

# The Handbook of Communication Science, Second Edition

## Persuasion

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Persuasion may be defined as the use of symbols (sometimes accompanied by images) by one social actor for the purpose of changing or maintaining another social actor's opinion or behavior. The foregoing statement implies some degree of agency and forethought on the part of the message producer, though not necessarily a great deal of planfulness. In fact, much persuasive discourse can be seen in off-the-cuff responses to a perceived moment of opportunity (Dillard, Anderson, & Knobloch, 2002). Other persuasive efforts, especially those that are the product of marketing departments and political campaigns, are carefully constructed and consciously orchestrated (Zhao, 2002).

The definition also gives a nod to the fundamentally social nature of persuasion. We make efforts to persuade *other people*. When people make reference to self-persuasion, they are really talking about individual decision making. The ability to change the views of others should be viewed as one of the most fundamental of social skills (Dillard & Marshall, 2003).

The phrase *the use of symbols* is important to the definition because it makes clear that persuasion is a form of communication. This point deserves emphasis given that research on persuasion—a communicative phenomenon—has, historically, been tightly intertwined with the study of attitude change—a psychological phenomenon. However, attitude change can result from a variety of nonsymbolic processes. For instance, it is well established that attitudes toward various stimuli—polygons, photographs, drawings, matrices, and people—can be made more favorable simply by repeatedly exposing individuals to those stimuli (Bornstein, 1989). Similarly, when ownership of an object is experimentally manipulated by giving some subjects objects to keep and others objects on loan, those who have ownership of the objects value them more highly (Thaler, 1980). While such processes are interesting and important, they fall outside of the domain of persuasion. With this limited explication of persuasion as a backdrop, I turn next to a sketch of the history of persuasion.

### A Brief History of Persuasion Research

Any history of persuasion research would be incomplete without some acknowledgment of the contributions of rhetoric. Corax is often credited with having been the first person to equate rhetoric and persuasion (in roughly 467 B.C.) and to advance the notion that the function of rhetoric is to assist in ascertaining not absolute truth but rather that which is likely (B. Smith, 1921). Subsequent students of rhetoric elaborated systems of argument such as Aristotle's well-known distinctions among pathos (affect), logos (logic), and ethos (credibility). Even relatively recent writers offer conceptions of rhetoric that are not markedly different from what has just been described as persuasion. Bitzer (1968) presents a case in point when he writes that "the rhetor alters reality by bringing into existence a discourse of such a character that the audience, in thought and action, is so engaged that it becomes a mediator of change. In this sense rhetoric is always persuasive" (p. 4).<sup>1</sup>

Of course, the study of rhetoric has been and continues to be undertaken using the tools of humanistic inquiry. Writing in 1916, Woolbert argued for the development of a new field—speech science—that broke with humanistic tradition and embraced the scientific method. Thus were sown the seeds for what would become communication science, a contemporary application of the scientific model to the study of persuasion.

While interest in the scientific view of persuasion grew slowly but steadily in communication, there was an explosion of research activity in social psychology following from the appearance of *Communication and Persuasion* (Hovland, Janis, & Kelley, 1953). The Yale Group, as they were known, was theoretically eclectic but organized their empirical efforts around a single question: Who says what to whom with what effect (Lasswell, 1948, p. 37)? In 1957, Festinger published his theory of cognitive dissonance, which influenced attitude research for decades to come. In 1960, Katz presented his work on attitude functions, which suggested that attitudes serve a variety of psychological purposes (see also M. B. Smith, Bruner, & White, 1956). Just a year later, McGuire (1961) began to develop his thinking on resistance to persuasion. After almost half a century, many of the ideas of these pioneering attitude change researchers continue to have an impact on the kinds of questions that are asked about persuasion today.

In this chapter, I will provide coverage of what are mostly social psychological theories of attitude change. Indeed, not to do so would create a seriously distorted image of the research literature. But there are notable differences between psychologists and communication scientists regarding the utility of these theories, and I will highlight these differences where appropriate. As with any review of this length, it is necessarily selective and inevitably incomplete. Nonetheless, my hope is that readers unfamiliar with the persuasion literature might take away a feel for the breadth of the area and that persons who are already steeped in the research can find a useful summary of contemporary thought.

