that the exams might be instituted at their institution but not until ten years later. The subjects would not be affected personally by the proposal in these latter two cases.

Two aspects of Petty and Cacioppo's findings are important here. First, the results confirmed the notion that a forewarning of persuasive intent inhibited attitude change more when the issue was personally important rather than unimportant. Second, persuasive intent had no effect on the number of message arguments that subjects could recall. This result suggests that there were no differences among the various groups in attending, comprehending, and learning the arguments contained in the message (see also Watts & Holt, 1979). We will see in chapter 5 that a forewarning of persuasive intent appears to reduce persuasion by motivating the recipient to counterargue the message while listening to it.
Chaiken (1979) conducted a naturalistic field study on communicator attractiveness in which students delivered a standard persuasive communication to other undergraduates on campus. The undergraduates were then asked to complete an opinion questionnaire and to sign a petition. Chaiken had previously collected information about the student communicator's physical attractiveness, Scholastic Aptitude Test (SAT) performance, communication skills, self-evaluation, and so forth. Chaiken found that physically attractive student communicators were more persuasive than unattractive communicators, as revealed both by the verbal and by the behavioral measure. In addition, Chaiken found that there were consistent differences between attractive and unattractive student communicators on a number of dimensions that may have contributed to their differential persuasiveness (e.g., physically attractive sources had higher grade point averages and SATs, more positive self-concepts, and better communication skills than physically unattractive communicators). These other factors apparently contributed to the greater persuasiveness of the attractive sources.

**Communicator Similarity**

A source may be liked by an audience for various reasons. For instance, similarity (Byrne, 1971; Rokeach, 1960), physical appearance (Berscheid & Walster, 1974), and familiarity (Sherif & Sherif, 1953; Zajonc, 1968) increase a person's likability and persuasiveness.

Brock (1965), in an interesting study on the role of similarity in persuasion, trained part-time paint salesmen to deliver one of two persuasive communications to customers who had decided to purchase paint. A salesman approached the customers as they headed toward the checkout counter and suggested that they buy a different brand of paint (which was either more or less expensive than the paint already chosen). To support this recommendation, the salesman told half the customers that he had personally tried both types of paint and that the alternative brand of paint was much better—that is, the salesman appeared similar to the customers on a dimension relevant to the issue (amount of paint previously used). The salesman told the other half of the customers that he had recently bought twenty times the amount of paint the customers had chosen and found the alternative brand of paint to be much better—that is, the salesperson appeared dissimilar to the customers. Brock (1965) found that more customers bought the advocated brand of paint when the salesman seemed similar rather than dissimilar to the customer.

Similar communicators don’t always have more impact on people than dissimilar communicators, however. Goethals and Nelson (1973) reasoned that, for issues dealing primarily with values or opinions where there is no verifiable “correct” answer, similar sources that agree with a subject engender more confidence in the subject’s opinion than dissimilar sources. For example, people differ in their opinions about what makes a person physically attractive. If you hold the opinion that being slender is an attribute of a physically attractive person,
you might be even more confident of that opinion if someone that you considered similar to you, such as your best friend, agreed with you than if someone agreed with you whom you considered dissimilar (such as a foreign exchange student).

Goethals and Nelson went on to argue, however, that when the issue concerns verifiable facts, agreement from dissimilar sources engenders more confidence in the truthfulness of the facts that agreement from similar sources. For instance, if you believe that the Queen of England is 5'5" tall, you might become even more confident of that belief if someone dissimilar to you verified this (such as the foreign exchange student) than if someone similar verified it. This is probably because, on factual matters, verification is more meaningful if it comes from a person who has different sources of information than you do.

**Communicator Power**

The power of the communicator refers to the extent to which the source can administer rewards or punishments. A parent, for instance, has power over a child, a drill instructor has power over recruits. How does power work in persuasion? Kelman (1958) suggested that people express more public agreement (i.e., compliance) to a powerful communicator than to a powerless communicator, at least in the presence of the powerful source. This attitude change is not internalized, however, which means that the people don’t really privately agree more with the powerful source than with the powerless source. Kelman argued that people simply report more agreement with the powerful source to maximize their rewards and minimize their punishments. For example, Kelman demonstrated that college students on scholarships expressed agreement with their financial aid officer when he was monitoring their attitudes, but they expressed no such agreement on a private measure of opinion.

What does it take to be a “powerful” communicator? First, the recipients of the communication must believe that the source can indeed administer rewards or punishments to them. Second, the recipients must decide that the source will use these rewards or punishments to bring about their compliance. And third, the recipients must believe that the source will find out whether or not they comply. All three of these conditions must be met for communicator power to produce and maintain the compliance (McGuire, 1969).2

In sum, according to the message-learning approach, source factors influence the incentives people have for attending to, comprehending, yielding to, and retaining the recommendations made in a persuasive message. In the next section, we examine factors pertaining to the message that influence persuasion. As shall become clear shortly, although Holand and his colleagues viewed message content as important in persuasion, they tended to ignore what is perhaps the most obvious of all message factors—the quality or cogency of the arguments presented in the communication. Most of their research focused instead on factors associated with the message content (such as whether the arguments used fear appeals or not). The lack of attention to the quality of the arguments in a message sometimes led to situations in which, in one study, the high-fear message may have had more cogent arguments than the low-fear message, but in other studies the reverse may have occurred. As a result, conflicting findings were sometimes obtained.

**Message Factors**

Plato, in his Dialogues, regarded persuasion as the key to power and the message as the key to persuasion:

What is there greater than the word which persuades the judges in the courts, or the senators in the council, or the citizens in the assembly, or at any other political meeting?—If you have the power of uttering this word, you will have the physician your slave, and the trainer your slave, and the money-maker of whom you talk will be found to gather treasures, not for himself, but for you who are able to speak and to persuade the multitude. [Cited in Jowett, 1937, p. 511]

Plato’s view might first appear outdated for our hurried, information-filled twentieth-century way of life. But reflections on Hitler’s massive rallies and rise to power in the 1930s, or of the Ayatollah Khomeini’s influence over Shi’ite Muslims in Iran a half century later, serve as startling reminders of the power of persuasive messages. Since Holand and his colleagues began their study of persuasion during World War II, perhaps it should be expected that much of their research concerned the attitudinal effects of source and message factors.

The following discussion of message content looks at the attitudinal effects of comprehensibility, number of arguments, emotional tone, recognition of one or both sides of an issue, and type of conclusion. Factors that have been investigated concerning the structure or way of organizing the message include the timing for announcing the source, the ordering of conflicting messages, and message repetition. We end our discussion of message factors with a short section on the style of message presentation. Effective messages, according to the message-learning approach, provide incentives for learning and accepting the advocated attitudinal position. This notion guided much of the research on message factors that we discuss below.

