Social psychologists have long realized that people process information in more than one way, and for more than one reason. By now, the literature is rich with multiple-process models that, in taxonomizing the "hows" of information processing, draw a distinction between more and less thoughtful ways of thinking (e.g., Chaiken, Liberman, & Eagly, 1989; Fiske & Neuberg, 1990; Gilbert, 1989; Petty & Cacioppo, 1986; Tellock, 1985). Renewed attention has also been given to the "whys," or motivational underpinnings, of information processing (e.g., Chaiken & Stangor, 1987; Heron, 1986; Johnson & Eagly, 1989; Kunda, 1990; Snyder, 1992), often with explicit reference to pioneering taxonomies of attitude functions (Katz, 1960; Smith, Bruner, & White, 1956). Yet little effort has been made to explore the interaction of multiple processing modes on the one hand and multiple motivations on the other.

In this chapter, we consider the motivations governing information processing within the framework of the heuristic-systematic model (Chaiken, 1980, 1987; Chaiken et al., 1989). This model proposes two concurrent modes by which people process information and reach judgments: a relatively effortless heuristic mode, characterized by the application of simple decision rules (e.g., "Experts can be trusted"), and a more effortful and analytic systematic mode, in which particularistic or individuating information about objects of judgment is used. Which mode predominates in any situation depends on the individual's current motivation and capacity to engage in detailed processing.
The model's motivational predictions are based on the sufficiency principle (Figure 24.1), which embodies the tradeoff between minimizing effort and reaching an adequate level of confidence in one's judgment. The sufficiency principle proposes a continuum of judgmental confidence for any particular decision. On this continuum there exist two points of interest: the level of actual confidence in one's judgment, and the level of desired confidence, or sufficiency threshold. With adequate capacity to process information, a person will engage in processing until the level of actual confidence is raised to the level of desired confidence, thereby closing the gap between the two.

Although the systematic mode requires greater processing capacity, it is generally more effective in increasing subjective confidence than heuristic processing is. Consequently, systematic processing will occur when heuristic processing cannot completely close the gap between actual and desired confidence. Systematic processing, then, can be encouraged by increasing this gap, either by raising the sufficiency threshold (Figure 24.1B—e.g., by increasing the relevance or importance of information at hand) or by lowering the amount of actual confidence (Figure 24.1C—e.g., by introducing information that contradicts a previously presented heuristic cue) (Maheswaran & Chaiken, 1991). It should be noted, however, that systematic processing can only take place if there is adequate capacity to process information effortfully.

The heuristic-systematic model originally assumed that perceivers were motivated to hold accurate attitudes and beliefs (Chaiken, 1980, 1987). While high levels of accuracy motivation tend to foster systematic processing, even heuristic processing was assumed to be motivated by accuracy concerns, albeit less pressing ones. However, in many situations, other motivations coexist with or supplant the desire to be objectively correct (Kruglanski, 1990; Swann, 1990; Taylor, 1991; Tesser, 1988; Trope, 1986). The heuristic-systematic model presently acknowledges two broad motives other than accuracy (Chaiken et al., 1989). Defense motivation is an orientation toward reinforcing important self-related beliefs, and impression motivation is an orientation toward holding and expressing beliefs dictated by the current interpersonal situation. In the same way that both heuristic and systematic processing have been shown to serve accuracy concerns, both modes of processing can serve defense and impression concerns.

The heuristic-systematic model was also originally developed to apply to persuasion settings, and indeed most research inspired by this model has examined attitude formation and change (see Eagly & Chaiken, 1993, Ch. 7). However, we have argued that the concepts of heuristic and systematic processing are also applicable to information processing in other settings, such as person perception and the evaluation of evidence (Chaiken et al., 1989). In fact, several new studies reported here extend the model's concepts and predictions to information processing in the absence of an explicit attempt to persuade.

