

Audience Involvement in Advertising: Four Levels

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The effectiveness of advertising messages is widely believed to be moderated by audience involvement. In this paper, psychological theories of attention and levels of processing are used to establish a framework that can accommodate the major consumer behavior theories of audience involvement. Four levels of involvement are identified (in order from low to high) as preattention, focal attention, comprehension, and elaboration. These levels allocate increasing attentional capacity to a message source, as needed for analysis of the message by increasingly abstract—and qualitatively distinct—representational systems. Lower levels use relatively little capacity and extract information needed to determine whether higher levels will be invoked. The higher levels require greater capacity and result in increasingly durable cognitive and attitudinal effects.

Two musicians, husband and wife, are driving along a familiar stretch of highway. (No, this is not going to be a joke.) The radio is tuned to a classical music station. Between selections the station announces the sale of tickets for an upcoming concert in a nearby town, featuring one of the husband's favorite soloists. He discontinues the ongoing conversation and listens carefully. The concert announcement is followed immediately by an advertisement for some stereophonic audio equipment that they already own, and then an ad, which both of them have heard at least 20 times previously, for a soft drink. Further along, their conversation resumes and is uninterrupted by the advertisement of a sale at a clothing store. Soon, the conversation trails off and he falls asleep. (Fortunately, she is driving.)

The relationship of the two travelers to the advertisements encountered during their trip can be characterized by a variable of *involvement*, which was obviously decreasing through the series just described. Despite the widespread assumption that involvement is a variable that is critical to the understanding of advertising communication, there is little agreement on what cognitive processes correspond to variations in involvement, or on the consequences of these variations for communication effectiveness.

In this paper, we first review several theories of involvement that have appeared in the consumer behavior literature between 1965 and 1980. Because these theories are not directly in conflict with each other, we were encouraged to seek a larger theoretical framework that could accommodate them. The psychological concepts of attention and levels of processing provided the needed framework. In particular, these concepts were used to identify four qualitatively distinct levels of involvement. After reviewing laboratory research that reveals the determinants and consequences of these varying levels of involvement, we conclude by discussing empirical questions raised by this analysis and applications of the analysis to advertising.

CONSUMER BEHAVIOR CONCEPTIONS OF INVOLVEMENT

Many of the paths followed by consumer psychologists in recent analyses of audience involvement emanate from an article that appeared in *Public Opinion Quarterly* in 1965, by Herbert Krugman. Krugman's thesis was offered partly in reaction to then-accepted views (e.g., Bauer 1958; Klapper 1960) that persuasive communications depended for their impact on the active processing efforts of the audience. Krugman's seminal observation was that there are:

two entirely different ways of experiencing and being influenced by mass media. One way is characterized by lack of personal involvement. . . . The second is characterized by a high degree of personal involvement. By this we do not mean attention, interest, or excitement but the number of conscious "bridging experiences," connections, or personal references per minute that the viewer makes between his own life and the stimulus.

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. . . with low involvement one might look for gradual shifts in perceptual structure, aided by repetition, activated by behavioral-choice situations, and followed at some time by attitude change. With high involvement one would look for the classic, more dramatic, and more familiar conflict of ideas at the level of conscious opinion and attitude that precedes changes in overt behavior (Krugman 1965, p. 355).

Krugman's distinction between two types of involvement and his assertion that both types can be associated with effective advertising (albeit via different routes) have stood up remarkably well, as we will show, in light of subsequent research. Also, Krugman's original conception of "bridging experiences," connections, or personal references" turns out to correspond well to a contemporary account of the dependence of memory on variations in the learner's cognitive elaboration of incidentally encountered information (Anderson and Reder 1979; Craik and Tulving 1975).

Before examining the relevant psychological concepts in more detail, we shall briefly consider the variety of interpretations of involvement that have appeared in the consumer behavior literature since Krugman's 1965 article. Our brief review, grouped in terms of ideas concerning the antecedents, consequences, and mediating processes of involvement, is neither exhaustive nor evaluative. One justification for not being evaluative is that there is little direct conflict (and much complementarity) among the views presented. Indeed, our major aim is to provide a framework that is sufficiently broad to accommodate the diversity of views encompassed in existing theory.¹

Antecedents of Involvement

Krugman drew attention to the effect of media on involvement, observing that advertising on television is typically not highly involving. Houston and Rothschild (1977) offered the concept of situational involvement as a covering term for the role of situational variables in determining involvement. A more specific theme that appears prominently in several treatments, traceable in part to Howard and Sheth's (1969) concept of importance of purchase, is the role of product characteristics in determining involvement. The hypothesis that involvement increases to the extent that products have salient distinguishing attributes appears also in the work of Hupfer and Gardner (1971), Lastovicka and Gardner (1979), Ray et al. (1973), and Robertson (1976). Product characteristics can be treated either as a situational or as a personality determinant of involvement, depending on whether one assumes these characteristics to elicit relatively fixed reactions or, instead, reactions that are importantly conditioned by the unique characteristics of each consumer. Houston and Rothschild, although locating the effect of product characteristics as a personality variable subsumed by their concept of enduring involvement, explicitly recognize both classes of determinants in

their distinction between situational and enduring involvement.

Consequences of Involvement

As previously observed, Krugman's (1965) paper was important in arguing that communication impacts were not limited to high-involvement persuasion situations. That is, communication effects can be expected with either high or low involvement, even though the effects should be different for these two levels of involvement. Krugman suggested that, with high involvement, a communication should act most directly to modify beliefs (that is, verbalizable propositions). By contrast, with low involvement the impact should be more on perceptions (that is, sensory organizations, such as brand logos or package configurations) and should occur more gradually, being effective only with repeated exposures.