**Message Comprehensibility**

Consider for a moment a couple trying to watch a presidential speech on the nation’s economy. They are watching the speech in the midst of a department store and, because of the extraneous sights and sounds, they are having trouble hearing what the president is saying. They are able to understand the president
say that people should save their money to help the economy, but the distractions of the department store drown out the rest of the message. A second couple is also watching the president’s speech in the department store, but they are standing much closer to the television. They hear not only the advocacy but also all of the reasons that the president gives for saving money. Which of these couples is most likely to spend their money in the department store, rather than save it as advocated by the president?

According to Hovland and his associates, for a message to be persuasive it must first be attended to and comprehended. In the example above, the first couple did not comprehend the message, whereas the second couple did. If the couples are alike in all other respects and if the president gives some cogent reasons for saving, then the second couple is more likely to be persuaded by the president’s plea to save their money than is the first. The research on this point supports this conclusion (Gardner, 1966).

A study by Eagly (1974) highlights the importance of message comprehensibility. In this study, all subjects heard a message advocating that people need much less sleep per night than they typically get. One group of subjects heard a reason sequence of arguments for sleeping less (good comprehensibility condition). A second group of subjects heard the same arguments, but the sentences were cut in half and put back together in a random order so that the sentences “appeared” to make sense, but really did not (medium comprehensibility condition). A third group of subjects heard the same words, but the sentences made no sense because the words of the sentences were completely randomized (poor comprehensibility condition). Not surprisingly, Eagly found that subjects in the good comprehensibility condition were the most persuaded and recalled the most message arguments, whereas subjects in the poor comprehensibility condition were the least persuaded and recalled the fewest arguments (see fig. 3.3).

**Number of Arguments**

If understanding message arguments increases the likelihood of changing a person’s attitude, does it follow that adding arguments increases the effectiveness of the message? The answer appears to be yes—sometimes. For instance, Calder, Insko, and Yandel (1974) conducted a study in which subjects served as “jurers” in a simulated bigamy trial. The subjects heard either one or seven arguments favoring the defense and either one or seven arguments favoring the prosecution. Afterwards, subjects expressed their certainty of the innocence or guilt of the defendant. Calder and his colleagues found that the side having the most arguments for its case was the most persuasive.

Interestingly, more arguments are not always better. Norman (1976) had subjects read a statement made by either an expert or a smiling, physically attractive source. The source advocated that people sleep less than the usual eight hours. Half of the subjects read only this statement, whereas the other half also read a three and one-half page message containing six arguments for sleeping less. Provision of supporting arguments increased the persuasive impact of the message when the statement was attributed to an expert, but subjects agreed with the advocacy when it was attributed to an attractive source whether or not supporting arguments were provided. These results suggest that an expert source is more persuasive than a physically attractive source because he or she causes the recipients to attend to and think about the reasons provided for adopting a recommendation.

Since including message arguments did not diminish the persuasiveness of the message, one still might have the impression that persuasive messages should contain as many supporting arguments as possible to maximize their effectiveness. There are several reasons though, to suspect this strategy. First, people may stop attending to a message if it goes on and on. If they are made to listen to a message, they may become bored with it or irritated by it after awhile, particularly if the arguments are highly repetitive (Cacioppo & Petty, 1979b). Second,
people can think about and remember only a limited amount of information during a given time interval. This means that the more arguments presented within a given time span, the less time people have to think about or rehearse each one of the arguments (Calder, 1978). Hence, recipients are likely to remember a smaller proportion of the total number of arguments when many, rather than a few, are mentioned in a given time span (Eagly, 1974). Finally, some arguments are going to be stronger, more convincing, and more influential than others, and providing a person with a few very convincing arguments may promote more attitude change than providing these arguments along with a number of much weaker arguments (Anderson, 1974).

Rewards within the Message
As we noted previously, message arguments are presumed to motivate attitude change by the incentives they provide or because they serve as rewards within the message. The finding that more message arguments can lead to more attitude change is consistent with this notion. We noted also that rewards are more powerful when they are administered immediately, rather than after a delay (see chap. 2). Similarly, a persuasive message is more effective when the message arguments are separated from the conclusion by little, rather than a lot, of neutral material (Weiss, Buchanan, & Pasamanick, 1965).

The Arousal and Reduction of Fear
The promise of relief from a negative event may also provide an incentive to accept an advocacy. The notion that avoiding misfortune is rewarding led Janis and Feshbach (1953) to conduct their now classic study of fear-arousing messages and attitude change.

Implicit in the use of fear appeals is the assumption that when emotional tension is aroused, the audience will become more highly motivated to accept the reassuring beliefs or recommendations advocated by the communicator. [p. 78]

To test this hypothesis, Janis and Feshbach prepared three forms of a communication recommending good dental hygiene. Each message contained the same basic information about the causes of tooth decay and the same recommendations concerning oral hygiene practices. The three messages differed, however, in the amount of fear-arousing material that was included. A high-fear message was constructed including discussions of diseased gums, painful toothaches, and spreading infections that can "cause secondary infections which may lead to diseases such as arthritic paralysis, kidney damage, or total blindness." A moderate-fear message was constructed describing these dangers in a more detached factual fashion. Finally, a low-fear message was constructed that contained primarily neutral information about the growth and function of teeth.

Janis and Feshbach found that the low-fear message was the most effective in inducing students to practice good oral hygiene (an effect that was only marginally significant, p < .10). They argued that the high-fear message was so upsetting to the students that they engaged in defensive avoidance, that is, the students became so frightened by the high-fear message that they avoided thinking about the issue.

Leventhal (1970), however, found that high-fear appeals were usually more effective than moderate- or low-fear appeals, which led him to suggest an alternative explanation of Janis and Feshbach's observations. He argued that the high-fear-arousing message made the students feel uncomfortable about their oral hygiene habits, but the supporting arguments were not very reassuring. Subjects were left feeling vulnerable with no effective means of protecting themselves. Adopting the recommendations served little purpose, so few subjects did.

Let's look more closely at how fear-arousing messages are constituted. These messages describe: (a) the unfavorableness of the consequences that will occur if the recommended actions are not adopted; (b) the likelihood that these consequences will occur if the recommended actions are not adopted; and (c) the likelihood that these consequences will not occur if the recommended actions are adopted (Hass, Bagley, & Rogers, 1975; Rogers, 1975; Rogers & Mewborn, 1976). In other words, the message arouses fear in a person by questioning the adaptiveness of the current state of affairs (Mewborn & Rogers, 1979). In addition, the message arguments motivate a person to accept the recommendations by outlining explicit undesirable consequences of doing otherwise. That is, the message arguments explain the high likelihood that a set of dire consequences will occur if the recommendations are ignored, consequences whose seriousness and unpleasantness are graphically depicted. The better understood and the more reassuring the message arguments, the more attitude change toward the recommended action that should occur. One implication of this research is that the message arguments used by Janis and Feshbach (1953) were not sufficiently reassuring to reduce the unpleasant drive-like state created by the fear-arousing material.