![Figure 24.1](image_url)
Accuracy motivation is the desire to hold attitudes and beliefs that are objectively valid. Not only the heuristic-systematic model, but other influential theories of attitude formation and change (e.g., Petty & Cacioppo, 1986; Anderson, 1971) and of social information processing (e.g., Fiske & Neuberg, 1990) have explicitly or implicitly assumed that people are motivated to have an objectively true representation of the world. Accuracy motivation is also well represented among attitude theories that acknowledge multiple possible motives in persuasion. In particular, various typologies of attitude function have asserted that attitudes can serve the goal of realistic assessment, whether this function is labeled as “knowledge” (Katz, 1960) or as “object appraisal” (Smith et al., 1956). Accuracy motivation is also conceptually related to Chaiken and Stangor’s (1987) discussion of issue involvement, as well as to Gollwitzer’s (1990) discussion of the deliberative mindset corresponding to the predecisional action phase, which is characterized by “an orientation toward accurate and impartial processing” (p. 65).

Although systematic processing does not necessarily lead to an objectively accurate judgment, in many cases it is the mode better suited to achieving accuracy goals. Careful scrutiny is needed to distinguish between valid and spurious information (Petty & Cacioppo, 1986), and can attenuate the effects of such fallible heuristics as “likeable people are correct” (Chaiken & Eagly, 1983). Thus, systematic processing is promoted in situations that induce high accuracy motivation, such as those in which the issue at hand will personally affect the subject (Petty & Cacioppo, 1979). However, it is crucial that the capacity to process systematically also be present. For example, the person must know enough about the issue to be able to process arguments about it (Wood, Kallgren, & Priesler, 1985), and must have enough time to be able to concentrate on the message (Chaiken & Lutz, 1993; Rattan & Chaiken, 1991).

Heuristics processing also serves the goal of accuracy motivation, because heuristics tend to reduce uncertainty. When systematic processing is difficult or impossible, an accuracy-motivated person may have no choice but to base a decision on the best rule of thumb available, and when accuracy motivation is present but relatively low, heuristics provide a cognitively inexpensive way to gain a limited degree of confidence in the accuracy of one’s judgment.

According to the sufficiency principle, the preferred processing mode is that which best closes the gap between actual and desired confidence, given adequate capacity to process. When the prevailing motive is accuracy, as we have noted, extensive systematic processing increases actual confidence to a greater level than does heuristic processing alone, which in turn increases actual confidence more effectively than no processing at all. However, the nature of information, and not just the way in which it is processed, can affect its ability to satisfy accuracy concerns. For example, a heuristic-based inference that is later called into doubt by contradictory information will be seen as an unsatisfactory basis for judgment even when accuracy motivation is low (Maheswaran & Chaiken, 1991). Similarly, one might predict that a message that comes from an obviously biased or self-interested source may not satisfy the accuracy-motivated person’s need for reliable information, even if it is processed systematically.

Finally, even though a person may be driven to seek accuracy, the actual result of processing may fall short of this goal. Most persuasion heuristics are of limited diagnostic value: Not all experts can be trusted, not all majors are right. Even when motivation is high, expectancies derived from these heuristics can bias systematic processing; for example, an expert’s arguments may be evaluated more favorably than a nonexpert’s (Chaiken & Maheswaran, 1994). Bias in prior knowledge can also affect the accuracy of systematic processing. For example, if the arguments on one side of an issue rest mainly on biological evidence, while those on the other side rest on sociological evidence, a person who is knowledgeable about potential fallacies in biological research but knows little about sociology may criticize the biological evidence especially harshly (see also Bick, Wood, Chaiken, & Nations, in press).

Defense motivation is the desire to hold attitudes and beliefs that are congruent with existing self-definitional attitudes and beliefs. By “self-definitional” we mean those attitudes and beliefs that are closely tied to the self, including terminal values (Rokeach, 1968); social identities such as one’s gender, ethnicity, religion, or profession; attitudes supporting one’s material vested interests; and beliefs about personal attributes such as intelligence, social sensitivity, and healthfulness. The defense-motivated person’s main goal, consciously or unconsciously, is not to have an accurate representation of the world, but to preserve the self-concept and associated world views. Therefore, the hallmark of defense motivation is a self-serving bias in processing.