Sherif and Hovland's (1961) analysis of ego-involvement was influential in leading consumer behavior theorists to recognize that high involvement could be associated with resistance to (rather than acceptance of) persuasion. On that theme, Robertson (1976) noted that, even though low-involved consumers might not show much impact of advertising communications on beliefs, they might be induced more easily than highly involved consumers to try a new product or brand. The consequence—consistent with Krugman's suggestion (see the second paragraph quoted above from his 1965 article)—is that, for the low-involved consumer, attitude change should be more likely to occur after trial rather than being directly influenced by communication. The theme that different levels of involvement are associated with different sequences of impacts on the familiar attitude components of affect, behavior, and cognition has been developed most thoroughly by Ray et al. (1973) and has been elaborated even further by Calder (1979).

Processes of Involvement

Krugman identified high involvement with a specific cognitive process that he called "personal connections" or "bridging experiences." A quite different conception of the cognitive mediation of involvement appeared in analyses influenced by Sherif and Hovland's (1961) theory that involvement is interpretable as the linkage of new information to central or ego-involved attitudes (cf. Ostrom and Brock 1968). By tapping into regions of strong belief, high involvement yields resistance to cognitive change or a narrowing of the range of acceptable opinion positions (i.e., of the latitude of acceptance).

A still different interpretation of involvement appears in Houston and Rothschild's proposal that consumer decision processes (response involvement) increase in complexity with increasing involvement. Yet another process interpretation of low vs. high involvement is Petty and Cacioppo's (1981) distinction between peripheral and central routes to persuasion. In contrast to the foregoing conceptions, which

¹We have been aided, in formulating this review, by unpublished analyses of the involvement concept by Park and Mittal (1982) and Rosen (1982).

treat the mechanism of high involvement as basically cognitive, Mitchell (1979) has conceived of involvement as a high level of arousal or drive. Similarly, Burnkrant and Sawyer (1983) have conceptualized involvement as an increased drive state, which they designate as "need for information."

Summary

There is consensus that high involvement means (approximately) personal relevance or importance. Further, it is generally accepted that communication influences can occur with low involvement, and that the mechanism of communication impact for low involvement is different from that for high involvement. However, theorists have shown little agreement regarding the theoretical mechanisms of involvement, interpreting it in terms of concepts such as extent of personal connections (Krugman 1965), linkage to central values (Sherif and Hovland 1961), complexity of decision-making (Houston and Rothschild 1977), peripheral vs. central cognitive processes (Petty and Cacioppo 1981), and level of arousal (Mitchell 1979; Burnkrant and Sawyer 1983).

Because of the lack of consensus about the processes underlying variations in involvement, considerable uncertainty remains not only about just what the consequences of involvement are, but also about how antecedent variables influence involvement. Necessarily, then, there is also considerable uncertainty about how to apply the concept of involvement in predicting consumers' responses to variations in marketing strategy. This uncertainty takes the form, for example, of theoretical interpretations that predict both greater cognitive change (Krugman 1965; Ray et al. 1973) and greater resistance to cognitive change (Sherif and Hovland 1961; Ostrom and Brock 1968) with high involvement. We take it as the major task in the analysis of consumer involvement to identify, in terms of psychological theory, the processes that constitute variations in involvement.

ATTENTION, LEVELS OF PROCESSING, AND INVOLVEMENT

Audience Involvement and Actor Involvement

One of the problems that should be dealt with by a theoretical analysis of involvement is captured by the following question:

The actor/audience question: Which is more involving—being a player in an important football game, or watching the game on television?

The answer is that both playing in the game and watching it are involving, but in different ways. The difference is between involvement as a participant (or *actor*) and involvement as an observer (or *audience*). The audience is engaged in acquiring knowledge, whereas the actor executes performances based on already acquired knowledge. Because in the advertising situation the practical concern

is more with the consumer's acquiring (rather than using) knowledge, the focus in this paper is primarily on the knowledge-acquiring type of involvement—namely, audience involvement.

Attentional Capacity and Attentional Arousal

A second question is similarly useful in providing direction to our treatment:²

The arousal/capacity question: Which is more involving—listening to and remembering a single digit when your life depends on it, or mentally multiplying two two-digit numbers?

As in the case of the actor/audience question, both alternatives are involving, but in different ways. Trying to do anything—even if it is only remembering a single digit—when your life is at stake may make the heart pound wildly, but trying to do a difficult mental multiplication is, nevertheless, a more demanding task. This distinction corresponds to one that is made in the psychological analysis of attention—a distinction between *arousal* and *capacity*. Arousal refers to a state of wakefulness, general preparation, or excitement that facilitates the performance of well-learned responses.

Capacity, on the other hand, is a limited resource that must be used to focus on a specific task and that is needed in increasing amounts as the cognitive complexity of a task increases. Arousal and capacity allocation are related to one another, but not directly. It is generally assumed that, up to moderate levels, arousal facilitates information processing, but that high levels of arousal *interfere* with complex cognitive tasks that demand a high level of capacity (this is the Yerkes-Dodson effect: see Kahneman 1973; Hasher and Zacks 1979).