In sum, fear-arousing messages are effective in inducing attitude change particularly when the following three conditions are met: (a) the message provides strong arguments for the possibility of the recipient suffering some extremely negative consequence; (b) the arguments explain that these negative consequences are very likely if the recommendations are not accepted; and (c) it provides strong assurances that adoption of the recommendations effectively eliminates these negative consequences. Defensive avoidance may occur (thereby reducing attitude change) when the message leaves a person feeling inevitably vulnerable regardless of the actions taken to deal with the danger.
One-sided versus Two-sided Messages

The Yale group also explored the relative attitudinal effects of "presenting only those arguments favoring the recommended conclusion (a one-sided message) and discussing also arguments opposed to the position advocated" (and then refuting them—a two-sided message) (Hovland et al., 1953, p. 105). Hovland, Lumsdaine, and Sheffield (1949) first faced this question during World War II. The War Department wanted to find the most effective means of convincing American soldiers that the war in the Pacific might continue for some time. Hovland and his colleagues conducted a study using a large number of soldiers to determine whether it was best to present only a one-sided message (which stressed Japan's advantages and resources) or to present a two-sided message (which contained all of the one-sided arguments but also mentioned and refuted arguments about Japan's weaknesses). They found no overall difference in effectiveness between these two types of communications. They did, however, find that the two-sided message was more effective for soldiers who were more knowledgeable about the issue and who were initially opposed to the advocacy. One-sided communications were more effective for soldiers who either knew very little about the issue or who initially agreed that the Pacific war would be drawn out.

Several years later, Lumsdaine and Janis (1953) conducted an important followup to this study. Their study was conducted several months before President Truman announced that the USSR had produced its first atomic bomb. Some subjects, serving as a control group, were simply asked how long it would take the USSR to produce large numbers of atomic bombs. Other subjects heard a message advocating that it would take at least five years for the USSR to develop an atomic arsenal. Half of these subjects heard a one-sided message that contained only arguments supporting this conclusion; and half heard a two-sided message that contained the same arguments and the same conclusion, but that also included some arguments and refutations for the opposite side of the question. As found previously by Hovland et al. (1949), Lumsdaine and Janis (1953) found that people who initially agreed with the advocacy tended to be more persuaded by the one- than the two-sided message, whereas people who initially disagreed with the advocacy showed the opposite effect.

The new and interesting aspect of this study was that, one week later, some of the subjects were exposed to a "counterpropaganda" message arguing that the USSR would develop an atomic arsenal fairly soon. Afterwards, the subjects completed a questionnaire in which they expressed how long they believed it would take Russia to produce large numbers of atomic bombs. The remaining subjects simply completed this questionnaire without hearing the counterpropaganda. They found that people who had first been exposed to the one-sided message were more persuaded by the subsequent counterpropaganda than people who had initially been exposed to the two-sided message. The increased resistance to the counterpropaganda shown by subjects who heard the two-sided message is called an "inoculation effect." A detailed discussion of why this occurs is found in chapter 8. For now, it is sufficient to note that the initial exposure to the two-sided message appears to make people better able to argue against the later counterpropaganda message.

The implications of this research for marketing and advertising may be somewhat surprising. Most advertisements list the benefits derived from the use of a product and ignore the costs involved in its use or the benefits of competitive brands. In other words, most advertisements are one-sided communications. This strategy is probably most effective when the product is well liked, widely consumed, has few competitors, and enjoys loyal customers. However, if the audience is well informed about a product and its alternatives, the product is not widely preferred, or the audience is likely to be exposed to advertisements for competitive products (which is the case for most products), then two-sided rather than one-sided advertisements may be more effective (Faison, 1961; see fig. 3.4).
Conclusion-drawing

Once a message has been constructed and presented, what is the most effective way to end it? Should the message end by stating the conclusion explicitly, or should the conclusion be left for the audience to draw? Holm and his colleagues reasoned that drawing a conclusion would increase the likelihood that recipients comprehend and retain the message arguments; but if recipients could draw the correct conclusion themselves, then retention and yielding would be enhanced. An example may clarify their reasoning. Consider the case of a professional racquetball player instructing a novice. As she explains the general dynamics of hitting a racquetball, she focuses on the proper position of the ball to the body, the trajectory of the arm, and the desired placement of the ball on the front wall. One purpose of her instruction is to convince the novice that she must snap her wrist when striking the ball. Is the novice more likely to change her swing and snap her wrist if the conclusion is stated explicitly (“Thus, you must snap your wrist...”) or if she is left to “discover” this conclusion on her own?

The answer is that it depends. If the novice is either unmotivated or unable to discover that conclusion, then she can accept it only if the pro ends the instructions by stating the conclusion for her. But if the novice is able to “discover” the conclusion, either during the course of the message or shortly thereafter, then she will be more persuaded than if the conclusion is drawn for her. Observations such as these are the basis for the adages “Experience is the best teacher” and “I told you so.”

Conclusion-drawing in persuasive communications appears to operate similarly. A conclusion is usually helpful or necessary for the audience to understand and remember fully the message arguments and advocacy (Holm & Mandell, 1952; Stithelwaite, de Haan, & Kamenetzky, 1955). Occasionally, however, an issue is sufficiently involving and a message is sufficiently understandable that people themselves are able and motivated to correctly surmise the contents and conclusion of a message. When these conditions are met, people are more persuaded (or maintain their attitudes longer) when left to draw their own conclusion (Linder & Worchel, 1970; Stotland, Katz, & Patchen, 1959; Stithelwaite & Kamenetzky, 1959). In chapter 8 we will see further examples of circumstances in which self-generated information is more persuasive than information that originates externally. McGuire’s (1969) statement regarding the attitudinal effects of conclusion drawing puts it aptly:

It may well be that if the person draws the conclusion for himself he is more persuaded than if the source draws it for him; the problem is that in the usual communication situation the subject is either insufficiently intelligent or insufficiently motivated to draw the conclusion for himself, and therefore misses the point of the message to a serious extent unless the source draws the moral for him. In communication, it appears, it is not sufficient to lead the horse to the water; one must also push his head underneath to get him to drink. [P. 209]

Thus far, we have considered factors associated with the message content, and we have seen that findings have sometimes conflicted because of a lack of attention to how cogent or reassuring the message arguments were (e.g., fear appeals). In the next several sections, we shall consider investigations inspired by the message-learning approach that look at the effects of message factors even further removed from the message content. These message factors include the style in which the source presents the message, the structure of the message, and the number of repetitions of the message. For example, should the source be identified at the beginning or end of the message? If competing with another recommendation, is it best to present the arguments first or last? Repeating message arguments should facilitate people’s retention of them—does this mean that they will be more likely to accept the recommendation they support as well? These issues are discussed next.

Identifying the Source First or Last

Consider an advertising agency that is producing commercials for a credit card company. The agency has obtained expert (financial and banking executives) and attractive people (movie stars) to serve as the communicators for their endorsements. The issue to be decided is: Should the communicator be identified at the beginning or at the end of the message? One advertising executive mentions that, by identifying the source at the outset of the message, the credibility of the message arguments might be increased so that they would attract more attention and encourage learning of them. A second executive notes, however, that knowing the source might prevent the audience from focusing on the message per se, thereby reducing its impact. Which would be better for the advertising agency to do?