## **Theoretical Perspectives on Persuasion**

### ***FUNCTIONAL THEORIES***

Katz (1960) asserted that virtually all attitudes help to structure an understanding of the environment (see also M. B. Smith et al., 1956). This *knowledge function* is performed, at some level, by all attitudes (Fazio, Roskos-Ewoldsen, & Powell, 1994). Some attitudes operate so as to maximize rewards and minimize punishments from objects in the environment (the *utilitarian function*), whereas others foster a connection with social groups (the *social identity function*). Still other attitudes serve a *value expressive function*—that is, they provide a means for the expression of personal values and core aspects of the self-concept.

Although the list of functions varies from author to author, all functional theorists agree on one fundamental principle: Matching message content to attitude function is the means by which persuasion can be achieved. Briñol and Petty (2006) have speculated that there may be multiple mechanisms underlying the matching effect. These include, among others, increased depth of message processing, biased message processing, and processing fluency. In a significant paper, Hullett and Boster (2001) identified and repaired an internal contradiction in existing functional theory. Their contributions were twofold. First, and most important, they noted the ambiguity associated with the value expressive function. To which of the many possible values that one might hold does it refer? And if one wishes to design a persuasive message that matches the values of the target audience, to which value should one appeal? This insight led them to suggest that audiences might be comprehensively studied using existing typologies of values. Their second important contribution was to recognize that the *social adjustive function* (i.e., attitudes that enable affiliation with others) did not deserve stand-alone status. Rather, this function could be sensibly viewed as the value that individuals place on getting along with others. Subsequent investigations using this framework examined the persuasive effect of emotions provoked by matched and mismatched messages (e.g., Hullett, 2004).

### ***DISCREPANCY MODELS***

Research in this tradition revolves around the assumption that persuasion is the result of some process of comparison. The models differ in terms of what gets compared with what.

*Social Judgment Theory (SJT)*. Perhaps the oldest of the discrepancy models, SJT holds that attitude change

follows from a comparison of one's preexisting attitude with the position advocated in the message (Sherif & Hovland, 1961). A recipient's attitude may be divided into three regions. The latitude of acceptance includes his or her own position as well as all of the other positions that are acceptable to that individual. The latitude of rejection encompasses all of those positions that are definitely at odds with the individual's own position. The latitude of noncommitment, which lies between acceptable and unacceptable positions, contains positions that the individual neither explicitly embraces nor explicitly disavows. The relative size of the latitudes of acceptance and rejection is thought to be a function of involvement with the issue. Higher levels of involvement produce smaller latitudes of acceptance and larger latitudes of rejection.

When a message proposes a change that falls in the latitude of acceptance, SJT predicts an assimilation effect such that the recipient will see the position as more similar to his or her own than it is in fact. This will produce more change than would be expected from an accurate perception of the position. If a message presents a position that is substantially different from one's own position—in the latitude of rejection—the theory anticipates a contrast effect such that the message is perceived as more different than it really is. It is expected that this misperception will yield less attitude change than a veridical comparison or that it will produce a boomerang effect (i.e., attitude change opposite to that intended). Although there are few data consistent with the notion that the proposed perceptual processes mediate the effects of message discrepancy on attitude change, the theory is not without value. The core ideas are sufficiently appealing that they remain common currency in the persuasion literature despite the lack of empirical support. And SJT does make the important prediction that change is best accomplished in a series of steps in which each message falls fairly close to the target's initial attitude (i.e., not in the latitude of rejection). This feature of the theory was cleverly exploited by S. W. Smith, Atkin, Martell, Allen, and Hembroff (2006) in a study of drinking among students at Michigan State University. Those researchers conducted an effective social norms campaign by first ascertaining that the normative information they would be providing to students fell relatively close to the target audience's own position (i.e., not in the latitude of rejection), then creating a series of messages that gradually moved that boundary.

*Social Norms Approach (SNA).* More of an idea than a theory, the SNA holds simply that (a) behavior is influenced by the perceived behavior of others, and (b) most individuals live in a state of pluralistic ignorance insofar as they do not perceive the frequency of others' behavior accurately. Typically, individuals believe that others engage in risky health behaviors, such as binge drinking, more often than is actually the case. The implication is that correcting this misperception will cause individuals to bring their own drinking more in line with the true behavioral norm. For example, a message that said "2 out of 3 Penn State students don't drink so much that they forget what they did last night" was intended to reduce alcohol consumption among Penn State students: It did not (L. LaSalle, personal communication, January 9, 2008). Despite some successes, serious questions remain about the validity of the approach. Some investigations show that providing normative data does cause shifts in attitudes and beliefs toward those data but without any corresponding change in behavior (e.g., Steffian, 1999). Other research reports reactance-like effects of social norms messages among those most at risk (e.g., heavy drinkers; Cameron & Campo, 2006; Campo & Cameron, 2006). And even when social normative information does produce change in the desired direction, the specific type of normative information that is effective varies across types of health behavior (Cameron & Campo, 2006). The fact that almost half of the colleges in the United States have used or are using the SNA in an effort to curb student drinking (Wechsler, Seibring, Liu, & Ahl, 2004) suggests an ill-advised rush to implement an unproven persuasive strategy. Greater theoretical specification is needed (e.g., Lapinski & Rimal, 2005) as well as enhanced recognition that SNA must be supplemented with other campaign strategies if they are to have any positive effect at all (e.g., Lederman & Stewart, 2005).