Psychological theory of attention—including the concepts of arousal and capacity allocation—has been developed to analyze the reception of auditory and visual stimuli in noisy environments. Because advertising, too, consists of messages received in a complex or noisy environment, its analysis should be able to make use of the extensive development of attention theory in psychology.³

Levels of Processing

In an influential paper, Craik and Lockhart (1972) proposed that the level (or depth) to which an incoming message is processed determines the durability of memory for

²This question is based on one posed by Kahneman (1973, p. 14).

³The present distinction between arousal and capacity allocation follows closely the prior treatments of Posner and Boies (1971) and Kahneman (1973). Posner and Boies analyzed attention into three components, two of which are arousal (their term is "alerting") and capacity. Their third component, selection, functions to focus information processing resources on a specific message source. In our treatment (see Figure A), selection appears not as a separate component of attention but as an initial product (focal attention) of capacity allocation. Kahneman's (1973) analysis emphasized concepts of arousal and effort, the latter of which corresponds to capacity allocation.

it. Although subsequent research has led to some modification of this formulation (Baddeley 1978; Cermak and Craik 1979; Craik and Tulving 1975), it has continued to support the principle that memory for an event depends on the amount and nature of cognitive activity that accompanies it. Our interpretation of audience involvement incorporates this central principle of the levels-of-processing analysis. That is, we shall associate the idea of increases in involvement with qualitatively distinct forms (levels) of cognitive activity that (1) require increasing amounts of attentional capacity, and (2) produce increasingly durable effects on memory.

Levels of Involvement

Figure A gives our analysis of four levels of audience involvement. The four levels differ in the abstractness of symbolic activity used in the analysis of an incoming message. The progression from *preattentive* (the lowest level) through *elaboration* (the highest) is assumed to be accompanied by the allocation of increasing capacity, which is required for increasingly abstract analyses of incoming information.

Preattentive uses little capacity. The second level, *focal attention*, uses modest capacity to focus on one message source, and to decipher the message's sensory content into categorical codes (object, name, word). Further capacity is required for *comprehension*, which analyzes speech or text by constructing a propositional representation of it. The fourth level of involvement, *elaboration*, uses still more capacity to enable the integration of message content with the audience member's existing conceptual knowledge.

The four hypothesized levels of audience involvement can be related to our opening description of two traveling musicians. Recall that the husband listened carefully to the advertisement of a concert by one of his favorite soloists. Perhaps he was thinking simultaneously about previous occasions on which he had heard this performer and about how to adjust his schedule to be able to go to the concert (*elaboration*). He may have continued to attend well to the immediately following advertisement for audio equipment (*comprehension*), but this ad may not have prompted elaboration, perhaps because it was not relevant to any future action. The next advertisement—a familiar soft drink commercial—may have been listened to (*focal attention*) because attention had not yet been diverted elsewhere, but the following ad—for a clothing sale—was ignored (*preattentive*), and that was followed by sleep.⁴ This illustration gives only an intuitive introduction to our analysis of audience involvement. The conception of four levels should become clearer as we consider their relation to research

procedures, to laboratory findings, and to advertising practices.

Relation to Other Information-Processing Approaches

Our analysis of involvement has some obvious resemblance to the well known information-processing approach to communication (Hovland, Janis, and Kelley 1953; McGuire 1969). In the established information-processing view, persuasion depends on sequential steps of attention to, comprehension of, and acceptance of a message. Our analysis expands this conception by (1) adding preattention as another stage, or level, of processing, (2) basing the differences between levels on concepts of attentional capacity and levels of processing, and (3) relating the levels to qualitatively different—and increasingly abstract—systems of mental representations. Burnkrant and Sawyer (1983) also relate involvement to depth of processing and capacity but, unlike us, treat involvement as varying along a continuum of intensity, rather than being characterized by qualitatively distinct levels.

RESEARCH PROCEDURES AND LEVELS OF INVOLVEMENT

The Table relates the four levels of involvement to procedures that have been used in laboratory research. The contents of the Table will be described more fully for each of the five research areas. References to reviews of the relevant literature are found in the right column of the Table.

Orienting Responses

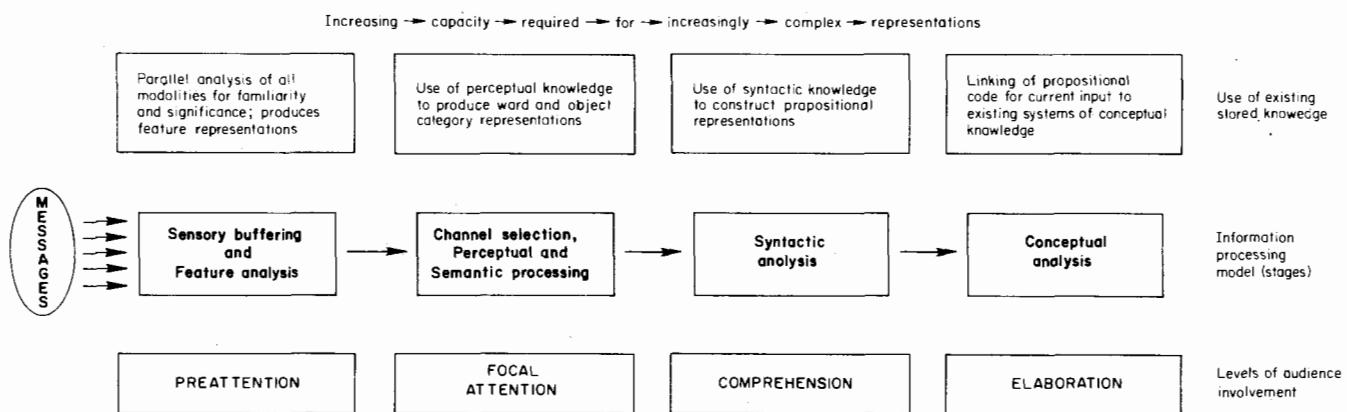
When a novel or unfamiliar stimulus is initially presented, it elicits an orienting response, which consists of mild physiological arousal together with physical orienting of receptors toward the source of stimulation. The orienting response corresponds to focal attention being directed toward the novel stimulus. If the same stimulus is repeated several times, it ceases to elicit the orienting response. This elimination—or *habituation*—of the orienting response corresponds to a reduction of involvement from focal attention to preattention. Orienting responses can also be elicited by familiar stimuli that are specially significant, such as one's own name, or by cues that predict the occurrence of affectively significant events.

