CHAPTER 9

The Elaboration Likelihood Model

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The elaboration likelihood model (ELM) of persuasion is a "dual process" approach to social information-processing phenomena that is focused specifically on persuasion (Petty & Cacioppo, 1986; Petty & Wegener, 1999). The central idea of the ELM is that two different basic kinds of persuasion processes can be engaged, depending on the degree to which the message recipient engages in "elaboration" of (systematic thinking about) information relevant to the persuasive topic. The development of the ELM has broken new ground in the study of persuasion processes, and offers important advances over previous work. In what follows, the nature of elaboration is described, the two persuasion processes are detailed, the ELM's analysis of multiple roles for persuasion variables is described, and directions for future research are sketched.

Elaboration

The ELM suggests that, under different conditions, receivers will vary in the degree to which they are likely to engage in issue-relevant thinking ("elaboration"). Sometimes receivers will engage in a great deal of elaboration—attending carefully to the message's arguments and evidence, reflecting on other arguments they remember, and so forth. But on other occasions, receivers will not do so much thinking about the persuasive message.

The most straightforward means of assessing the amount of elaboration is the "thought-listing" technique: Immediately following the receipt of a persuasive message, receivers are simply asked to list the thoughts that occurred to them during the communication (for a broad review of such techniques, see Cacioppo, von Hippel, & Ernst, 1997). The number of issue-relevant thoughts reported provides at least a rough index of the amount of issue-relevant thinking. And those issue-relevant thoughts can also be classified in various ways, most notably in terms of their favorability to the advocated position.

The degree of elaboration thus forms a continuum, from extremely high elaboration to little or no elaboration. A variety of factors influence the amount of elaboration that message recipients undertake, with these usefully divided into influences on elaboration *motivation* (the desire

to engage in issue-relevant thinking) and elaboration *ability* (the capability for issue-relevant thinking).

Elaboration motivation can be influenced by a great many factors, but two can serve here as illustrations. One is the receiver's level of involvement with the persuasive issue, where involvement is understood as the degree of direct personal relevance of the topic to the message recipient. As involvement increases, elaboration motivation increases. That is, as a given issue becomes increasingly personally relevant to a receiver, the receiver's motivation for engaging in thoughtful consideration of that issue increases (e.g., Petty, Cacioppo, & Schumann, 1983).

Second, elaboration motivation is influenced by the receiver's level of need for cognition. "Need for cognition" is an individual-difference variable concerning the degree to which persons engage in and enjoy thinking. As need for cognition increases, elaboration motivation increases (for a review, see Cacioppo, Petty, Feinstein, & Jarvis, 1996, pp. 229–231). That is, people who generally enjoy thinking hard are on the whole more likely to be motivated to process persuasive messages closely.

Elaboration ability is also influenced by a number of different factors. One such influence is the receiver's amount of prior knowledge about the topic. As receivers know more about the topic, they can engage in greater elaboration (e.g., Laczniak, Muehling, & Carlson, 1991). A lack of relevant background knowledge can plainly interfere with one's ability to think carefully about an issue.

A second influence on elaboration ability is the presence of a distraction in the persuasion setting—some distracting stimulus or task. In experimental research, distractions have included such things as having an audio message be accompanied by static or beep sounds, or having receivers monitor a bank of flashing lights. Under conditions that would otherwise produce relatively high elaboration, distraction interferes with such issue-relevant thinking (for a review, see Petty & Cacioppo, 1986, pp. 61–68).

The amount of elaboration in which a receiver engages is influenced jointly by elaboration motivation and elaboration ability. A receiver might have the desire to attend closely to a message (elaboration motivation) but be prevented from doing so (e.g., by the presence of a distraction). When elaboration motivation and ability align, the contrast is striking. Imagine, on the one hand, a low need-for-cognition receiver, encountering a message that's not very involving, on a topic about which the receiver knows relatively little, while keeping one eye on the television set—plainly the recipe for very low elaboration. By contrast, a knowledgeable and high need-for-cognition individual encountering a message on a highly involving topic, with nothing to distract from attending closely to the message, is likely to undertake considerable elaboration.

Now one might be tempted to think that where little or no elaboration is occurring, little or no persuasion can occur, given that the receiver is not very engaged with the message. But the ELM proposes that persuasion can take place at any point along the elaboration continuum, even under conditions of very low elaboration—but it suggests that the nature of persuasion varies depending on the degree of elaboration. This idea is expressed by the ELM's two "routes to persuasion."