Processing bias arising from defense motivation should be distinguished from other sources of bias that are more purely cognitive, such as the impact of prior knowledge or heuristic information on accuracy-motivated systematic processing (Bick et al., in press; Chaiken & Maheswaran, 1994). Defense motivation leads to a directional bias that is consistently in line with existing self-beliefs, whereas a bias arising only from cognitive sources can either favor or contradict existing self-beliefs.

Our concept of defense motivation is similar to Chaiken and Stangor’s (1987) discussion of position involvement, Tesser’s (1988) discussion of self-evaluation maintenance, Johnson and Eagly’s (1989) discussion of value-relevant involvement, and Kunda’s (1990) discussion of motivated reason-
ing—all of which are described as motivations to defend pre-existing ideas.4
Within the functional theories of attitude, defense motivation is closely linked to Katz’s (1960) ego-defensive function, under which attitudes are formed, held, and changed to preserve existing beliefs about the self. Less obviously, we also see our concept of defense motivation as related to Katz’s value-expressive function, under which attitudes are formed, held, and changed with the aim of reflecting core values and beliefs about the world.5

**Defense-Motivated Heuristic and Systematic Processing**

Under defense motivation, the overriding processing principle is selectivity. That is, people will selectively process information in the way that best meets their defensive needs. The sufficiency principle can still be applied under defense motivation. However, defensive sufficiency is determined not by whether information processing yields a judgment that is likely to be accurate, but by whether information processing yields a judgment that reinforces self-definitional attitudes and beliefs.

Motivational factors that raise a person’s defensive sufficiency threshold for an issue include the perceived relevance of the issue to existing self-concepts, and the centrality of these concepts. Issues that obviously touch on core attitudes, beliefs, and identities are more likely to arouse defense motivation than issues that are only weakly linked to central concerns, or that are linked to more peripheral concerns. Threats to the self-concept can also increase defense motivation and raise the defensive sufficiency threshold. These threats may affect an area similar to (e.g., symbolic self-completion; Wicklund & Gollwitzer, 1982) or different from (e.g., self-affirmation; Steele, 1988) the aspect of the self currently under consideration. In addition, self-views about which a person is relatively certain are more likely to evoke defense motivation when threatened (Swann, 1990). In our terms, an initially high level of certainty creates a high standard of desired confidence that people are motivated to restore.

The defensive sufficiency threshold may be reached using either heuristic or systematic processing, or both modes. We propose that defense motivation leads to a congenial bias in the processing of information within the systematic and heuristic modes, so that the desired judgment will more easily be reached. Moreover, defensive concerns may determine whether heuristic or systematic processing is used, according to the strength of defense motivation and the nature of available information.

Within the systematic mode, selective processing involves the biased evaluation of evidence and arguments. Material that is congruent with existing self-relevant beliefs, such as research supporting one’s position on capital punishment, will be judged as more valid and accurate than incongruent material (Lord, Ross, & Lepper, 1979; Pyszczynski, Greenberg, & Holt, 1985; Pyszczynski & Greenberg, 1987). We believe that this judgment bias pervades the defense-motivated individual’s systematic processing, and that its strength varies mainly according to how much defense motivation is present.

Heuristics, too, can be applied in a biased way, and their implications may be accepted or rejected according to whether or not they support the individual’s central beliefs and attitudes. The reliability of a particular piece of noncongenial heuristic information may be disparaged, as when a survey’s sample size or sampling method is called into question (Hazelwood & Chaiken, 1990). Following the principle of selectivity, people will be especially likely to question the survey if its implications go against their beliefs. In addition, attitudes may be defended by disparaging the validity of a noncongenial heuristic; one may endorse the general rule “The majority is right” when public opinion supports one’s own opinions, but dismiss it when the polls offer contrary findings.