Selective Listening

Selective listening research uses the shadowing task, in which the subject repeats a verbal message aloud as it is being heard. This task commands focal attention and also effectively prevents focusing on any concurrent auditory message. Thus a second message that is presented simultaneously with the shadowed message remains at the level of preattention. Further, the cognitive demands of repeating

⁴In a previous version of this paper, we treated sleep as a separate level that was lower in involvement than preattention. Here, we treat sleep as a very low-arousal form of preattention. The latter interpretation seems justified chiefly because there is little evidence to indicate that information encountered in waking inattention has any more lasting impact than information encountered while asleep.

FIGURE A
FOUR LEVELS OF INVOLVEMENT



NOTE: This figure indicates relationships to sequential stages of information processing and use of increasingly complex representational systems in the four levels of involvement.

TABLE
RESEARCH PROCEDURES RELATED TO LEVELS OF INVOLVEMENT

Research areas	Levels of involvement				Sources
	Preattentive	Focal attention	Comprehension	Elaboration	
Orienting responses	Repeated stimulus presentation (habituation of the orienting response)	Loud, colorful, moving, novel, unexpected, or affect-evoking stimulus			Berlyne (1960) Kahneman (1973) Lynn (1967)
Selective listening	Message presented in unattended channel	Message presented in attended channel (shadowing task)			Moray (1970) Neisser (1967) Norman (1976)
Levels of processing		Sensory orienting tasks	Semantic orienting tasks	Self-reference orienting tasks	Cermak & Craik (1979) Craik & Lockhart (1972) Kuiper & Rogers (1979)
Cognitive elaboration		Message that lacks context needed for comprehension	Message that has context enabling comprehension	Self-generated elaboration; visual imaging	Anderson & Reder (1979) Bransford & Johnson (1973)
Persuasion	Strong distraction; very familiar message; unimportant message	Moderate distraction; moderately familiar message	Mild distraction; credible source; agreeable message; novel message	Cognitive responding; disagreeable message; ego-involvement	Greenwald (1968) McGuire (1969) Petty, Ostrom, & Brock (1981) Sherif, Sherif & Nebergall (1965)

one message and rejecting a second may use enough capacity to prevent the subject's involvement in the attended message from progressing to any level of involvement higher than focal attention.

Levels of Processing

Research on levels of processing in memory has developed procedures, referred to as *orienting tasks*, that constrain the nature of a subject's processing of experimental stimuli. The design of orienting tasks assumes that stimuli are ordinarily processed through a series of stages of analysis. The more stages used in the analysis of any stimulus, the "deeper" is the processing of that stimulus. Some tasks—for example, judging whether a word is printed in upper or lower case—are intended to use only sensory stages of analysis. These sensory orienting tasks require only the focal attention level of involvement. The somewhat more demanding task of judging whether or not two words are synonyms is assumed to require complex semantic analysis in addition to sensory analysis, and is placed at the comprehension level in the Table. A still more complex orienting task obliges subjects to judge whether or not each of a series of trait adjectives describes them. This self-reference task, which requires judgments based on the relation of stored knowledge about oneself to current input, has been placed in the column for the highest level of involvement in the Table—elaboration.

Cognitive Elaboration

In some recent studies of human memory, the levels-of-processing conception of successive stages of processing has been supplemented by the assumption that encountered events give rise to propositional representations. Greater cognitive elaboration of an event consists of a greater number of propositions based on the event. Among the relevant research procedures are ones that have been used to vary comprehension of a message. For example, Bransford and Johnson (1973) wrote stories that were virtually incomprehensible without additional context, such as a title for the story or a picture that showed the action being described. Reading such stories without the needed context effectively constrained subjects' involvement to the focal attention level, permitting little or no comprehension or elaboration. Addition of the context permitted comprehension. Still greater involvement (elaboration) can be achieved by instructions that induce the subject to generate visual imagery or additional story details that supplement a provided text.

Persuasion

In recent years, the cognitive response approach has been influential in research on the persuasion process. In this approach the audience is conceived of as an active processor of the persuasive message. Research procedures that encourage active cognitive responding—e.g., explicit instructions to respond verbally to the message, or instructions to improvise a message from materials provided by the ex-

perimenter—correspond to the elaboration level of involvement. This active cognitive responding also occurs when a communication is ego-involving, and especially when it presents a disagreeable opinion, in which case elaboration takes the form of counterarguing.