Several studies bear upon this issue. Mills and Harvey (1972), for instance, asked subjects to read a message that argued in favor of broader education for college students. The message was attributed either to an expert or to an attractive source. Some subjects learned the identity of the source at the beginning, others at the end of the message. They found that subjects were more persuaded when the expert was identified at the outset of the message rather than at the end but that subjects were equally persuaded whether the attractive source was identified at the beginning or at the end of the message (Husek, 1965; Norman, 1976). These results suggest that a manipulation of source expertise may affect how a person thinks about the message but that a manipulation of source attractiveness does not. This is further discussed in chapters 8 and 9.

Ordering of Message Presentations

Next, consider the scheduling problems of a presidential candidate. The candidate knows that his adversary is speaking on Wednesday. Assuming that the candidate can arrange to speak to the same audience either before or after his opponent, which order of presentation would be most effective? The answer to
Finally, Miller and Campbell reasoned that if the messages were presented one after the other and measurement followed immediately, no forgetting would occur and therefore the order of presentation would not matter greatly. Similarly, if the messages were separated in time and both were followed by a long time delay before measurement, both messages would be forgotten. In this case, too, the order of presentation would not matter (see fig. 3.5).

These results make the scheduling for our fictional candidate easier. When speaking back to back, the candidate would do best by speaking first, unless voting was scheduled immediately following the speeches, in which case it would not matter whether he spoke first or second. Perhaps more importantly, these results suggest that a last-minute media blitz may be highly effective, especially when some time has lapsed since the opposing candidate has presented his or her views.

**Message Repetition**

Of course, campaigns, advertisements, public service announcements, promotions, and so forth are expensive to produce and present. If the same message is used over and over again, production costs can be minimized. But if repeating the message decreases its effectiveness, then the promotional costs are wasted. What might we expect from repeating messages? According to the message-learning approach, repetition should enhance the total attention to, comprehension of, and retention of a message. That is, just as reading a passage in a text several times may aid the student in understanding and accepting its point, repeating a message may aid an audience in following and accepting an advocacy.

Consistent with these suggestions, Wilson and Miller (1968) demonstrated that three presentations of jury trial excerpts led to better learning and retention of the arguments than one presentation. Subjects also agreed more with an attorney's recommendation when they were exposed to the arguments three times rather than one time. Less compatible with the message-learning model are the findings that continued presentations of persuasive messages may maintain retention at high levels but can decrease attitude change (Cacioppo & Petty, 1979b, 1980a; Gorn & Goldberg, 1980; Miller, 1976). We will return to this issue in chapter 8 and explain the conditions under which repetition decreases a message's persuasive impact.

**Style of Presentation**

The last category of message factors that we discuss here is the style in which the speaker presents the message. For example, is a humorous style (telling jokes to warm the audience up) more effective than a nonhumorous style? Unfortunately, the existing data about the use of humor and other style variables is not very consistent, perhaps because the probable effectiveness of a certain kind of style depends on so many other factors. Thus, a humorous message might work

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<table>
<thead>
<tr>
<th>Condition</th>
<th>Time Delay</th>
<th>Which message is favored by these conditions?</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Message A, Message B → Attitude Measurement</td>
<td>Time Delay</td>
<td>A (Primacy effect)</td>
</tr>
<tr>
<td>(2) Message A, → Message B, Attitude Measurement</td>
<td>Time Delay</td>
<td>B (Recency effect)</td>
</tr>
<tr>
<td>(3) Message A, Message B, Attitude Measurement</td>
<td>Time Delay</td>
<td>Neither</td>
</tr>
<tr>
<td>(4) Message A, → Message B, Time Delay</td>
<td>Attitude Measurement</td>
<td>Neither</td>
</tr>
</tbody>
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Figure 3.5

The effects of the order of presentation depend upon the time delay between the two messages and the time delay between the last message and attitude measurement. (Adapted from Miller & Campbell, 1959.)

this question depends upon (a) the length of time that separates the two presentations and (b) the length of time before attitudes are measured (in this case, on election day).

The classic study in this area was conducted by Miller and Campbell (1959), the design and results of which are presented in figure 3.5. They found that the position presented first is generally more effective, particularly when a considerable length of time separates the two presentations from the measurement of attitudes. Hence, if the candidate has a chance to speak immediately before or after the adversary, and if election day is several days away, the candidate would do best to speak first. That is, all else being equal, information with "prior entry" is more persuasive when some period of time passes before attitudes are measured (a "primacy" effect).

Miller and Campbell (1959) went on to argue that, as time passes, recipients forget fairly quickly what they learn in messages, though not quite so much if the information had prior entry. This suggests that speaking second would be more effective than speaking first if a measurement occurred after the first message was forgotten but while the second was still fresh in memory. To test this, Miller and Campbell presented one position and, following a time delay, presented an opposing message. Immediately after the second message, Miller and Campbell measured the subjects’ attitudes, and under these conditions, the second message was more effective than the first (a "recency" effect).
well for certain topics (getting you to try a new shampoo), but might be disastrous for other topics (getting you to favor capital punishment).

Despite this problem, a number of style variables have been investigated with some success. For example, Hemsley and Doob (1978) found that speakers who look at their audience are judged more credible and are more persuasive than speakers who gaze away as they speak. The rate and fluency of speech have also been shown to affect people’s judgments of the speaker’s credibility and their susceptibility to persuasion. Thus, Lind and O’Barr (1979) report that speakers who use a powerful style of speaking (characterized by the infrequent use of hesitations and hedges such as “well,” “kinda,” and “I guess”) are more persuasive than people who use a powerless style; and Miller et al. (1976) report that people are more susceptible to persuasion when a speaker delivers a message at a rapid rate, rather than at a normal rate of speech. Speakers who use powerful speech and rapid speech are perceived to be more knowledgeable about the topic and hence more credible. Finally, Hall (1980) has indicated that the nonverbal voice cues that a speaker can use, such as the tone of voice, can also affect the susceptibility of a recipient to persuasion.

Recipient Factors

Proponents of the message-learning approach (e.g., Howland & Janis, 1959; Janis & Field, 1956) were among the first to recognize the importance of recipient factors, and to examine their effects in persuasion. The Yale group searched for differences in persuasibility among people that could generally be found regardless of the topic of the message. It is to this area of research that we turn next.

Intelligence

During World War II, Howland et al. (1949) focused for a time on the persuasive impact of a series of indoctrination films called Why We Fight. The investigators were interested in what made the films effective and for whom they were the most effective. They found that the more years of schooling a soldier had, the more likely it was to agree with the film’s indoctrinations. Howland and his associates reasoned that the more educated soldiers paid more attention to, understood, and remembered more of the arguments in the films than the uneducated, less intelligent soldiers (see also Janis & Rife, 1959).