*Language Expectancy Theory (LET).* LET proposes that individuals develop expectations about the linguistic behavior of others as a result of their cultural experiences (Burgoon, Denning, & Roberts, 2002). Persuasive speakers who depart from those expectations may do so in one of two ways. Positive violations exceed

expectations in some desirable way and, in so doing, enhance persuasion. Negative violations that depart from linguistic expectations, reflect upon the speaker in an unflattering manner, and yield diminished persuasive effects or boomerangs. In its original conception, LET focused primarily on understanding language intensity in combination with social categories such as males versus females. Subsequently, it was (a) expanded to include a larger variety of message variables, including fear appeals, opinionated language, profanity, and verbal aggression, and (b) taken into new domains such as health communication and interpersonal influence (Burgoon, Denning et al., 2002, provide a review).

## **COGNITIVE MODELS**

*Cognitive Response Model.* This perspective, originally proposed by Greenwald (1968), asserts that attitude change is a function of thinking. *Cognitive responses* are thoughts that individuals have in reaction to a persuasive message. Although the theory itself is mute regarding the algorithm that computes attitudes from thoughts, the procedures used by researchers are straightforward. After exposure to a message, research participants are asked to list all of the thoughts that came to mind during the message. The resulting cognitive responses have been classified in a variety of ways (Cacioppo, Harkins, & Petty, 1981), but the overwhelming majority of investigations in this tradition have used valence coding. For example, favorable thoughts, that is, those that evaluate the message positively, are coded 1. Unfavorable thoughts, that is, those that are critical of the message, are coded -1. A *dominant cognitive response index* can then be formed by subtracting the sum of the unfavorable thoughts from the sum of the favorable thoughts.

Because the cognitive response model locates dominant cognitive response as the proximal cause of attitude, one important question is whether there is empirical support for that claim. Various different forms of evidence suggest that this is the case. For example, there is a substantial correlation between cognitive responses and attitude (e.g., Petty & Cacioppo, 1979). Other investigations, using some form of statistical mediation analysis, produced data compatible with the claim of proximal causation (e.g., Hale, Mongeau, & Thomas, 1991). Finally, experimental manipulation of the valence of cognitive responses produced the anticipated effects on attitude (Killeya & Johnson, 1998). Although none of these investigations alone offers ironclad evidence, when considered together, they make a compelling case for the idea that cognitive responses precede attitude change.

The central insight of the cognitive response model is that persuasion will take place only to the extent that a message prompts thinking that is compatible with the major thrust of the appeal. This leads naturally to the question of what might bring about variation in the number and valence of cognitive responses. It was precisely this issue that framed research on the direct descendant of the cognitive response model, that is, the elaboration likelihood model.

*Elaboration Likelihood Model (ELM).* According to Petty and Cacioppo (1986), the general answer to the question of what determines the number and valence of cognitive responses is ability and motivation. Message recipients who are both motivated and able to process a persuasive message are said to engage in *central route processing*. This is an attentive frame of mind in which individuals carefully scrutinize the content and structure of the message. If either motivation or ability is absent, then messages are processed via the *peripheral route*, in which attitude change depends on simple cues, including associative learning, inference from one's own behavior, negative motivation states (e.g., dissonance and reactance), mere exposure, subliminal priming, and memory-based heuristics. While the peripheral route is best viewed as a set of processes, ELM-instigated empirical research is largely limited to the study of heuristics.

Consideration of one of the early studies in this research stream will help to shed light on key features of the model. Petty, Cacioppo, and Goldman (1981) sought to better understand the role of involvement in persuasion. Research participants listened to a message for the supposed purpose of evaluating its broadcast quality. All of the messages argued in favor of the position that college seniors pass a comprehensive examination in their

major area of study as a requirement for graduation. One version of the message contained strong arguments, such as the claim that comprehensive exams had been shown to reverse the decline in standardized achievement scores at other universities. Another version was built around weak arguments in which a friend of the author had to take a comprehensive exam and now had a prestigious academic position. The messages were attributed to either a high credibility source—the Carnegie Commission on Higher Education— or a low credibility source—a “report produced by a class at the local high school.” The third factor in the design was involvement. It was manipulated by informing participants that the university chancellor was considering implementing the exams either next year (high involvement) or in 10 years (low involvement).