The presence of a mild distractor may occupy enough attentional capacity to interfere with cognitive responding, while still permitting comprehension. Examples of such mild distraction that have been used in persuasion research include accompanying a spoken persuasive message with an irrelevant film of abstract art or asking the message's audience to focus on judging the speaker's personality. Messages that are known to be agreeable, that are presented by trustworthy sources, or that are difficult (but not impossible) to understand may all be received at the comprehension level, without elaborative cognitive responding. To lower the level of involvement to focal attention, the experimenter can use messages that are moderately familiar, that are accompanied by sufficient distraction to disrupt comprehension, or that are constructed so as to be incomprehensible. Involvement may be reduced further to the level of preattention by using distractors that are sufficiently strong to draw focal attention to another source, or by using messages that are either very familiar or very unimportant.

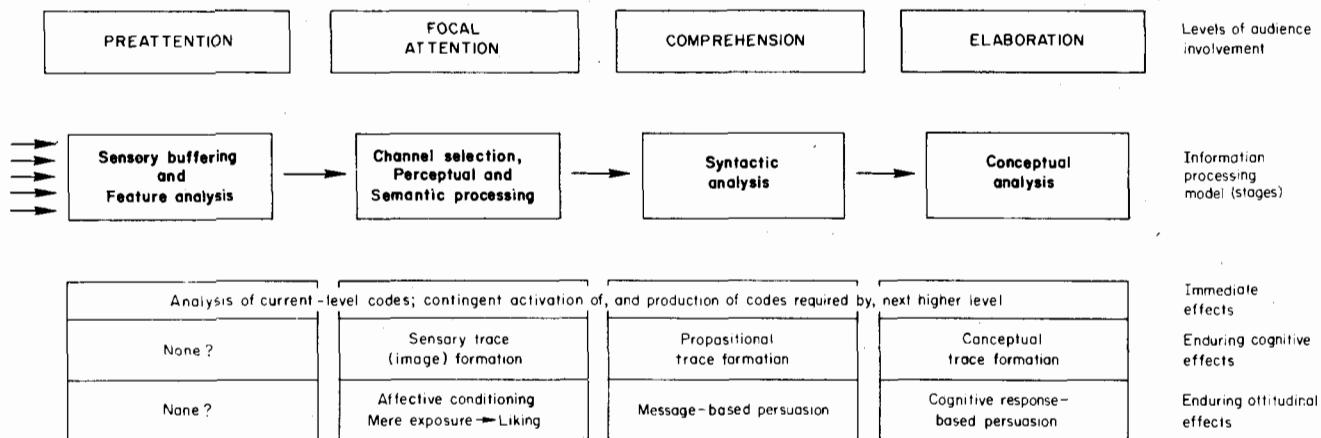
Four Principles for the Control of Involvement

The Table summarizes a variety of laboratory procedures for inducing the different levels of involvement. Although these laboratory methods are typically not directly transferable to natural settings, still the principles that underlie them are. We can identify four such principles:

1. *Bottom-up (data-driven) processing.* When low-level analyses detect indications of significant message content, the next higher level of analysis is invoked.
2. *Top-down (concept-driven) processing.* Analysis at the level of comprehension or elaboration may reveal that the message is unimportant or very familiar, as a consequence of which the use of capacity for comprehension may be suspended, or attention may be directed elsewhere.
3. *Competence (data) limitation.* Involvement is limited to a low level if the content of a message cannot be analyzed at a higher level—for example, words may be in a foreign language, they may be presented too rapidly, or they may be masked by noise.
4. *Capacity (resource) limitation.* Because high levels of involvement are demanding of a limited resource (attentional capacity), involvement in one message is necessarily limited when capacity is allocated to some other message.

The first two of these principles make use of a well-known contrast between bottom-up and top-down (or data-driven vs. concept-driven) processing. The third and fourth principles relate to a somewhat less familiar contrast between data-limited and resource-limited processing (expository introductions to these concepts are available in Norman 1976). The fourth principle (capacity limitation) makes it

FIGURE B
**IMMEDIATE AND ENDURING COGNITIVE AND ATTITUDINAL
EFFECTS ASSOCIATED WITH THE FOUR LEVELS OF INVOLVEMENT**



clear that involvement can be distributed at different levels to several concurrent messages, rather than there being a single level that characterizes the person as a whole. However, when involvement with any one message is at the level of focal attention or higher, the limited nature of attentional capacity makes it unlikely that involvement with any concurrent message will exceed the preattention level.

COGNITIVE AND ATTITUDINAL EFFECTS OF INVOLVEMENT

Immediate Effects

Figure B summarizes present knowledge of the cognitive and attitudinal consequences of the four levels of involvement. For all levels, the most immediate effect is to analyze codes produced by prior processing. For the first three levels, other immediate effects are (1) to activate the next higher level of involvement if analysis detects sufficiently important content, and (2) to produce representations that can be operated on by the next higher representational level. For example, the comprehension level requires symbolic word codes for construction of propositional representations, and the elaboration level makes use of these propositional codes for integration with existing conceptual knowledge. These immediate effects determine which among several concurrent messages receives limited attentional capacity, and to what level this message will be analyzed.