Other studies of recipient factors and persuasibility produced a more complex picture. For instance, a child is increasingly persuasive until around the age of eight, after which time the child becomes less persuasive each year until some stable level of persuasibility is reached. Studies of intelligence and persuasibility in young adults have sometimes indicated that the two go together; but more often they indicate that people with high intelligence are less persuasive than those with normal to low intelligence (see review by McGuire, 1969). What are we to make of these findings?

Extending the framework outlined by Howland et al. (1953), McGuire (1968) proposed a model of personality and persuasibility that clarified much of the research in this area. According to McGuire’s model (displayed in fig. 3.6) attitude change is determined by (a) the reception of the message arguments and advocacy, which includes the processes of attention, comprehension, and retention; and (b) yielding to influence. McGuire argues that recipient factors often have opposite effects on these two components. For example, the more intelligent members of an audience may comprehend and remember a communication better than the less intelligent audience members. This fact should enhance the attitude change in the more intelligent audience members. But intelligence may also make recipients less likely to yield to influence because they are more confident in their critical abilities and, therefore, are more sure of their initial attitude; this attenuates attitude change. The result is a complex though understandable relationship between personality traits and persuasibility (see fig. 3.6).

Eagly and Warren (1976) examined the relative effects of these components on attitude change. Measures of intelligence (verbal ability) were obtained from subjects, who were later exposed to either a complex or a simple message. Eagly
and Warren reasoned that intelligence should increase acceptance of the complex message, because if the message is complex, acceptance should be determined mostly by the reception curve in figure 3.6. The yielding curve is not very important for a complex message, because it is assumed that everyone would yield to a complex (cogent) argument if they could only understand it. On the other hand, intelligence should decrease acceptance of the simple message, because if the message is simple, acceptance should be determined mostly by the yielding curve in figure 3.6. The reception curve is not very important for a simple message, because it is assumed that virtually everyone can understand it. Consistent with this hypothesis, they found that higher intelligence was associated with better comprehension and slightly more agreement with the complex message but with equal comprehension and less attitude change to the simple message.

**Self-esteem**

McGuire’s (1968) model of personality and persuasibility has also been applied to the relationship between self-esteem and attitude change. Self-esteem refers to the value, worth, or regard one places on oneself. People with low self-esteem are less confident, view themselves as less capable, and are less happy than people with high self-esteem. Hence, as McGuire has noted, people who lack self-esteem are more likely to yield to influence. On the other hand, self-esteem is positively related to intelligence, interest in events outside oneself, and so forth. This suggests that persons with low self-esteem are less likely to attend to, learn the contents of, and thereby be susceptible to persuasive communications. Overall susceptibility to influence as a function of self-esteem, therefore, may be described by McGuire’s model, with self-esteem being positively related to reception but negatively related to yielding (see Fig. 3.6).

Support for this line of thought was obtained in several studies (e.g., Gergen & Bauer, 1967; Nisbett & Gordon, 1967; Zellner, 1970). For instance, Nisbett and Gordon (1967) measured the self-esteem of 152 male and female undergraduates. A week later, subjects read a number of statements about health, which were attributed to the state health department. In some instances, these “health facts” were simple, unsubstantiated statements about health. In other instances, the “health facts” were followed by extensive documentation. The unsubstantiated message was easily comprehended but provided little reason to yield, whereas the substantiated message contained evidence that was compelling, though difficult to comprehend.

Nisbett and Gordon found that the relationship between self-esteem (low, moderate, and high) and attitude change depended upon how compelling and difficult to understand the message was. When the message was simple, people with moderate self-esteem showed the most attitude change (as indicated by their agreement with the “health facts”). But when the message was complex, people with high self-esteem displayed the most attitude change.

Significant gaps were found, however, between what was expected from McGuire’s model and what was observed. The subjects in the Nisbett and Gordon (1967) study were university students, and presumably even those classified as possessing relatively low self-esteem actually possessed moderate self-esteem when compared to the average population. Nisbett and Gordon’s unsubstantiated message was sufficiently simple that everyone, regardless of their level of self-esteem, should have comprehended the message. Since comprehension was high for all subjects, and self-esteem is associated with low yielding, one might have expected a negative relationship between self-esteem and attitude change. This effect was not found, however—people with moderate levels of self-esteem were the most persuaded by the simple message (rather than people with low self-esteem).

Several other lines of evidence also suggest that alternative processes contributed to the observed attitude change in these studies. For instance, Skolnick and Heslin (1971b) noted that self-esteem was sometimes positively, sometimes negatively, and sometimes curvilinearly related (in an inverted U-shaped fashion) to attitude change. They went back to the various studies reporting these data and collected the messages that were used in each. Then, they gave these messages to a group of subjects who rated each in terms of its quality (persuasiveness, validity, and logicalness) and comprehensibility (complexity, difficulty). Contrary to the message-learning approach, message comprehensibility did not distinguish the attitudinal effects of the messages in a meaningful way.

**Add Self-Efficacy (Bandura, 1977, 1986)**

**Sex Differences**

A number of the early studies on persuasion that analyzed for sex differences reported that women appeared to be more persuasive than men (see reviews by Cooper, 1979, and Eagly, 1978). What accounts for these early findings? Eagly (1978) considered a message-learning account, which holds that women, having greater verbal abilities than men, would be better able to comprehend the arguments contained in the message and would thereby show more persuasion. Eagly argues against this account, however, because studies measuring comprehension differences between men and women have failed to support it (Eagly, 1974; Chaiken & Eagly, 1976).

There are currently two explanations for the observed sex difference that are given the most credence. First, the sex difference may be due to the social roles that men and women have learned. In other words, women have been socialized to be cooperative and to maintain social harmony, which would facilitate agreement (Eagly, 1978), whereas men have been socialized to be assertive and independent, which would facilitate resistance to influence (Eagly, Wood, & Fishbaugh, in press). Second, the sex difference may occur because the persuasive message in many influence studies are ones that men are more interested in and knowledgeable about than women. In fact, Eagly and Carl (in press) asked men...
and women to rate the topics used in a large number of persuasion studies and found that the more masculine topics (issues that men were more interested in than women) tended to be associated with greater female susceptibility to influence. Thus, the sex difference may simply represent the fact that it is easier to persuade someone who has very little interest in and/or knowledge about the issue under discussion.

Experimental tests of the sex difference effect have tended to support the interest or knowledge hypothesis. For example, Sistrunk and McDavid (1971) selected 45 statements about a variety of everyday opinions and matters of fact. Some of the items were prejudged to be masculine in nature, some were prejudged to be feminine, and the rest were prejudged to be neutral. These 45 statements were intermixed with 20 additional statements (filler items) to prepare a test booklet labeled “Inventory of General Information.” Next to each statement in the booklet there was a “majority response,” and subjects were asked to indicate the extent to which they agreed or disagreed with the “majority.” Sistrunk and McDavid found that men agreed with the majority on feminine items, but women displayed more agreement on masculine items.