Elaboration and the Two Routes to Persuasion

According to the ELM, different kinds of persuasion processes are activated, depending on how much elaboration occurs. To bring out the basic idea, the ELM describes two fundamentally different routes to persuasion: the central route and the peripheral route. As a brief overview: The central route is activated when elaboration is relatively high; when persuasion is achieved through the central route, it comes about through elaboration, that is, through issue-relevant thinking. The peripheral route is activated when elaboration is relatively low; when persuasion is achieved

through the peripheral route, it commonly comes about through the receiver's use of mental shortcuts ("heuristics") rather than thoughtful examination of issue-relevant considerations.

The Central Route

In central-route persuasion (i.e., when elaboration is relatively high), the outcomes of persuasive efforts will depend most centrally on the predominant valence of the receiver's issue-relevant thoughts. If the message evokes predominantly negative thoughts about the advocated view, then little or no attitude change is likely to occur. But if the message leads the receiver to have predominantly positive thoughts about the advocated position, then the message is likely to be relatively successful in changing the receiver's attitudes in the desired direction.

Two notable factors influence elaboration valence (the relative positivity of the evoked thoughts). One is whether the message advocates a pro-attitudinal position—one toward which the receiver is already favorably inclined—or a counterattitudinal position. With pro-attitudinal messages, recipients will presumably ordinarily be inclined to have favorable thoughts about the position advocated; when the message advocates a counterattitudinal position, receivers will generally be inclined to have unfavorable thoughts about the advocated view. Thus, everything else being equal, one expects pro-attitudinal messages to evoke predominantly favorable thoughts, and counterattitudinal messages to evoke predominantly unfavorable thoughts.

A second influence on elaboration valence is argument strength, that is, the quality (strength) of the arguments advanced in the message. Under conditions of high elaboration, message recipients are closely scrutinizing the message contents, and the valence of receivers' elaboration will naturally reflect the results of such scrutiny. If close examination of the message reveals weak arguments, dubious reasoning, poor evidence, and the like, predominantly negative elaboration is likely; if the message is found to contain powerful arguments, sound reasoning, good evidence, and the like, then predominantly positive elaboration is more likely. That is, under conditions of high elaboration, argument quality influences the evaluative direction of elaboration and hence influences persuasive success (e.g., Petty & Cacioppo, 1984; Petty, Cacioppo, & Goldman, 1981; Petty, Cacioppo, & Schumann, 1983).

The Peripheral Route

In peripheral-route persuasion (i.e., when elaboration is relatively low), the outcomes of persuasive efforts do not depend on the receiver's issue-relevant thinking—after all, with low elaboration, there isn't much such thinking. Instead, persuasive effects arise through some other mechanism. A variety of such peripheral-route mechanisms have been suggested, but the one with the greatest research attention is the receiver's use of heuristics, that is, simple rules—which don't require much thinking—for deciding whether to agree with the advocated view. These heuristics are activated by "peripheral cues," extrinsic aspects of the communication situation.

These heuristics are not ordinarily consciously articulated, but the workings of heuristics can be inferred from the observable influence of peripheral cues on persuasive outcomes. The ELM underwrites a specific prediction about the effect of peripheral cues, namely, that the influence of peripheral cues will be greater under conditions of relatively low elaboration likelihood (e.g., lower involvement) or under conditions in which the cue is relatively more salient. The primary evidence for the operation of heuristic principles consists of research results conforming to just such patterns of effect (for some discussion, see Bless & Schwarz, 1999).

One such heuristic is based on the communicator's apparent credibility, and if expressed explicitly, would amount to a principle such as "statements by credible sources can be trusted."

When this heuristic is activated, higher-credibility communicators are more persuasive than lower-credibility communicators. Consistent with ELM expectations, the peripheral cue of credibility has been found to have greater impact on persuasive outcomes when elaboration likelihood is relatively low (e.g., Petty, Cacioppo, & Goldman, 1981; Rhine & Severance, 1970) or when credibility cues are less salient (e.g., Andreoli & Worchel, 1978).