Enduring Effects

It is, however, the enduring effects of the different levels that determine the impact of advertising messages on their audiences. The lowest level, preattention, has no definitely established—but some controversially claimed—enduring effects. The three higher levels are associated with a pattern

of increasingly strong effects. A review of the research that provides the basis for Figure B is well beyond the scope of this paper. Our observations, grouped by levels of involvement, are limited to descriptions of the effects summarized in Figure B, with mention of some of the major supporting evidence. Fuller discussions of this research literature can be found in the sources cited in the Table.⁵

With preattention, stimuli receive extensive immediate analysis that produces little or no lasting effect. Evidence for this preattentive analysis is plentifully available from research in the orienting response and selective listening traditions. Preattentive analysis apparently functions to monitor background stimulation for the occurrence of novel or significant events. For example, affectively significant information (such as the subject's name) in the unattended channel of the selective listening task will be detected and can cause a shift of focal attention to the source of the message that contains this significant content. Also, after many repetitions (habituation) of a novel patterned stimulus, preattentive analysis can detect the omission of some component of the pattern, reattracting focal attention (orienting response). Preattentive analysis includes sensory buffering—that is, brief sensory persistence of visual or auditory inputs—which makes it possible to switch attention to and identify an event after it has ceased to stimulate receptors.

The question marks in the rows for enduring cognitive and attitudinal effects of preattention reflect a currently very active controversy as to whether any such effects exist. There continues to be no confidently established support for claims of various types of lasting effects of "subliminal"

⁵Because Figure B deals with several areas of research that remain currently active, the conclusions summarized in it are necessarily subject to change. At the same time, we have tried to confine conclusions to ones that can be asserted with confidence.

communications (Moore 1982). Yet two procedures that correspond to the preattention level of involvement are currently the focus of some research. One particularly active area of research uses the procedure of presenting visual stimuli at subdetectable durations by means of a tachistoscope. However, claims of short-lasting effects of these procedures have been countered by methodologically based critiques (see Merikle 1982; Purcell, Stewart and Stanovich 1982).

The second procedure is the repeated presentation of melodies in the unattended channel of the selective listening task. Wilson (1979) has reported that this procedure produces an increase in the subsequently judged pleasantness of the unattended (and subsequently unrecognized) melodies. Because Wilson's result is at odds with other findings of no lasting effects of unattended stimuli, and because it has not yet been replicated (see Obermiller 1983), it is cautious to defer any strong conclusions based on this finding.

With focal attention, familiar stimuli are perceived categorically as separable, identifiable objects (figure, rather than background), and unfamiliar stimuli establish sensory memory traces. When a novel event is repeated at the level of focal attention, the traces of separate presentations merge into a categorical sensory representation of the event. Subsequent exposures to instances of the category are then recognizable and, importantly, they become decreasingly effective in eliciting focal attention. (This decreased effectiveness, as noted previously, is referred to as habituation.) As familiarization through repetition proceeds, the perceived pleasantness—or affective value—of the event tends to shift in a positive direction (the mere exposure effect: see Obermiller 1983; Zajonc 1968). Affective change also occurs if a component of a repeated event has prior affective value—for example, when a product is advertised in the company of an attractive person or elegant surroundings. Because of the *redintegrative* property of a category representation—the property by which presentation of a part can activate the representation of the whole—initially neutral components of the repeated event will come to elicit the positive affect associated with other components. This affective learning process, which underlies "image" advertising, is similar in principle to Pavlov's classical conditioning.

With comprehension, a message can establish traces at the propositional level of representation. This trace formation process is apparently less gradual than the sensory trace formation at the focal attention level, since memory for message propositional content can often be established with a single message exposure (Anderson 1980). Nevertheless, comprehension is usually not sufficient to establish easily retrievable memories. This is because, without elaboration, a message's propositional content is unintegrated with existing knowledge and thus is difficult to access. If the comprehended message effectively associates novel persuasive arguments with an attitude object (such as a commercial product or a political candidate), it can produce

message-based attitude change. This attitude change occurs to the extent that the attitude object as cue is able to retrieve the message's arguments. However, because comprehension does not necessarily integrate message content with other attitude-relevant knowledge, message-based persuasion may become substantial only with repeated comprehension-level processing of the message.

The highest level of involvement, elaboration, produces substantial freedom of memory and attitude from the specific details of the original message or its setting. Elaboration consists of such cognitive activities as relating information in a message to important personal goals (self-reference, personal connections), imagining events related to the content of the message (imagery), and actively supporting or disagreeing with a persuasive message (cognitive responding). Elaboration serves to establish memory traces in which message content is integrated with existing propositional knowledge. (This integrated trace is referred to as a *conceptual trace* in Figure B.) As a result, it may take only a single exposure to effectively establish the contents of an elaboration-processed message. In the attitude domain, it is possible—indeed, likely, when the message disagrees with the audience's existing attitudes—that elaborative processing will evaluatively oppose the content of the message. When involvement is at the elaboration level, this makes a *boomerang effect* possible—i.e., attitude change opposite to that advocated in the persuasive message.

Principle of Higher-Level Dominance

Our analysis of levels of involvement is based on serial processing assumptions, in which message analysis occurs in an orderly sequence of stages. One consequence of this stage assumption is that a message analyzed at a high level must also have been analyzed at all lower levels. For example, a message that is analyzed for propositional content (comprehension) must also have received perceptual analysis (focal attention). Thus a comprehended message should produce the effects of comprehension (propositional trace formation and some message-based persuasion) along with those of focal attention (sensory trace formation, affective conditioning, and mere exposure).

How are these effects integrated and—in the event that the effects of different levels oppose one another—which level will predominate? We suggest a principle of *higher-level dominance*—that is, the effects associated with the highest level of analysis applied to a message should be dominant. For example, among attitudinal effects, affective conditioning—which is associated with focal attention—should be outweighed by message-based persuasion effects, which should in turn be dominated by cognitive-response-based persuasion effects.