As these examples indicate, we believe that defense-motivated people can and do use the same heuristics that accuracy-motivated people use, although in a biased way. It is also possible that defensive concerns may manifest themselves in heuristics that are not used by accuracy-motivated people. These heuristics, although determined idiosyncratically by the individual’s core beliefs, would take the general form “If information supports belief X, it must be true,” or the converse, “If information contradicts belief X, it must be false.” Such defensive heuristics may provide quick and easy ways to reinforce important attitudes and beliefs, while dismissing threats to them.

Selectivity in the amount of processing given to information can manifest itself in two ways. First, a person may give more systematic scrutiny to hostile material in order to find flaws in it or generate counterarguments. When this process is driven by defense motivation, it may be labeled “defensive countering.” Conversely, hostile material may be ignored outright, or attended to less carefully than congenial material; we label this process “defensive inattention.” Although associated with psychoanalytic perspectives on repression (e.g., Freud, 1933/1965), defensive inattention has also been acknowledged in social psychology by Janis and Feshbach’s (1953) theoretical perspective on avoidance of fear-arousing stimuli; by Festinger’s (1957, 1964) selective exposure hypothesis; and by Baumeister and Ciarrochi’s (1992) concept of self-deception, which they define as “the systematic, motivated avoidance of threatening or unpleasant information about the self” (p. 851).

Extensive study has not been given to the question of which conditions lead to the use of counterarguing versus inattention. But, as with accuracy motivation, we can predict that the individual’s motivation and ability to process selectively will determine which type of selective processing is used. When defensive sufficiency thresholds are high (e.g., the issue is highly self-definitional) and actual defensive confidence is low (e.g., the material effectively threatens the person’s self-image), selective counterarguing will be preferred, given the ability to do so. Such an active strategy is more likely to effectively reinforce existing self-relevant attitudes and beliefs. However,
when defensive thresholds are low, when actual defensive confidence has been bolstered, or when ability to counterargue is not present, the less demanding inattention strategy will predominate (see also Eagly & Chaiken, 1993, Ch. 12).

The mode of processing favored by the defense-motivated person may also depend on the congeniality of existing information. For example, a message may be accompanied by hostile heuristic information, such as a poll showing that most people reject a political position that the individual is motivated to support. Because the poll undermines the individual's actual defensive confidence, biased systematic processing will be used to close the widened defensive sufficiency gap. Assuming that ability is present, then, a hostile cue can be expected to lead to greater levels of systematic processing, albeit biased. A congenial cue, on the other hand, can be expected to boost actual defensive confidence, narrowing the confidence gap so that biased systematic processing of the message is reduced.

**Empirical Evidence**

Although many empirical studies have shown defensively motivated selectivity in the evaluation of information (e.g., Lord et al., 1979; Pyszczynski et al., 1985), the processing mediation of these effects has not been fully examined within a dual-process framework. Nonetheless, several recent studies have found that evidence contradictory to such vital self-beliefs as "I am healthy" and "I am socially sensitive" may be subject to increased scrutiny or counterargument, rather than to defensive inattention. Wyer and Frey (1983) found that students who received negative feedback on an intelligence test, relative to neutral observers or to students who received positive feedback, recalled more pro-intelligence-test information from a message presenting information both for and against the test. However, negative-feedback subjects also judged intelligence tests more negatively, suggesting that pro-intelligence test arguments were given special attention in order to be refuted.

Liberman and Chaiken (1992) gave women who either did or did not drink coffee a detailed message that either supported or disconfirmed a purported link between coffee drinking and fibrocystic disease, but presented studies on both sides of the issue. Coffee-drinking and non-coffee-drinking subject groups were matched on prior belief in the link, so that any biases found would clearly proceed from self-interest motivation rather than from cognitive factors. In addition to finding biased judgment of the message, Liberman and Chaiken found tendencies for coffee drinkers to expend more effort on the message and to find more weaknesses in pro-link than in anti-link information, suggesting the use of a defensive counterarguing strategy.