A second heuristic is activated by the recipient's liking for the communicator, and might be expressed as "people I like usually have correct opinions." When this heuristic is activated, liked communicators are more persuasive than disliked communicators. Consistent with ELM expectations, the persuasive advantage of liked communicators over disliked communicators diminishes as involvement increases (e.g., Chaiken, 1980, Experiment 1; Petty, Cacioppo, & Schumann, 1983) or as the salience of liking cues varies (e.g., Chaiken & Eagly, 1983).

A third heuristic is activated by other people's reactions to the message, and can be expressed as a belief such as "if other people believe it, then it's probably true." When this heuristic is employed, the approving reactions of others enhance message effectiveness (and disapproving reactions should impair effectiveness). A number of studies have confirmed the operation of such a consensus heuristic in persuasion (for a review, see Axsom, Yates, & Chaiken, 1987).

As can be seen from these three examples, heuristics are mental shortcuts for message recipients. Rather than engaging in extensive thinking about the message topic and the merits of the arguments, instead receivers can decide what to think by relying on such simple considerations as the communicator's expertise or likeability or the reactions of other people.

The Two Routes Illustrated

A classic illustration of the differences between the central and peripheral routes to persuasion is provided by Petty, Cacioppo, and Goldman's (1981) experiment, in which three factors were varied: the receiver's level of involvement, the expertise of the communicator, and argument quality. The participants were college undergraduates, and the persuasive messages advocated the adoption of senior comprehensive examinations as a college graduation requirement. Involvement was varied by having the message advocate adoption of that requirement either at the receiver's own university (high involvement) or at a distant university (low involvement).

High-involvement receivers were significantly affected by the quality of the arguments (being more persuaded by strong arguments than by weak arguments), but were not significantly influenced by the communicator's degree of expertise. By contrast, low-involvement receivers were more affected by expertise variations (being more persuaded by the high expertise source than by the low) than by variations in argument quality. That is, where receivers were inclined to engage in extensive elaboration (by virtue of involvement), argument quality was more influential than was the peripheral cue of expertise. But where receivers were not inclined to invest the cognitive effort in close scrutiny of the message, the peripheral cue had more influence.

As this study illustrates, persuasion can be obtained either through a central route (involving relatively high elaboration) or through a peripheral route (where little elaboration occurs). But the factors influencing persuasive success are different in the two routes.

It should be emphasized that the two routes to persuasion are not conceived of as two rigidly different categories of persuasion, but rather as prototypical extremes at the ends of an elaboration continuum. For example, at intermediate levels of elaboration, one expects some complex mixture of central-route and peripheral-route processes. Thus the ELM does not claim that (for example) peripheral cues have no influence on persuasive outcomes under conditions of high elaboration, but rather simply that as elaboration increases, the

influence of peripheral cues decreases and the influence of elaboration valence increases.

Consequences of the Route to Persuasion

Although persuasion can be achieved either through central or peripheral routes, the ELM emphasizes that these two ways of achieving persuasion are not identical in their consequences. Broadly speaking, the attitude change obtained through central-route persuasion is likely to be more enduring over time, more resistant to counterpersuasion, and more directive of subsequent behavior (for reviews and discussion, see Petty & Cacioppo, 1986, pp. 173–195; Petty, Haugtvedt, & Smith, 1995; Petty & Wegener, 1999, pp. 61–63).

One way of characterizing these effects is to say that central-route persuasion produces stronger attitudes than does peripheral-route persuasion. The attitudes resulting from these two routes might not necessarily be evaluatively any more extreme (for example, central-route and peripheral-route persuasion might yield equally positive attitudes), but those attitudes could differ with respect to attitude strength. (For discussion of strength-related attitude properties and effects, see Bassili, 2008; Farc & Sagarin, 2009; Petty & Krosnick, 1995; Visser, Bizer, & Krosnick, 2006.)

The plain implication for persuaders is that central-route persuasion, though perhaps more difficult to achieve (because it requires ensuring greater elaboration by message recipients), brings long-term benefits, in the form of attitudes that are more stable over time and are more likely to exert an influence on behavior.