The principle of higher-level dominance is intended to apply only to the comparison of single exposures at different levels. We do not mean to suggest, for example, that the message-based persuasion effect of a single com-

hended exposure is greater than the affective conditioning that might occur from (say) 20 focally attended repetitions of a message.

The principle of higher-level dominance is plausible for two reasons. First, a message that is analyzed at one of the higher levels is, in effect, analyzed only briefly at lower levels. And second, the effects associated with the higher levels tend to be stronger, in the sense of depending less on repetition and being longer-lasting.

IMPLICATIONS AND APPLICATIONS

Areas for Future Research

The preceding sections have established the roots of our analysis in existing psychological theory. We wish to establish also that the analysis is useful in generating research hypotheses and in suggesting applications. This section describes seven empirical questions to which our analysis points and notes application problems that await the answers to some of them.

Does required capacity increase with increasing level of involvement? Our theoretical analysis assumes that the capacity required to analyze an incoming message increases as the level of involvement in the message increases. Although this assumption seems plausible, there is little evidence for it. The lack of evidence is due to the limitations of currently available techniques for assessing the use of expended capacity (e.g., Kerr 1973; Beatty 1983). To illustrate: suppose one attempts to keep involvement in some target message at the (relatively low) level of focal attention by adding distracting background or by making the materials too complex to be comprehended. Although it may be that the capacity effectively allocated to the target message is indeed low, nevertheless the subject may also be devoting capacity to the background material or to futile efforts at comprehension. Existing measures can index only the overall capacity used, rather than identifying just the fraction that is effectively allocated to the target message.

What is the relation between arousal and involvement? Earlier, we noted that capacity and arousal are conceived of as distinct components of attention. Capacity has appeared as a central construct in our analysis of audience involvement. By contrast, we have mentioned arousal only briefly, with the observation that it is "not directly related" to capacity (and therefore not directly related to involvement). We may better appreciate the indirect relation between arousal and involvement by considering the consequence of variations in arousal within each level of involvement. For the highest level, elaboration, existing theory suggests that processing is disrupted by strong arousal and that processing is most effective at a moderate level of arousal. Perhaps arousal is less disruptive at lower levels of involvement. Indeed, a plausible—but untested—hypothesis is that there is an orderly relation between arousal and involvement, such that the optimal arousal level

may be rather high for preattention and progressively lower for focal attention, comprehension, and elaboration. It would follow that increases in arousal should drive down the effective level of involvement. For example, if a person is experiencing strong arousal while attempting to maintain elaboration-level involvement, elaboration should be difficult to maintain and the effective level should drop to comprehension, or perhaps lower.

Are there persisting effects of messages at the preattention level? The controversial nature of existing evidence on this point was noted previously in discussing Figure B. We can anticipate resolution of this controversy as further research determines the minimal attentional conditions for the mere exposure effect and for the establishment of memory traces. However, until this empirical point is resolved, it remains cautious to credit the preattention level with ability to use memory traces, but not to establish new ones.

What analyses are performed "automatically"? The concept of automaticity has two quite different meanings, depending on whether one is discussing preattention or focal attention. When the context is preattention, the question about automatic analyses may be interpreted as "what analyses are invariably performed on *unattended* information (such as a message in the ignored ear of a selective listening task)?" When the context is focal attention, the question is "what analyses are performed on an *attended* message (such as a message in the selected ear of a selective listening task) without noticeable expenditure of attentional effort (capacity)?" Both questions have relatively well-established answers. In the case of unattended auditory messages, characteristics that are reliably processed include spatial location of the message source, voice pitch of the speaker, and the presence of words (such as one's name) that indicate important content (see the review in Norman 1976). In contrast, focally attended auditory messages are analyzed effortlessly for frequency of repetition of words, temporal spacing of such repetitions, and meanings of individual words (Hasher and Zacks 1979).

Should there be level-specific measures of advertising effectiveness for each level of involvement? An implication of our analysis is that no single measure can provide an overall index of advertising effectiveness. One of the most widely used measures, free recall of ad content, can serve as an indicator that an ad has been processed at the highest level, elaboration. However, recall cannot be interpreted directly as a measure of ad effectiveness. That is, a recall measure will completely miss any negative evaluative reactions of the sort that can accompany elaboration-level processing. Consequently, evaluative measures of brand acceptance or product attribute beliefs may be the best indicators of effectiveness for ads processed at the elaboration level.

Another frequently used memory measure, recognition, also serves more as an index that a given level of involvement has been achieved than of effectiveness at that level.

That is, recognition of claims about product attributes indicates comprehension-level processing, and recognition of nonverbal sound or picture content can indicate processing at the level of focal attention. Effectiveness at the comprehension level might better be assessed by using a cued recall procedure in which the brand name is provided and the audience is asked to recall attribute claims made for the brand. To assess effectiveness at the focal attention level, one needs measures that are sensitive to small changes in affect (e.g., measures of attitude toward the ad—see Leavitt 1975; Mitchell and Olson 1981; Wells, Leavitt, and McConville 1971), or to the establishment of sensory traces (e.g., a measure of tachistoscopic identifiability of the brand logo).