The hypotheses were as follows: When involvement was low, participants would be unwilling to devote much thought to the message and thus would look for a cognitively effortless way to arrive at an attitudinal judgment. The experimenters provided such a means by way of the source credibility cue. In the high-involvement conditions, it was anticipated that participants would be motivated to carefully analyze the message given that it could have a significant impact on their lives. Accordingly, they were expected to pay close attention to argument quality but give little or no weight to source credibility. The results conformed perfectly to these predictions.

There are several noteworthy features of the study, some of which presaged larger movements in the study of attitude change and persuasion. First, the results for involvement helped to rekindle an interest in the forms and effects of involvement that continues to this day. Second, the argument strength variable proved central to ELM inquiry as a sensitive indicator of depth of message processing. Argument strength in this and later studies was assessed in pretests according to the number of favorable or unfavorable cognitions that the message generated. In other words, under conditions that almost surely reflect central route processing, individuals were asked to list their thoughts about individual arguments within a message. Arguments that produced predominantly *favorable* thoughts (> 65%) were labeled strong, while those that yielded mostly *unfavorable* thoughts (> 65%) were called weak. ELM researchers then proceeded to identify and test for conditions that reduced or eliminated individuals' ability or motivation to discriminate between the two types of messages. From the viewpoint of psychology, this is a perfectly reasonable research strategy: First develop some stimuli that produce the desired psychological effect, and then examine variables that moderate the effect.

From the perspective of communication research, there are at least two problems with this approach. For one, to characterize the arguments as strong or weak is to confuse the effect of the appeals (i.e., variation in cognitive response) with a property of the message (i.e., strength). Whereas Petty and his colleagues (1981) wanted to use the pretested arguments as a methodological tool for understanding message processing, communication researchers take the linkage between message features and message effects as their object of study.

The second problem with argument strength is closely connected to the first. A communication researcher might ask, “How do I design a persuasive message?” but the psychologist's answer appears to be, “Conduct a pretest to determine which messages have strong or weak arguments.” Hence, the ELM seemingly provides no theoretical counsel to individuals whose disciplinary orientation predisposes them to a concern with creating effective persuasive messages. In this regard, the ELM is a viable theory of attitude change but not an especially useful theory of persuasion.

Perhaps the single most important contribution of the ELM is the observation that any given variable can influence attitude change in four ways: (a) by affecting the degree of elaboration, (b) by serving as a cue, (c) by serving as an argument, or (d) by biasing message processing. And there is no requirement that a variable function in only one of these roles. For example, individuals seeking to understand why an expert would endorse a particular position might self-generate arguments (Petty, Wheeler, & Bizer, 1999). Conversely, source expertise might operate as a persuasion cue when involvement is low, as it did in the Petty et al. (1981) study discussed above. Finally, an attorney might point to a witness's expertise in an effort to strengthen him or her

argument for the defendant's guilt.

The great value of the ELM's multiple-role postulate is that it makes clear the complexity of the persuasive process. This is not a trivial contribution. The primary shortcoming of the multiple-role postulate is the absence of supporting theoretical architecture that clarifies the conditions under which a given variable will serve one of the four functions. This degree of conceptual flexibility has made it necessary for some researchers to seek the advice of the theory's developer to ascertain what the theory predicts (e.g., Kumkale & Albarracín, 2004, p. 143).

*Heuristic-Systematic Model (HSM).* Chaiken's (Todorov, Chaiken, & Henderson, 2002) heuristic-systematic model (HSM) is often treated as if it were identical to the ELM. It does make many of the same predictions. But it can also be distinguished from the ELM along several lines, perhaps the most fundamental of which revolves around the notion of dual process. The HSM describes two *types* of message processing: heuristic and systematic. These two modes of message processing are specified to be qualitatively different. In contrast, the ELM posits the existence of two *classes* of mental processes: central (i.e., thinking) and peripheral, which, as discussed above, includes all manner of processes that are low in cognitive effort. This is a key difference between the two theories.