Multiple Roles for Persuasion Variables

One important contribution of the ELM to the general understanding of persuasion is its emphasizing that a given variable might play different roles in persuasion under different conditions. From the perspective of the ELM, a variable might influence persuasion in three general ways. First, it might affect the degree of elaboration (and thus influence the degree to which central-route or peripheral-route processes are engaged). Second, it might serve as a peripheral cue (and so influence persuasive outcomes when peripheral-route persuasion is occurring). Third, it might influence the valence of elaboration (and so influence persuasive outcomes when central-route persuasion is occurring). (Some presentations of the ELM provide a more elaborated list of possible roles [e.g., Petty & Wegener, 1999, p. 51], but the three identified here will serve for present purposes [see O'Keefe, 2002, pp. 164–165].)

The question naturally arises, however, as to exactly *when* a given variable is likely to serve in one or another of these roles. The ELM offers a general rule of thumb for anticipating the likely function for a given variable, based on the overall likelihood of elaboration (Petty, Wegener, Fabrigar, Priester, & Cacioppo, 1993, p. 354). When elaboration likelihood is low, then if a variable affects attitude change, it most likely does so by serving as a peripheral cue. When elaboration likelihood is high, then any effects of a variable on attitude change are likely to come about through influencing elaboration valence. And when elaboration likelihood is moderate, then any effects of a variable on attitude change are likely to arise from affecting the degree of elaboration (as when some aspect of the persuasive situation suggests that closer scrutiny of the message will be worthwhile).

One might wonder about the degree to which this ELM rule of thumb is genuinely informative, because it amounts to little more than a restatement of the distinction between the two routes to persuasion. For instance, the proffered principle says in effect that "when elaboration is low, attitude change happens through peripheral processes and so anything that affects attitude change under such conditions

does so by serving as a peripheral cue." This might appear to verge on a tautology, in which by definition something that influences attitude change under conditions of low elaboration must be operating as a peripheral cue. The value of this rule of thumb thus turns on the degree to which one can independently assess whether peripheral or central processes are engaged, and such independent assessments are elusive (as acknowledged by Petty & Briñol, 2006, p. 217).

However, the ELM's analysis does point to distinctive predictions about the different roles of a given variable, predictions derived from the operation of moderating variables. For example, if the physical attractiveness of a communicator in an advertisement is processed as a peripheral cue (and so activates a general liking heuristic), then the nature of the advertised product is unlikely to influence the cue's effects. By contrast, if attractiveness influences elaboration valence because of being processed as an argument, then attractiveness's effects should obtain for some products (namely, those for which attractiveness is a plausible argument, such as beauty products) but not for others (Petty & Briñol, 2006, p. 218). The implication is that by examining the observed effects of a moderator variable, one can distinguish whether a given property is activating a heuristic or influencing elaboration valence.

The larger point to be noticed is that the ELM draws attention to the mistake of thinking that a given variable can influence persuasive outcomes through only one pathway. For example, the credibility of the communicator might serve as a peripheral cue (and so activate a credibility-based heuristic)—but it could also influence the amount of elaboration, as when the communicator's apparent expertise leads receivers to think that it will be worthwhile to pay closer attention to the message's arguments. Recognizing this complexity of persuasion processes represents an especially important contribution of the ELM.

Future Research

As fruitful as the ELM has been as a framework for stimulating research, at least three areas of research deserve future attention: the nature of argument quality, the nature of involvement, and the relationship of central and peripheral processes.

The Nature of Argument Quality

In ELM research, the nature of argument quality (or argument strength) has not been a focus of explicit attention, because argument quality variations have been defined in terms of persuasive effects. That is, a high-quality argument is one that, in pretesting, is relatively more persuasive (compared to a low-quality argument) under conditions of high elaboration.

This way of defining argument quality reflects the role that argument quality has played in ELM research designs. In ELM research, argument quality variations have been used "primarily as a methodological tool to examine whether some other variable increases or decreases message scrutiny, not to examine the determinants of argument cogency per se" (Petty & Wegener, 1998, p. 352). The idea is that if message receivers are sensitive to argument quality variations (as displayed by their being more persuaded by high-quality arguments than by low-quality arguments), then those receivers must have been engaged in close message processing (relatively high elaboration). For example, in Petty, Cacioppo, and Goldman's (1981) classic study discussed earlier, argument quality variations affected persuasive outcomes under conditions of high involvement but not under conditions of low involvement; the inference to be drawn is that under conditions of higher involvement, audiences were more closely processing the message and so were more attentive to argument quality variations.