Summary

We have seen that Hovland and his associates searched for general differences among people in their susceptibility to influence. Individual differences in message comprehension were thought to be especially important in this regard. However, Insko and his colleagues (Calder, Insko, & Yandell, 1974; Insko, Lind, & LaTour, 1976) found that fairly large differences in comprehension are needed for detectable differences in attitude change to result. Thus, the line labeled “reception” in figure 3.6 probably has much less influence on attitude change than depicted. In most studies, the large differences in comprehension that are needed to alter attitudes are absent: “Learning and recall of factual information from mass communications does occur. However, recall and retention measures seem, at best, irrelevant to the ultimate effects desired, the changing of attitudes and behavior” (Haskins, 1966). Subtle idiosyncratic effects of personality traits on understanding and memorizing a message may therefore be less important in persuasion than the effects of recipient factors on the thoughts and associations stimulated by the message. For instance, men appear to be more persuasive than women on “feminine” topics and vice versa, at least in part because as one’s knowledge and interest in a topic increases, one is more motivated and able to think about and react, in both a positive and negative manner, to the recommendations made (Cacioppo & Petty, 1980b). We shall return to this matter in chapter 9.

Channel Factors

The early work of Hovland and his colleagues clearly demonstrates that mass communications could educate and influence the people exposed to them. In this section, we address the attitudinal effects of the various media through which communications can be transmitted, such as the print media of newspapers, magazines, and books; the audio media of radio, telephones, and recordings; and the audio visual media of television, movies, and videorecordings. Together, these channels constitute the mass media, the effects of which can be contrasted with face-to-face communications.

Face-to-face vs. Mass Media Appeals

In 1949, Cartwright reported on the U.S. government’s drive to sell savings bonds. He compared the relative effectiveness of personal solicitations with media appeals to buy bonds and found that personal solicitations were more effective. The greater impact of the face-to-face channel has been found repeatedly since then (Berelson, Lazarsfeld, & McPhcc, 1954; Katz & Lazarsfeld, 1955). These early studies should remind us also that persuasive arguments that produce attitude change do not have to come from some type of formal written or verbal communication. Burnstein and Vinokur (1975, 1977), for instance, have extensively analyzed attitude changes that result from group discussion. Their numerous investigations have shown that the arguments generated by people in a group are learned by and can change the attitudes of the other people in the group. Because people are often persuaded by the arguments that others in a group discussion generate, an interesting phenomenon may occur as a result of a face-to-face discussion—group polarization. That is, people’s attitudes after group discussion are often more extreme than the attitudes held prior to discussion. The group polarization effect is most likely to occur when most group members are on the same side of the issue, and group members have different reasons for favoring that side of the issue. Thus, during discussion most group members will hear arguments on their own side of the issue that they had not considered previously (Burnstein & Sensis, 1981).

Even though face-to-face communications generally have more impact than media communications, tens of billions of dollars are spent each year on persuasive communications delivered through the mass media (McGuire, 1978). These channels are used as an “organized means of reaching large numbers of diverse kinds of people quickly and efficiently” (Weiss, 1969, p. 70). The mass media channels are popular because of the large number of people that can be reached. The politician’s walk across the state or a president’s speech to the nation would be relatively ineffective in changing public attitudes if these acts were not communicated to the mass public by newspapers, radio, and television. Even the
campaigner who successfully convinced each of the 1,000 people with whom he or she spoke would be woefully behind the campaigner who convinced one percent of a prime-time television audience (Bauer, 1964). Though accomplishing the latter feat is by no means simple, the potential impact of an effective mass media campaign is unquestionably substantial.

Channel Attributes

Persuasive communications are most effective when tailored to suit the special attributes of the channel through which they are to travel (Klapper, 1960). Print media provide a fairly permanent record that people can consume at their own pace and re-expose themselves to should they desire. The audio and audiovisual media reach a larger, more diverse audience than the print media, and communications traveling along audio or audiovisual channels "go to" the recipient, whereas printed communications must lay in waiting (Weiss, 1969). Further, audiovisual media are especially potent channels of communication that people both see and hear (Bradac, Konsky, & Davies, 1976; Fransen, 1963), and people tend to be more critical of and perceive as less valid the material that is written as opposed to the material presented on audio or videotape (Carver, 1935; Maier & Thurber, 1968). On the other hand, the nonverbal cues (and attendant distraction from reception of the message content) are more evident in audiovisual than audio communications and in audio than in printed messages (Wright, 1980).

The unique advantages and limitations associated with each channel suggest that no one form of transmission is "best," but rather that the most effective channel depends upon a variety of factors. These include the audience one wishes to reach; the interest value, comprehensibility, and personal relevance of the message; and the characteristics of the source. For instance, it is indicated that (a) complex messages are comprehended better in print than in audio or audiovisual form, and (b) yielding to what is comprehended is most likely in audiovisual communications and least likely in printed messages (Chaiken & Eagly, 1976). It follows then that an easily comprehended message should engender the most attitude change when it is videotaped and the least attitude change when it is printed. However, printed media may be the most effective when the message is complex, because substantially more of the message can be comprehended when presented in print rather than audio or audiovisual form. Furthermore, the relatively incomprehensible audio or audiovisual presentations can be more frustrating and unpleasant to follow than the more successfully comprehended printed presentation.

Chaiken and Eagly (1976) tested these notions using students at the University of Massachusetts. The subjects were told that the psychology department was hiring the New England Law School to evaluate its new training program for students, which would involve law students serving in community legal clinics. Subjects read background information about the "Victoria Company case," a fictional company-union dispute. Next, the subjects either read, listened to, or viewed a videotape of a law student's discussion of the case (the persuasive message). Half of these subjects heard a simply worded discussion (the easy message) and half heard essentially the same information stated in more difficult vocabulary and embedded in complex sentences (the difficult message). Subjects then expressed their judgment regarding the case and completed a "case evaluation" questionnaire.

Chaiken and Eagly found that when the law student's message was simple, subjects were most persuaded by the audiovisual presentation and least persuaded by the printed presentation. When the message was difficult, however, subjects were more persuaded by the printed than by audio or audiovisual presentations. Second, as expected, subjects found the audio and audiovisual presentations of the difficult message to be less understandable and more unpleasant than the printed presentation. These findings underscore the need to tailor messages to the channel through which they are transmitted.

The Persistence of Attitude Change

So far we have focused primarily on the immediate attitudinal effects of persuasive communications. Yet there would be little reason to study these phenomena if we had no basis for believing that changes in attitudes would be retained and would affect people's subsequent thoughts and actions. In this section, we address the message-learning perspective on the persistence of attitude change.

Message Retention

The durability of attitude change was not addressed by Hovland et al. (1949) until their work for the War Department during World War II was nearly ended. Until then, they had assumed that the effects of communications would be greatest immediately following their presentation.