Finally, Ditto and Lopez (1992) present a particularly vivid illustration of the tendency to engage in greater scrutiny of threatening evidence. Subjects were told that a self-administered saliva test indicated either the presence or absence of an unfavorable medical condition. Those who were diagnosed as having the unfavorable condition not only were more likely to rate the test as less accurate and the condition as generally less serious, but were more likely to spontaneously give themselves the test again, subjecting the unwelcome information to more intensive analysis.

Evidence for defensive inattention has been mixed. Research in the "fear appeals" tradition, in which subjects are typically exposed to fear-arousing persuasive communications, has generally failed to establish that the reduced persuasive effect of threatening information is mediated by reduced attention to information (Eagly & Chaiken, 1993). But in a related literature, Frey (1986) concluded that people who experience cognitive dissonance after a decision, when given a selection of information to peruse, tend to avoid decision-incongruent information and to seek out decision-congruent information. In line with our ability predictions, the tendency to select congruent material appears to be eliminated if the incongruent material is seen as easily refutable (Frey & Stahilberg, 1986). Pyszczynski and Greenberg (1987) also report a line of research in which nondepressed subjects, given a selection of information after receiving self-relevant performance feedback, tend to request congenial material.

The general finding of defensive inattention when subjects are given a selection of information stands in contrast to the general findings of defensive counterarguing or unbiased attention when all subjects are actually exposed to mixed or hostile information, as in the fear appeal and health message literatures referred to above. This contrast has not yet been tested explicitly. However, it stands to reason, in line with our hypotheses, that actually presenting people with hostile material will lead to a greater drop in actual defensive confidence, and a greater reliance on biased systematic counterarguing, than merely giving people the option to select hostile material.

Apart from the above-described findings, there has been little work devoted to specifying the conditions under which defense-motivated perceivers employ inattention versus counterarguing. A recent study (see Chaiken, Pomerantz, & Giner-Sorolla, 1995) provides some evidence that the extent to which one's beliefs on an issue support one's attitudes, as measured by evaluative-cognitive consistency, affects which defensive style is used in processing a mixed message. Low-consistency subjects, who presumably lacked the cognitive resources with which to counterargue, remembered fewer hostile than congenial arguments on the issue of capital punishment, which suggests that they may have focused mainly on congenial arguments in an attempt to bolster their attitudes. High-consistency subjects showed the opposite bias, remembering more hostile arguments and judging them negatively, which suggests a greater tendency to counterargue.

Another recent experiment (Giner-Sorolla & Chaiken, 1995) examined the selective use of defensive processing modes in response to heuristic cues that either did or did not support defensive concerns. Subjects were classified according to their vested interest in the issue of making essay exams mandatory—that is, whether they said they generally did better in essay exams
GOAL INFLUENCES ON SOCIAL INTERACTION

Beyond Accuracy

.student populations and laboratory settings. Although laboratory researchers have not literally taken up Sears’s challenge to account for the strong motivations of people “such as Palestinian guerrillas, southern Italian peasants, ... Archie Bunker, Ma Joad, Clarence Darrow or Martin Luther King” (p. 527), various issues—mainly academic and health-related—have been found to activate the defensive motives of the undergraduate subjects caricatured by Sears as “lone, bland, compliant wimps who specialize in paper-and-pencil tests” (p. 527). Our framework for examining defensively motivated processing, which encompasses both relatively thoughtful and thoughtless ways of rejecting threatening information, stands as a potentially useful guide to future research on the passions and biases of many different populations in many different settings.

IMPRESSION MOTIVATION

Thus far, we have seen that whereas accuracy-motivated perceivers search for judgments that reflect objective reality, defense-motivated perceivers desire judgments that are congruent with their existing self-defining attitudes and beliefs. In comparison, impression-motivated individuals express judgments that are called for by the social situations in which they find themselves.