Another important distinction concerns the motivations for message processing. The ELM asserts that the primary (perhaps only) reason for processing is to form an accurate attitude. In contrast, the HSM explicitly recognizes that different forms of involvement underlie different processing motives. Outcome-relevant involvement produces a desire to accurately evaluate the appeal. Impression-relevant involvement prompts the formation of attitudes that align with those of socially desirable others. Value-relevant involvement can stimulate biased processing in an effort to ward off the persuasive attack. Evidence supportive of these distinctions can be found in Johnson and Eagly (1989) and, more recently, in Cho and Boster (2005). However, Slater (2002) has suggested that communication research demands a lengthier list of motivations.

A third point of contrast involves the notion of concurrent processing. Presumably, message processing under the ELM occurs at some specific point on the elaboration likelihood continuum. Thus, if a message processor is engaged in central route processing, he or she is not simultaneously capable of peripheral route processing. But HSM explicitly allows for concurrent processing, a distinctive prediction that has received empirical support (e.g., Bohner, Ruder, & Erb, 2002).

*Unimodel.* The key evidence supporting the dual-process models is the observation that cues and arguments both interact with motivational factors in opposite ways. For example, in the Petty et al. (1981) study described above, source expertise influenced attitude change under conditions of low involvement, but argument quality determined attitude change when involvement was high. The same general pattern was observed for ability factors as well (e.g., Petty, Wells, & Brock, 1976). However, as Kruglanski and his colleagues have pointed out, the cue information in these studies was typically presented prior to the message arguments, and it was much shorter and less complex than the argument information. In other words, the cue versus argument information was confounded with ordinal position and length (Kruglanski et al., 2006).

Is this confound of any consequence? Kruglanski et al. (2006) would certainly answer yes. They base their response on a series of investigations that seem to refute the key evidence supporting the dual-process models. For example, Kruglanski and Thompson (1999) conducted a study that showed that brief arguments had a greater attitudinal impact than lengthy arguments under conditions of low involvement, but the reverse held for high involvement. Other investigations discussed in Kruglanski et al. also run counter to the position that there are two routes to persuasion. Consideration of this evidence *in toto* led Kruglanski et al. to propose that the dual-process models had erroneously posited the existence of two processes when, in fact, only one exists. The single-process account of message processing shows considerable similarity to argumentation theory (e.g., Hamble, 2003). It asserts that individuals glean information from persuasive messages (i.e., evidence), which

they then proceed to evaluate syllogistically. On this view, an argument or a peripheral cue could serve equally well as the major premise in a syllogism. Accordingly, the logic of the unimodel specifies one and only one process by which suasyory messages yield an effect.

Although Kruglanski et al. (2006) make an interesting case for the value of the unimodel, it is not altogether clear that it represents a significant advance in our theoretical understanding of persuasion. One criticism that might be leveled against it is that it covers much of the same ground as the dual-process models. Indeed, two of the three foci of the model—the ability factors and motivational factors that underlie processing—are embodied in the ELM and HSM. It might also be said that the third focus (i.e., the structure of evidence) has also been the target of considerable dual-process research. Even the notion that arguments might serve as cues and cues as arguments has, to some degree, been anticipated by the ELM's multiple-role postulate. In short, it is too soon to know whether the unimodel has the capacity to alter the conceptual terrain of the study of persuasion. But the fact that it has successfully challenged conventional wisdom concerning the underpinnings of the persua sive process and provided the impetus for reexamining what had become taken for granted is all to the good.

*Inoculation Theory.* After observing that two-sided messages were more effective at producing attitude change than one-sided messages, Lumsdaine and Janis (1953) speculated that two-sided messages “inoculated” against persuasive counterattacks. McGuire (1961) subsequently elaborated this germ of an idea into a full-blown theory of resistance to persuasion. Hewing closely to the biological metaphor, he proposed that cultural truisms (i.e., beliefs that had never been challenged) were susceptible to persuasive influence. One means of creating resistance to persuasive attacks might be to provide additional supportive information about the rightness of the beliefs, a strategy much akin to eating right and getting plenty of exercise to maintain one's health. But just as with biological attacks, a more effective strategy might be to present the organism with some weakened but still identifiable form of the disease that would stimulate the body's defenses. In persuasive form, this meant exposing individuals to arguments that were strong enough to demonstrate that their beliefs might be incorrect, then showing those same individuals how to counterargue the attack. This effectiveness of this refutational preemption was thought to depend on motivating the message recipient via threat, then providing argumentative content capable of fending off the attack.