Remember that Hovland and his colleagues proposed that learning the message arguments (i.e., "factual knowledge") potentiated, or sets the upper bounds on, attitude change. If attitude change was observed immediately following a communication, it was thought to be the result of attention, comprehension, and acceptance of the arguments and advocacy (see fig. 3.1). Accordingly, attitude change was thought to persist to the extent that the message could be remembered. If people forget most of the message arguments, then they would be expected to return nearly to their initial attitudes (see fig. 3.7). This model of persistence is stringent in that it assumes an intimate relationship between the retention of specific information in the message and attitude change. A less
Surprisingly, however, decrease in attitude change and decay of message retention did not follow the same time course. Attitude change and retention of arguments were correlated initially (i.e., the more one remembers, the more attitude change evidenced), but this association was broken, and actually tended to reverse, over time. Other studies have failed to substantiate even the initial learning-persuasion correlation (Cacioppo & Petty, 1979b; Insko, Lind, & LaTour, 1976; Petty & Cacioppo, 1979b). This latter finding suggests that attitudes persist because people remember the substance of the conclusion of the message, or perhaps their own thoughts about the message, rather than the specific arguments that are contained in the message (Greenwald, 1968; Petty, 1977). In the remaining portions of this chapter, we survey research and theory on persistence that emerged from the seminal work by Howland and his associates. We will return in chapters 8 and 9 to the question of attitudinal persistence with a view that highlights the importance of people's thoughts about a message rather than the externally provided arguments constituting the message.

The "Sleeper Effect"

In 1933, Peterson and Thurstone conducted one of the earliest investigations of the persistence of attitude change. Silent motion picture indoctrination films about different ethnic groups were shown to children in secondary schools, and the immediate and delayed attitude effects of these "communications" were obtained. Peterson and Thurstone concluded that attitude change "persists for a considerable period of time" (p. 62). But surprisingly, one of the films, Four Sons, had a delayed action effect: the attitude change it created appeared to be greater six months later than immediately after its showing.

Howland, Lumsdaine, and Sheffield (1949) found a similar effect in their study of the persistence of attitude change. One of the movies in the Why We Fight series, entitled the Battle of Britain, was designed to induce positive regard in American soldiers for their British allies. The film was quite effective in this task, at least as indicated by immediate attitude change. Howland, et al. expected a sharp decline across time in attitude change and in the retention of the factual knowledge about the message. They too found slightly greater attitude change nine weeks after the message than existed after one week. (Message retention did decrease, though.) Howland et al. called this delayed action effect on attitude change the "sleeper effect" (p. 188).

The Dissociative-cue Hypothesis

These and subsequent studies of sleeper effects led to the formulation and refinement of cue hypotheses about the persistence of attitude change (e.g., Kelman & Howland, 1953). According to this formulation, an attitude at any point in time is the result of: (a) associating the message arguments with a conclusion (we have discussed this process extensively already), and (b) associating cues with a conclusion. Two types of cues were postulated. A discounting
cues is something (besides message arguments) that causes a person to reject an advocacy. For instance, an untrustworthy communicator may cause a person to "discount" the attitude change a message may otherwise have produced. Conversely, an augmenting cue is something (other than message arguments) that causes the person to accept a conclusion (e.g., an attractive source). It was thought that the cues and the message arguments have separate (noninteracting) effects on attitude change—that is, that cues did not affect the reception, retention, or yielding induced by the message arguments and that the arguments did not alter the effects of the cues. Thus, attitude change could be determined at any point simply by adding the separate effects of the cue(s) and the message arguments.

According to the message-learning approach, the pairing of the message arguments and the message conclusion is remembered longer than the pairing of a cue and the conclusion. This notion is dubbed the dissociative-cue hypothesis. This view holds that a sleeper effect occurs because a discounting cue is dissociated from the message conclusion by the passage of time, while the remaining (more slowly decaying) association between message arguments and message conclusion produces what appears to be an "awakening" of attitude change. Thus, in theory, the increase in attitude change is not due to the message content actually increasing its effectiveness, but rather is due to the removal (dissociation) of the counteracting influence of a discounting cue.

Recall the Kelman and Hovland (1953) study mentioned earlier in which a message about juvenile delinquency was attributed to either a highly credible and trustworthy source (a distinguished judge) or a totally noncredible and untrustworthy source (a man arrested recently for a drug offense). On the immediate postcommunication attitude measure, the high-trustworthy source produced more attitude change than the low-trustworthy source. Three weeks later, subjects' attitudes were again assessed. Half of the subjects simply completed the delayed posttest, whereas half were reminded of the identity and characteristics of the source before they completed the posttest. On the delayed measure with no reminder of the source, a significant decay in attitude change was observed for the high-credibility source and no change for the low-credibility source (though a nonsignificant increase in attitude change was observed). A very different pattern of results was obtained for the groups in which subjects were reminded of the source (i.e., for which the cue was reassociated). The high-credibility group showed more and the low-credibility group showed less acceptance than comparable groups for which the cue was not reassociated (see fig. 3.8). Weber (1972) has found essentially the same pattern of results by making the cue either easy or difficult to dissociate from the message. He did this by repeating the source's name either two (easy dissociation) or twenty-two (difficult dissociation) times during the initial testing session. Subjects exposed to the easy dissociation cue showed converging attitudes similar to those shown in figure 3.8, whereas subjects exposed to the difficult dissociation cue showed persisting attitudes characterized by those illustrated for the reinstatement groups in figure 3.8.

These studies, however, failed to obtain a significant increase in attitude change with the passage of time, which is the test for an absolute sleeper effect (Cook, Gruder, Hennigan, & Flay, 1979). Intensive searches for the absolute sleeper effect were instituted, and after seven different experiments failed to find it, Gillig and Greenwald (1974) proposed that it was time to "lay the sleeper effect to rest."

The sleeper effect was down, but not out. A group of researchers at Northwestern University sought to arouse the sleeper effect (Cook, 1971; Cook & Flay, 1978; Cook et al., 1979). They examined the model proposed by Hovland and his colleagues and proclaimed that everyone had been looking in the wrong places for the effect. The Northwestern group reasoned that the message-learning approach predicted that a sleeper effect could be found only when: (a) the message alone had a substantial initial impact on attitudes, (b) this immediate attitude change was totally suppressed by association with a discounting cue, (c) the discounting cue and the message conclusion were dissociated with the passage of time, and (d) this dissociation occurred more quickly than did the forgetting and dissociation of the message content and conclusion. Finally, it was important that the cue and the message content affect attitude change separately and that they not affect one another.
With their route thus marked, Cook and colleagues set out to find the sleeper effect (Cook et al., 1979; Gruder, Cook, Henningan, Flay, Alessis, & Halama, 1978). Subjects read a 1,000-word message that contained strong arguments supporting its conclusion, thereby meeting the first requirement, (a), above. After reading the message, some subjects were exposed to a discounting cue. For instance, in their first experiment the discounting cue consisted of a “Note to the Reader” stating that the conclusion of the message was false. Moreover, it said that the message had been refuted because it was “inaccurate and wrong” (Gruder et al., 1978, p. 1065). Not surprisingly, subjects who read this “Note” indicated no attitude change on an immediate posttest. However, when their attitudes were measured again five weeks later, these subjects indicated a significant increase in attitude change—that is, their attitudes showed an absolute sleeper effect.