Impression motivation involves the desire to express attitudes and beliefs that will address the specific interpersonal goals arising within different social contexts. Therefore, impression-motivated perceivers are primarily focused on the interpersonal consequences associated with expressing a given judgment in a particular social situation. In terms of its processing implications, impression motivation, like defense motivation, invokes processing that is guided by the principle of selectivity. Impression-motivated selectivity, however, promotes perceivers’ current social goals rather than their existing self-views.

In considering the social context, impression-motivated perceivers may take into account the views of others who are actually present in the immediate social setting, as well as those of imagined others (Chaiken et al., 1989). For example, a political candidate anticipating that a particular audience will view a televised debate may engage in impression-motivated processing and express judgments that are tailored to fit the audience (e.g., Cialdini, Levy, Herman, Kozlowski, & Petty, 1976; Tetlock, 1983). However, it is important to note that when real and imagined others comprise important self-defining reference groups, defense motivation is likely to be paramount.

In past research on various forms of impression motivation, when the views of anticipated audiences were known, impression-motivated subjects expressed judgments that mirrored these views; when the views of anticipated audiences were unknown, impression-motivated subjects formed moderate judgments (e.g., Cialdini, Levy, Herman, & Evenbeck, 1973; McFarland,
differences in impression motivation. For instance, research has shown that high versus low self-monitors exhibit greater attitude change when persuasive messages are designed to heighten concern with public approval or appearances—concerns closely linked to impression motivation (e.g., Snyder & DeBono, 1985; DeBono, 1987; DeBono & Edmonds, 1988, Experiment 2). Fenigstein (1979) found that people high versus low in public self-consciousness were more sensitive to and reacted more negatively to social rejection. Given a social setting in which impression motivation may be aroused, we would expect higher levels of public self-consciousness to correspond to pronounced degrees of impression motivation.

Levels of impression motivation may depend not only on individual-difference factors such as self-monitoring status, but also on varying situational factors. For example, impression motivation may be enhanced to the degree that the attitudinal preferences of real or imagined others are salient, social norms are obvious, or social relationships are important (Chaiken et al., 1989). More generally, to the extent that individuals perceive the social implications of expressing particular judgments to be consequential or far-reaching, impression motivation is heightened. To illustrate, impression motivation is likely to be enhanced to the extent that the significance of a social relationship increases one's perception that expressing certain judgments will have large consequences for the maintenance of the relationship.

**Impression-Motivated Heuristic and Systematic Processing**

Impression-motivated processing may invoke either the heuristic or systematic mode, independently or interactively. Importantly, as we have stated, this form of motivated processing is selective in direct response to the interpersonal goals relevant in the surrounding social environment. As with the other two broad motives, the sufficiency principle can be used to make predictions regarding the form and extent of impression-motivated processing. However, impression motivation sufficiency is determined by whether information processing produces a judgment that serves current social goals, rather than one's accuracy or self-defining goals.

Like accuracy- and defense-motivated systematic processing, impression-motivated systematic processing involves a relatively deep analysis of judgment-relevant information, given the requisite cognitive capacity. Impression-motivated systematic processing is selective in that it varies consistently with situation-specific social goals; the amount and type of information that the impression-motivated perceiver chooses to process extensively will reflect a motivational bias toward the fulfillment of these goals. For example, an impression-motivated individual whose goal is merely to obtain a positive evaluation may selectively attend to information that supports an evaluator's opinions. Impression-motivated perceivers who desire not only to secure a positive evaluation, but also to appear particularly knowledgeable in an upcoming interaction with an evaluator, may also pre-
Empirical Evidence

Explicit tests of our hypotheses about impression-motivated processing are few in number. Tetlock's (1983) accountability research lends support to our assertion that the nature of impression-motivated processing varies with the interpersonal context. Social context in this research was manipulated by making subjects either aware or unaware of the views of the person to whom they had to justify their opinions. To serve their accountability concerns, aware subjects merely invoked an acceptability heuristic and expressed attitudes directionally consistent with that of the person to whom they were accountable. The same heuristic could not be used by the unaware subjects, who not only indicated relatively moderate attitudinal positions, but also listed thoughts that were more integratively complex and evaluatively inconsistent than those of aware subjects. From our perspective, Tetlock's results suggest that unaware subjects were forced to engage in relatively more systematic forms of processing in order to achieve a level of impression motivation sufficiency (brought on by the accountability manipulation) comparable to that of the aware subjects.9