In subsequent years, a great deal was learned about the process of creating resistance. One finding of considerable note was that inoculation is not, as McGuire (1961) originally thought, limited to cultural truisms. Rather, individuals can be inoculated on all manner of controversial topics (e.g., Burgoon & Chase, 1973). Second, much progress has been made, primarily by communication researchers, toward illuminating the psychological processes instigated by refutational preemption. That work shows evidence of counterarguing but also affective change as well as variations in effectiveness due to attitude accessibility (Szabo & Pfau, 2002, provide a comprehensive review). Given the considerable importance of inoculation processes in applied areas such as health and politics, it seems likely that this vigorous research tradition will continue unabated for the foreseeable future.

## **COMPUTATIONAL THEORIES**

Theories in this section all embrace the idea that the mind bears some resemblance to a computer. They assume that message processing can be modeled using equations similar to the following:

$$A = \sum b_i e_i$$

where  $A$  represents an attitude toward some behavior,  $b$  represents a belief about the likelihood of some consequence of that behavior, and  $e$  represents an evaluation of the outcome. Thus, the process of forming an attitude involves (a) identifying the consequences of an action (of which there may be several, as indicated by the subscripts associated with  $b$  and  $e$ ), (b) making judgment of  $b$  and  $e$ , (c) forming the cross-products of  $b$  and  $e$ , and then (d) summing the cross-products. Whether or not the mind actually uses exactly this algorithm

is not at issue. Rather, it can be said the mind is doing something similar to Equation 1 because the right side of the equation has proven to predict independent measures of attitude with a high level of precision (Hale, Householder, & Greene, 2002). In this respect, then, attitude formation is a logical and often computationally intense process, though not necessarily one that occurs with conscious awareness.

The equation given above is well known as Fishbein's (1967) theory of attitude. This framework was later expanded into the theory of reasoned action (TRA; Fishbein & Ajzen, 1975), which added the concept of subjective norms, that is, the notion that individuals also take into account the wishes of others. Specifically, subjective norms are aggregated perceptions of the extent to which the target individual believes that particular social entities (i.e., people, groups, institutions) believe that he or she *should* engage in a behavior. Hence, they are conceptually distinct from the descriptive norms that are the focus of the social norms approaches discussed earlier.<sup>2</sup>

In the TRA, attitudes and subjective norms influence behavioral intentions, which, in turn, influence behavior. The theory is one of "reasoned behavior" insofar as individuals compute the most desirable course of action as they see it. In other words, reasoning occurs from a subjective standpoint. It may or may not correspond to objective reality and thus may or may not be rational.

The theory was reformulated again as Ajzen's (n.d.) theory of planned behavior (TPB; see also Fishbein & Yzer, 2003). The major change in this instance was the addition of perceived behavioral control as an antecedent of intention. Broadly **speaking**, perceived behavioral control is the actor's perception of the relative difficulty of performing the behavior. This move makes plain what was implicit in the TRA— that the computational theories attempt to explain deliberate *volitional* behavior.

In either one of its contemporary forms—Ajzen's TPB or Fishbein and Yzer's integrated model (IM)—this is a mature theory that has successfully withstood many years of testing, stimulated an enormous amount of research, and been applied to a plethora of behavioral phenomena. And, more so than many other theories, it has some fairly straightforward implications for message design. The TPB/IM suggests that, to change intentions, one must change attitudes, subjective norms, or perceived behavioral control. Each of these three constructs is composed of subordinate constructs (e.g., beliefs and evaluations) that help to identify more specific targets of change. Hornik and Woolf (1999) have suggested three criteria for identifying the beliefs that should be targeted in a persuasive intervention: (a) The belief should be significantly associated with intention, (b) there should be a sufficient number of people who do not already subscribe to the belief to justify the intervention, and (c) it should be possible to develop a compelling argument in favor of belief change. For message designers, these guidelines provide added value to a theory that has already contributed a great deal to the study of persuasion.

### **HOT PROCESS THEORIES**

Whereas cognitive and computational theories accord a privileged role to thought as a precursor to persuasion, other approaches emphasize motivational or "hot processes." *Message-Irrelevant Affect*. Affective states that exist prior to message exposure and have no logical implications for message evaluation have been termed *message-irrelevant affects* (Dillard & Meijnders, 2002). Research in this area, which has focused on mood, demonstrates that message-irrelevant affect can have a considerable influence on message processing despite the absence of any logical connection. The first study to link mood effects with the dual-process models of persuasion was Mackie and Worth's (1989) investigation. The authors reasoned that because positive mental associations are more tightly interconnected than negative ones, placing people in a positive mood would consume cognitive capacity and thereby render them less capable of discriminating strong from weak arguments. The data were consistent with prediction. In contrast, Bohner, Crow, Erb, and Schwarz (1992) suggested that the findings could be interpreted as a motivational rather than cognitive deficit. Borrowing from emotion theory, these writers advanced the notion that positive moods signal that all is well in the environment.