How well does the dissociative-cue hypothesis fare, then? The study by Gruder et al. (1978) suggests it fares very well. But now that the sleeper effect has been aroused, it is appearing in a variety of places (Greenwald, Baumgardner, & Leippe, 1979; Watts & Holt, 1979), occasionally in ways unanticipated by the dissociative-cue hypothesis. For instance, Greenwald et al. (1979) were able to turn the sleeper effect on and off: It was obtained when the discounting cue followed the message, but not when the cue preceded the message. This result suggests that the assumption regarding the separate lives of the cue and message is, in many instances, incorrect (Watts & Holt, 1979). Indeed, as we mentioned previously, several studies have demonstrated that a person’s interpretation and retention of a message is affected by source cues when the source is identified before rather than following the message (Husek, 1965; Mills & Harvey, 1972; Norman, 1976; see also Eagly & Chaiken, 1975). That is, people who know the source and circumstances surrounding a message prior to rather than following its delivery respond differently to the message and its conclusion. When this occurs, it becomes meaningless to speak of dissociating the “cue” from the “message,” since the meaning of each can be interpreted only in light of the other.

In sum, the dissociative-cue hypothesis may work only when the cue is introduced following the message in such a manner that it cannot alter the meaning of the message or how the message is encoded. For instance, imagine that you are exposed to a persuasive message about eliminating the delivery of mail on Saturdays. Imagine also that a discounting cue is associated with the message—you are told that the arguments contained in the message have been found to be completely unsubstantiated or false. If the discounting cue is introduced before rather than following your exposure to the message arguments, the way in which you might think about the message arguments and the emergence of attitude change as a function of having read the message could be quite different. If the discounting cue is introduced before the message, you would probably pay very little attention to the arguments, and little attitude change would result. If the cue is introduced after the message, however, it comes at a time when you may have already done a considerable amount of thinking about the communication. In chapter 8 we specifically address the issue of how knowledge of the source can affect how a person thinks about the message arguments.

Retrospective

In this chapter, we have focused on a second major approach that developed to attitudes and persuasion. This approach, which was advanced by Carl Howland and his associates at Yale University during the 1940s and 1950s, postulates that message learning is a fundamental determinant of attitude change. These researchers examined how different variables (e.g., source, message, recipient, channel) affected a person’s attention to, comprehension of, yielding to, and retention of the arguments contained in a persuasive message. The working assumption underlying this approach was that message learning portended attitude change, particularly when incentives were provided in the persuasive message for accepting the recommended position. In the remaining chapters of this book, we discuss some of the judgmental, motivational, and cognitive processes that influence attitudes and persuasion. These processes often uniquely transform objective stimuli (e.g., the message arguments) into a more comfortable, functional, or meaningful psychological reality for the individual. The later approaches to persuasion owe much to the important work by Howland and his associates, who identified a large number of important factors and interesting effects in persuasion. The subsequent approaches evolved in most instances to explain more simply, completely, and/or accurately the psychological processes underlying these effects (e.g., message repetition enhancing persuasion) and to specify in greater detail the circumstances that would lead to their emergence, nonemergence, and reversal.

Notes

'Asch (1948) has provided an alternative account of this prestige-suggestion effect. He posits that the nature of the source actually alters how people interpret the recommendation. In other words, he proposes that the recommendation is perceived to mean something more favorable when it comes from a prestigious rather than a nonprestigious source. Whether or not the context in which something is presented can affect its meaning ("meaning shift") is currently the subject of much controversy (Kaplan, 1975; Ostrom, 1977; Zanna & Hamilton, 1977).

In chapters 5 and 6, we shall describe circumstances in which a compliant behavior can cause a person to internalize a new and consistent attitude.
The notion that a person's own idiosyncratic thoughts about a message were an important mediator of persuasion (Smith, Bruner, & White, 1956) was not foreign to Hovland and his associates. In 1949, Hovland, Lumsdale, and Sheffield suggested that an audience may protect itself against persuasion by going over their own arguments against the advocacy. Hovland (1951) later emphasized that the best way to study the internal process of attitude change was to have subjects "verbalize as completely as possible their thoughts as they responded to the communication" (p. 430). Nevertheless, Hovland focused most of his research efforts on situational factors as they pertained to attitude change.

There has been some disagreement recently regarding the term sleeper effect. Hovland et al. (1949, 1953), Katz (Stotland, Katz, & Patchen, 1959), and McGuire (1969), Cook (Cook & Flay, 1978), and others have used the term, as we have here, to denote any facilitative delayed action effect on attitude change. Others use the term to refer to the increase in persuasion over time that results from messages initially associated with low-credibility sources (Gillig & Greenwald, 1974).

A relative sleeper effect is tested by finding a significant interaction between time of attitude measurement and the cue manipulation (e.g., high- or low-source-credibility). Thus, a relative sleeper effect does not have to include a significant increase for the low credibiity appeal but may result from any relative persistence of the low compared to the high-credibility message. For example, the low-credibility message may not decay as fast as the high-credibility appeal. These relative sleeper effects have not been so elusive (Cook & Flay, 1978; Cook et al., 1979).

Judgmental Approaches

Have you ever wondered why the first 60°F (16°C) day after a bitterly cold winter seems quite warm, but the first 60°F day after an intensely hot summer seems rather cool? Clearly, how we judge something depends upon what we are comparing it to. Our evaluations of social objects are also affected by our comparison points, and the theme of this chapter is that all evaluative judgments (including belief and attitude judgments) are relative. In other words, how positive or negative something feels or how it is rated on some attitude scale depends upon what our frame of reference is. For example, when college men were asked to judge the physical attractiveness of a potential date, the date was rated as significantly less attractive if the men had just finished watching a television program starring three very attractive women ("Charlie's Angels") than if they had watched a control program (Kenrick & Gutierres, 1980). All of the approaches to attitudes and persuasion that we will consider in this chapter share the same view: the psychophysical principles of human judgment that are used to explain why one light is rated as brighter than another, and why one line is rated as longer than another, can be used to understand why one person is more influenced than another, why one message is more persuasive than another, and why one object is rated more favorably than another.

Adaptation Level Approach

The underlying postulate of judgmental theories, including adaptation level theory as elaborated by Helson (1959; 1964), is that all stimuli can be arranged in some meaningful order. Thus, weights can be arranged from the lightest to the heaviest, and attitudes toward some object or issue can be arranged from the most negative (unfavorable) to the most positive (favorable). The theory gets its name from that point on the dimension of judgment that corresponds to the psychological neutral point, called the adaptation level. For example, if you were to put your hand in a bucket of very cold water, eventually your hand would adapt to the water temperature so that the cold water would feel neutral or normal. Subsequent judgments of how cold or warm another bucket of water felt