But a thorough understanding of persuasion processes requires some analysis of the nature of

these argument quality variations. As a way of seeing the importance of this matter, consider: What advice would the ELM offer to a persuader presenting a counterattitudinal message to an audience likely to engage in a great deal of elaboration? Presumably the advice would be "use high-quality arguments." But because argument quality has been defined in terms of effects (a high-quality argument is one that persuades under conditions of high elaboration), this advice amounts to saying "to be persuasive under conditions of high elaboration, use arguments that will be persuasive"—which is obviously unhelpful (for some elaboration of this line of reasoning, see O'Keefe, 2002, 2003). And, unfortunately, the experimental messages used in ELM experiments appear to have confounded a great many different appeal variations, making it challenging to identify just which features might have been responsible for the observed effects.

However, research has identified the active ingredient in ELM messages as a variation in the perceived desirability of the outcomes associated with the advocated view (Areni & Lutz, 1988; Hustinx, van Enschot, & Hoeken, 2007; van Enschot-van Dijk, Hustinx, & Hoeken, 2003; see also Johnson, Smith-McLallen, Killeya, & Levin, 2004). So (for example) when receiver involvement is low, the persuasiveness of a message is relatively unaffected by variation in the desirability of the outcomes, whereas when involvement is high, persuasive success is significantly influenced by whether the outcomes are thought to be highly desirable or only slightly desirable. That is, under conditions of high elaboration, receivers are led to have more positive thoughts about the advocated view when the message's arguments indicate that the advocated view will have outcomes that the receivers think are relatively desirable than they do when the arguments point to outcomes that are not so desirable—but this difference is muted under conditions of low elaboration.

That outcome desirability should turn out to be a key determinant of the persuasiveness of arguments under conditions of high involvement—that is, direct personal relevance—is perhaps not entirely surprising. When the outcomes affect the message recipient directly, the desirability of the outcomes becomes especially important.

The open question is whether *other* message variations might function in a way similar to outcome desirability. That is, are there other quality-related features of persuasive appeals that function as outcome desirability does—features whose variation makes relatively little difference to persuasive outcomes under conditions of low elaboration, but whose variation makes a more substantial difference under conditions of high elaboration?

One candidate that naturally comes to mind is outcome *likelihood*. A general expectancy-value conception of attitudes would suggest that attitudes are a joint function of evaluative judgments (how desirable the attitude object's characteristics are seen to be) and likelihood judgments (the likelihood with which those characteristics are associated with the object). Correspondingly, one might expect that messages varying in the depicted likelihood of outcomes might have effects parallel to those of messages varying in the depicted desirability of outcomes: variation in outcome likelihood might make a greater difference to persuasiveness under conditions of high elaboration than under conditions of low elaboration.

There is not much direct evidence concerning whether the effects of outcome-likelihood variations are moderated in this way by involvement. However, the general research evidence concerning the persuasive effects of outcome-likelihood variation is not very encouraging. Some research finds that outcome-likelihood variations have persuasive effects akin to those of outcome-desirability variations (e.g., Witte & Allen, 2000), but other studies have found very different patterns of effects (e.g., Johnson et al., 2004; Smith-McLallen, 2005). Perhaps only under yet-to-be-discovered conditions do variations in outcome likelihood function in ways akin to outcome desirability.

In any case, the general question remains open: There may be additional quality-related message characteristics—beyond outcome desirability—that enhance message persuasiveness under conditions of high elaboration. Identification of such message properties would represent an important advance in the understanding of persuasion generally and argument quality specifically.

The Nature of Involvement

In persuasion research, the concept of "involvement" has been used by a variety of theoretical frameworks to describe variations in the relationship that receivers have to the message topic. The most notable historical example is social judgment theory's use of the concept of "ego-involvement" (Sherif, Sherif, & Nebergall, 1965). The ELM has extended this tradition in its emphasis on the role of involvement as an influence on elaboration likelihood. But various commentators have suggested distinguishing different kinds of "involvement," on the grounds that different varieties of involvement have different effects on persuasion processes.