By implication, message recipients can safely concur with any suasive appeal that they might encounter without any need to expend cognitive energy assessing argumentative content.

Contrary to both of these positions, the hedonic contingency model holds that individuals make efforts to manage their moods so as to achieve or maintain favorable affective states (Wegener & Petty, 1994). According to this view, persuasive messages possess content and stylistic features that have hedonic consequences for message processors. For instance, loss-framed or counterattitudinal messages might threaten a positive mood. As a result, the model predicts that individuals in a good mood will be unmotivated to process systematically. In contrast, persons in a negative mood have nowhere to go affectively **speaking**, except toward the positive end of the scale. Hence, they are expected to be less discriminating in their decisions regarding which messages to process systematically. Hullett's (2005) meta-analysis of the mood and persuasion literature reveals a pattern of data that aligns most closely with the hedonic contingency model. Specifically, positive mood appears to reduce systematic processing when messages possess counterhedonic features but seems to increase systematic processing when messages are proattitudinal.

*Reactance.* Psychological reactance is "the motivational state that is hypothesized to occur when a freedom is eliminated or threatened with elimination" (S. S. Brehm & Brehm, 1981, p. 37). The theory contends that when a perceived freedom is eliminated or threatened with elimination, the individual will be motivated to reestablish that freedom. *Direct restoration* of the freedom involves doing the forbidden act. In addition, freedoms may be restored indirectly by (a) increasing liking for the threatened choice, (b) derogating the source of threat, (c) denying the existence of the threat, or (d) exercising a different freedom to gain feelings of control and choice. Although all of these means for reducing reactance have been the focus of at least some research, reduced or boomerang attitude change has captured the lion's share of attention.

There are four essential elements to reactance theory: freedom, threat to freedom, reactance, and restoration of freedom. The concept of free behaviors is defined broadly so as to include actions, as well as emotions and attitudes (J. W. Brehm, 1966). Individuals possess freedoms only to the extent that they have knowledge of them and perceive that they are capable of enacting the behavior. Given that an individual perceives a specific freedom, any force on the individual that makes it more difficult for him or her to exercise that freedom constitutes a threat (J. W. Brehm, 1966). Even an impersonal event, such as the weather, can be viewed as a threat if it renders more difficult the exercise of a freedom. However, social influence as a threat to freedom is most pertinent to questions of persuasive communication. It is quite common to see the specter of reactance invoked whenever a persuasive appeal or campaign fails to produce the expected effect (for a review, see Burgoon, Alvaro, Grandpre, & Voulodakis, 2002). Such post hoc explanations may be entirely accurate, but the fact that reactance was never measured directly renders them speculative. A series of recent investigations has shown that reactance can be modeled as an amalgam of anger and negative cognitions (Dillard & Shen, 2005; Quick & Stephenson, 2007; Rains & Turner, 2007). Together, these papers refute the claim that reactance cannot be measured (J. W. Brehm, 1966) and pave the way for research that traces the effects of message features through the entire process delineated by reactance theory. Perhaps most important, this work suggests that reactance theory can be folded into broader perspectives on emotion and persuasion (discussed below). To do so sacrifices none of the theory and research that has accumulated to date. However, it does make clear that reactance can be studied as just one part of a larger conceptual undertaking.

Miller, Lane, Deatrack, Young, and Potts (2007) make a valuable contribution to the message design literature by demonstrating that a postscript that emphasizes choice may be a means of reducing the reactance induced by a persuasive appeal. Finally, there is emerging evidence that loss-framed messages may suffer persuasive deficits relative to gain-framed messages by inducing a state of reactance (Reinhart, Marshall, Feeley, & Tutzauer, 2007). In sum, recent research activity on the nature and antecedents of reactance suggest that the theory is enjoying a resurgence of interest.