What are the involvement properties of the mass media of communication? It is part of popular lore that print is a more involving medium than audio or video. This conclusion is justifiable by reasoning that the print audience is more at liberty to dwell on message content. However, given that advertising media are ordinarily processed at low levels of involvement, it is important to consider media differences not just in terms of the extent to which they permit high levels of involvement but, perhaps more importantly, in terms of their potential for boosting involvement upward from its typically low level. In this respect, print may be at a disadvantage. With rapid page turning and only partial scanning of page contents (that is, with print involvement at preattention or focal attention), critical cues that could attract higher involvement may simply be missed. In contrast, such cues can be missed on radio or TV (audio portion) only by walking out of the room or by turning down the sound. Therefore, research is needed to determine the involvement properties of media under free exposure conditions. There could be dramatic divergence from results obtained under conditions of more controlled exposure.

When is elaboration-level involvement desired? The unique virtue of elaboration-level processing is that it makes message content available—that is, retrievable without dependence on specific cues contained in the message or in the original exposure setting. Yet such a high level of availability is not necessary when effective external triggering cues occur in the purchase situation: in many purchase situations, the shopper is offered a display of brand names, trademarks, and packages that can cue the retrieval of product attributes that have been encountered previously in advertising messages. In contrast, there are other purchase situations in which effective external cues are not available when the most critical steps toward a purchase decision are taken. For example, an automobile buyer's decision to visit a manufacturer's showroom is of necessity usually guided only by free recall of competitive brand information. In such a case, elaboration-level involvement with the advertising message should be particularly useful. Of course, the construction of a message that effectively attracts elaboration-level involvement is no simple task. Not only is it

difficult to find ways to attract involvement to this level, but there is also the risk that elaborative processing, once achieved, may produce evaluative opposition to the message.

Relation to Prior Conceptions of Involvement

In introducing our use of the concepts of attentional capacity and levels of processing, we suggested that an analysis based on those concepts could integrate the existing consumer behavior theories of involvement. Space does not permit a comprehensive translation between the language of previous theories and that of our own analysis. Therefore, we illustrate the integrative possibilities of our analysis by applying it to just a few of the existing theoretical accounts—those of Krugman (1965), Ray et al. (1973), Houston and Rothschild (1977), and Mitchell (1979).

In Krugman's conception of high involvement, the audience experiences "personal references" or "connections" to the advertising message. This corresponds well to our highest level of involvement, elaboration. Krugman's low level of involvement, which is characterized by "gradual shifts in perceptual structure, aided by repetition," corresponds well to our second level, focal attention. We agree with Krugman that the lower of these two levels better describes the involvement typical of audiences for television advertising. At the same time, two other levels of involvement—preattention and comprehension—should also be taken into account.

Ray et al. (1973) describe high involvement in terms of their "learning hierarchy," in which a communication directly produces cognitive change that can in turn produce attitude change and then behavior change. This conception of the learning hierarchy corresponds well to the comprehension level of involvement. And since Ray et al.'s conception of low involvement followed closely on Krugman's, it corresponds well to the present focal attention level. As in the case of Krugman's analysis, then, we find a good fit between Ray et al.'s analysis and two of our levels of involvement—in this case, the levels of focal attention and comprehension (rather than focal attention and elaboration).

Houston and Rothschild (1977) did not characterize involvement in terms of distinct levels, as we have. Nevertheless, their definition of response involvement as the "complexity and extensiveness of cognitive and behavioral processes" is consistent with our definition in terms of capacity allocation and levels of processing. Moreover, Houston and Rothschild's distinction between situational and enduring involvement can be mapped onto the present distinction between bottom-up and top-down principles for the control of level of involvement.

Of the major consumer behavior treatments of involvement, Mitchell's (1979) interpretation of involvement in terms of varying arousal appears to fit least well with our analysis. Our treatment includes a role for arousal, but it is not a simple one. In our analysis, high arousal is more likely to be associated with low levels of involvement than

with high. However, if Mitchell's use of arousal is given an interpretation in terms of attentional effort or information processing intensity (similar to Burnkrant and Sawyer 1983), the potential for relation to the present analysis becomes apparent. And a basic compatibility between our analysis and Mitchell's can be seen in Mitchell (1981), which sets the concept of involvement/arousal in a broader analysis of variations in cognitive processing.

CONCLUSION

In summary, our analysis deals with phenomena that have been the focus of a variety of theories of involvement in the consumer behavior literature. The major distinguishing feature of our analysis is its focus on audience involvement and its linking of levels of audience involvement to the psychological concepts of variable attentional capacity, levels of processing, qualitatively different representational systems, and (indirectly) arousal. The use of these concepts permits an orderly formulation of the antecedents and consequences of involvement.

Involvement is related to antecedents by means of the four principles of bottom-up processing, top-down processing, competence limitation, and capacity limitation; it is related to consequences by the association of levels of involvement with an orderly series of cognitive and attitudinal effects. Although our interpretation of involvement cannot claim to encompass all the phenomena dealt with by prior analyses, it does accommodate many of them and, perhaps more importantly, it provides a framework that permits the similarities and differences among prior theories to become apparent.

Because our discussion of audience involvement has indicated the complexities of this concept, it may be useful to conclude with a brief summary definition: audience involvement is the allocation of attentional capacity to a message source, as needed to analyze the message at one of a series of increasingly abstract representational levels. Low levels use little capacity and extract information that is used first to determine whether a higher level will be invoked and, if so, as raw material for analysis by the next higher level. Higher levels require greater capacity and result in increasingly durable cognitive and attitudinal effects.

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