For example, Johnson and Eagly (1989) distinguished value-relevant involvement (in which abstract values are engaged) and outcome-relevant involvement (in which concrete short-term outcomes or goals are involved). Their meta-analytic evidence suggested that value-relevant involvement leads receivers to defend their opinions when exposed to counterattitudinal messages, regardless of whether the message contains strong or weak arguments. By contrast, outcome-relevant involvement produces the pattern of effects expected by the ELM, in which variations in argument strength produce corresponding variations in persuasive effects. Johnson and Eagly's argument thus is that the ELM describes the role that one kind of involvement plays in persuasion, namely, outcome-relevant involvement, but does not capture the effects of variations in value-relevant involvement. Petty and Cacioppo (1990), however, have argued that the same process might underlie these apparently divergent patterns of effect (for some further discussion, see Johnson & Eagly, 1990; Levin, Nichols, & Johnson, 2000; Petty & Cacioppo, 1990; Petty, Cacioppo, & Haugtvedt, 1992; see also Park, Levine, Westermann, Orfgen, & Foregger, 2007).

As another example, Slater (2002) has approached the task of clarifying involvement's role in persuasion not by starting with different kinds of "involvement" but by starting with different kinds of message processing—and then working backward to consider how different kinds of involvement (and other factors) might influence the different sorts of processing. Slater's analysis includes such processing varieties as "outcome-based processing" (motivated by the goal of self-interest assessment), "value-affirmative processing" (motivated by the goal of value reinforcement), and "hedonic processing" (motivated by the goal of entertainment)—with these influenced by, respectively, outcome relevance (akin to "outcome-relevant involvement"), value centrality (akin to "value-relevant involvement"), and narrative interest. Slater (2002, p. 179) thus argues that "simply distinguishing value-relevant involvement from the issue- or outcome-relevant involvement manipulated in ELM research does not go far enough."

The larger point is that involvement (simpliciter) is a concept that is insufficiently well-articulated to do the work asked of it. Although a broad distinction between value-relevant and outcome-relevant involvement has merit, further conceptual and empirical work is surely to be welcomed.

The Relationship of Central and Peripheral Processes

One prominent alternative to the ELM has been Kruglanski and Thompson's (1999b) "unimodel" of persuasion, which suggests that the ELM's two routes to persuasion are in fact not fundamentally different: In each route, receivers

try to reach conclusions about what to believe, using whatever evidence is available. In the two persuasion routes, different kinds of evidence are employed (peripheral cues in the peripheral route, message arguments in the central route), but from the point of view of the unimodel, these are not actually two fundamentally different processes. In each route there is a process of reasoning to conclusions based on evidence, and thus a unitary picture—a "unimodel"—will suffice.

This underlying similarity, it is argued, has been obscured in ELM research by virtue of a confounding of the contrast between cue and arguments and the contrast between simple and complex inputs. From the unimodel point of view, both peripheral cues and message arguments can vary in their complexity (ease of processing, brevity, etc.). The argument is that in ELM research, peripheral cues have typically been quite simple and arguments have typically been quite complex. This produces differences in how these two inputs are processed, but (the suggestion is) if cues and arguments are made equally complex, then they will be seen to be processed identically and produce identical effects. This unity of underlying processing thus is taken to undermine the ELM's distinction between the two persuasion processes.

As an illustration of research supporting the unimodel's view, Kruglanski and Thompson (1999b, Study 1) found that when communicator expertise information was relatively lengthy, expertise influenced the attitudes of receivers for whom the topic was personally relevant but not the attitudes of receivers for whom the topic was not relevant. That is, topic relevance and expertise interacted in exactly the same way as topic relevance and argument quality did in earlier ELM studies. The apparent implication is that peripheral cues (such as expertise) and message arguments function identically in persuasion, once the level of complexity of each is equalized. (For some presentations of the unimodel and related research, see Erb & Kruglanski, 2005; Erb, Pierro, Mannetti, Spiegel, & Kruglanski, 2007; Kruglanski, Chen, Pierro, Mannetti, Erb, & Spiegel, 2006; Kruglanski, Erb, Pierro, Mannetti, & Chun, 2006; Kruglanski & Thompson, 1999a, 1999b.)