*Fear and Persuasion.* Rogers's original version of protection motivation theory (PMT) was a thoroughly cognitive

perspective that eschewed emotion entirely (Rogers & Prentice-Dunn, 1997). The theory predicted a three-way interaction between perceptions of (a) the severity of a threat, (b) one's susceptibility to it, and (c) the likelihood that the recommended action would reduce or eliminate the threat. Over the years, that interaction was almost never supported. Under the weight of accumulating evidence, fear was installed as a variable that could influence cognitive appraisals as well as exert a direct influence on protection motivation (Rogers & Prentice-Dunn, 1997). In the addition, the complex interactions were eliminated in favor of two main effects: one for threat (severity plus susceptibility) and one for recommendation (response efficacy plus self-efficacy). Finally, drawing from the health belief model (Janz & Becker, 1984), concepts such as barriers and benefits were incorporated, thereby rendering what was once a precise but inaccurate theory into something more cumbersome but realistic. In its current formulation, PMT provides a nearly comprehensive summary of the issues that message designers must confront in the implementation of threat appeals.

A second framework that borrows heavily from both PMT and Leventhal's (1971) parallel processing model is Witte's extended parallel processing model (EPPM; Witte & Allen, 2000). The EPPM is attractive for its straightforward condensation of issues into a compact and intuitively attractive framework. However, the theory unequivocally predicts an interaction between threat and recommendation that is not borne out in the literature. The most telling evidence against the interaction prediction can be found in Witte and Allen's (2000) meta-analysis when they write, "Overall, the additive model [i.e., main effects model] receives the greatest support in these analyses" (p. 600). Still, like the PMT, the EPPM offers a summary of the many questions that surround the use of threat appeals, and it remains useful in that regard. The innovative attempt to extend the EPPM into the realm of attitude accessibility offered by Roskos-Ewoldsen, Arpan-Ralstin, and St. Pierre (2002) is beginning to generate empirical interest (Roskos-Ewoldsen, Yu, & Rhodes, 2004).

*Multiemotion Models.* Recent thinking on the role of emotion in persuasion has embraced the idea that messages have the potential to evoke multiple emotions and that those emotions may exert contradictory influences on the persuasive process (Dillard & Nabi, 2006). For example, one study of messages that were structured as fear appeals found that most individuals actually experienced changes in three or more emotions (Dillard, Plotnick, Godbold, Freimuth, & Edgar, 1996). The same investigation showed that some emotions (e.g., fear and sadness) were positively correlated with persuasion, whereas others showed the opposite influence (e.g., anger and puzzlement). Subsequent research has verified the capacity for messages to arouse multiple emotions and for those emotions to exert a complex pattern of influence on attitude (Dillard & Peck, 2000, 2001).

Nabi's (1999) cognitive-functional model (CFM) emphasizes emotional approach and avoidance tendencies as determinants of attention and depth of message processing. Whereas the theory is designed around five negative emotions, empirical testing to date has focused on just two. That research reveals that anger, relative to fear, is associated with more careful message processing (Nabi, 2002). Other research in this stream indicates that emotions have the potential to frame interpretation of persuasive messages by stimulating a desire for emotion-consistent information (Nabi, 2003).

*Narratives and Exemplars.* One area of inquiry that is attracting increased research attention is that of narrative persuasion (e.g., Green, 2006). Proponents of the approach suggest that the investigation of narrative holds great promise because storytelling is a basic mode of human interaction (Fisher, 1987). When individuals are transported or absorbed by the storyline, they may experience the story as if it were actually taking place, will be less likely to counterargue the story's propositions, and will manifest strong emotional engagement with the characters and the plot (Green, 2006; Slater & Rouner, 2002). Tal-Or, Boninger, Poran, and Gleicher (2004) demonstrated that narratives that prompt counterfactual thinking about one's self (e.g., "If I had only worn a seat belt ...") produce greater and longer lasting persuasive effects. The study of narrative also offers a broad housing for Zillmann's (2006) exemplification theory, with its emphasis on the number and type of exemplars that are included in news stories. Although it is far too soon to tell with any degree of certainty, this focus on narrative persuasion is sufficiently engaging and distinct from the existing paradigm (i.e., the dual-process models of persuasion) that we may be seeing the cusp of a paradigm shift. Perhaps contributors to the next

edition of the *Handbook of Communication Science* will have a better vantage point from which to evaluate the veracity of this forecast.

## Notes

1. Although Bitzer (1968) contends that all rhetoric is persuasive, it is doubtful that he would agree that all persuasion is rhetoric.
  2. My discussion of SNA and TRA aligns these perspectives with descriptive and injunctive norms, respectively. Such a division oversimplifies the messier reality in which some SNA researchers have sought to understand injunctive norms. Moreover, Ajzen (n.d.) now asserts that descriptive norms should sometimes be regarded as instances of subjective (i.e., injunctive) norms.
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