The unimodel raises both empirical and conceptual issues concerning the ELM, and these issues are sufficiently complicated that it will take some time to sort them out. (For some discussion of these and related issues, see, e.g., Chaiken, Duckworth, & Darke, 1999; Petty & Briñol, 2006; Petty, Wheeler, & Bizer, 1999; Wegener & Claypool, 1999.) Empirically, it is not yet clear exactly when (or, indeed, whether) the ELM and the unimodel make genuinely different predictions. That is, there is at present some uncertainty about just what sort of empirical findings will represent confirmation of one view and disconfirmation of the other. Consider, for instance, the just-mentioned finding indicating that complex information about source expertise had more influence on persuasive outcomes when the topic was personally relevant to receivers than when it was not (Kruglanski & Thompson, 1999b, Study 1). From a unimodel perspective, this is taken to be inconsistent with the ELM, because the ELM is assumed to expect that source cues will have a smaller influence on persuasion as topic relevance increases. But—bearing in mind that a given variable might affect persuasion through various pathways—the ELM might explain this result in several ways, including the possibility that expertise information was processed as an argument or provoked elaboration of self-generated (as opposed to message) arguments (Petty, Wheeler, & Bizer, 1999, pp. 159–160). The general point is that it is not yet clear whether (or exactly how) the ELM and the unimodel can be made to offer contrasting empirical predictions.

Conceptually, the unimodel points to some aspects of the ELM that are not clear. Consider, for example, the question of whether it is true by definition that peripheral cues are easy to process. If part of the very concept of a peripheral cue is that it is easy to process, then it does not make sense to speak of there being any "confounding" of cues and simplicity—and so the unimodel's suggestion that there might be complex cues is conceptually malformed. On the other hand, if

peripheral cues are *not* by definition easy to process, then it becomes more plausible to explore, as the unimodel suggests, the effects of hard-to-process peripheral cues.

In sum, the unimodel has raised valuable issues concerning the ELM. Continuing attention to these issues offers the promise of better-articulated conceptual frameworks and more finely tuned empirical predictions.

The ELM: A Model of Attitude Change, Not Persuasion

The ELM can be placed in a broader context by noticing that it is better described as a theory of attitude change than as a theory of persuasion. To be sure, influencing attitudes is often an important aspect of persuasion. Attitudes influence what products people buy, what policies they prefer, what candidates they favor—and so persuaders often have the goal of ensuring that people have the desired attitudes.

However, attitude change is only part of persuasion. To see the difference, consider that one common challenge persuaders face is the task of getting people to act consistently with their current attitudes. For example, people often have positive attitudes about regular exercise, recycling, energy conservation, and so forth—but nevertheless fail to act consistently with those attitudes. In such cases, persuaders don't need to convince people of the desirability of the action ("Recycling is really a good thing to do"); that is, persuaders don't need to focus on changing attitudes. Instead, the advocate's task is to somehow get people to act on existing attitudes.

A variety of research findings bear on identifying and addressing such persuasive challenges. For example, sometimes the problem may be that normative considerations override personal attitudes ("Nobody else in my neighborhood recycles"), or that people don't know how to perform the behavior ("I'm confused by the different categories of trash"). [Some readers will detect here echoes of the theory of planned behavior and its variants (Fishbein & Ajzen, 2010).] Or perhaps people can be induced to feel hypocritical about their failure to act consistently with their attitudes, with these feelings then motivating subsequent attitude-consistent behavior (e.g., Stone & Fernandez, 2008). Or the problem might be that people haven't thought about exactly how they will perform the behavior, and so encouraging explicit behavioral planning could address the problem (e.g., Gollwitzer & Sheeran, 2006). That is, the larger literature on persuasion offers many resources for addressing the circumstance in which the desired attitudes are in place but the corresponding behavior is not occurring.

To be sure, the ELM is not entirely silent on how persuaders might proceed in such situations. For example, as discussed earlier, some evidence suggests that attitudes shaped through central-route processes are more likely to be expressed in subsequent behavior than are those arising from peripheral-route processes. Correspondingly, one might encourage persuaders to pursue central-route persuasion so as to maximize the chances of subsequent attitude-consistent behavior.

But inducing attitude-consistent behavior is not necessarily always a matter only of strengthening attitudes. Sometimes, even when people have (what appear to be) perfectly strong attitudes, they nevertheless fail to act on them—for example, when they believe themselves incapable of performing the desired action. In such situations, persuaders need guidance not readily supplied by the ELM.

Conclusion

The ELM has proven a remarkably fertile theoretical framework. Its central contribution is the recognition of the variable character of issue-relevant thinking—and from that has flowed a stream of research findings and conceptual insights that has permanently enriched the

understanding of persuasion. The model does not offer a comprehensive account of all persuasion-related phenomena, and open questions certainly remain. But the ELM unquestionably represents a significant advance in the study of persuasion.

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