Leippe and Elkin's (1987) study of issue and response involvement bolsters our propositions concerning the selectivity of impression-motivated processing. In contrast to the impression-motivated concerns of the response-involved individual, issue-involved perceivers are motivated to "form an attitude... in a way that best fits their personal goals, standards, and values" (p. 270). Issue involvement was varied by manipulating the personal relevance of the experimental issue, and response involvement was varied by manipulating whether or not subjects were told that they would later discuss the issue with another person. Although Leippe and Elkin found that both high issue involvement and high response involvement led to relatively more extensive processing of message information, they suggested that cognitive elaboration in the service of these two forms of involvement differed qualitatively. Issue involved subjects' processing was highly sensitive to variations in message argument quality; in contrast, response-involved subjects generated evaluatively balanced thoughts and engaged in "maintenance" processing, or processing aimed merely at obtaining and retaining attitudinally relevant information. Presumably, the selective nature of response-involved subjects' processing reflected their impression motivated concerns both with appearing well informed and with not appearing extreme (i.e., seeming flexible) in their issue opinions.

Before presenting our own research, we need to clarify and expand on past "strategic" interpretations of impression motivation and related constructs. Several researchers have argued that attitudes expressed under impression motivation are often merely "elastic" responses to impression-motivated concerns elicited by the situation (e.g., Cialdini & Petty, 1981). For instance, McFarland et al. (1984, Experiment 3) found that once interpersonal pressures were removed, subjects' expressed opinions demon-
strated a considerable degree of "snap-back" toward prior attitudes. Other researchers, however, provide evidence for the persistence of expressed judgments resulting from processing that was initially in the service of impression-motivated goals (e.g., Chen, Shechter, & Chaiken, 1995; Higgins & McCann, 1984; Higgins, 1992; Sedikides, 1990). For example, Higgins and McCann (1984) demonstrated not only that subjects processed judgment-relevant information in a manner that would facilitate their interpersonal goals, but also that this "strategic" processing had enduring effects on their subsequently assessed judgments.

A tentative resolution may lie within the principles of the heuristic-systematic model. Impression-motivated processing is "strategic" in the sense that it is, by definition, directed toward achieving situational social goals. However, we propose that to the extent that impression-motivated processing is systematic, resulting beliefs and judgments will tend to endure over time. Impression-motivated judgments resulting from systematic forms of processing persist because they are backed by an extensive and relatively more complex consideration and array of judgment-relevant information. In short, we speculate that impression-motivated systematic processing may lead perceivers to genuinely adopt the judgments that they once formed and expressed with primarily strategic or goal-directed intent. Clearly, further research is needed to substantiate and discover the limits of our theoretical speculations. Below we present our own research bearing on several of the propositions we have made regarding impression-motivated processing.

In two separate studies, we led subjects to anticipate an upcoming discussion with a partner about their issue opinions—an interpersonal situation in which we believed impression motivation would be aroused. In our first study (Shechter, 1987), high and low self-monitors were recruited as subjects. On the basis of past research using the self-monitoring construct (e.g., DeBono & Harinsh, 1988; Snyder & DeBono, 1987), we expected our experimental setting to arouse higher levels of impression motivation among high self-monitors and lower (or no) impression motivation among low self-monitors; we reasoned that expecting a discussion would lead high self-monitors to be relatively more concerned with getting along with their discussion partners and low self-monitors to be relatively more concerned with expressing accurate opinions. Subjects were led to believe that their alleged discussion partner held either a favorable, an unfavorable, or an unknown attitude on the issue. Subjects' attitudes and thoughts were assessed after exposure to a judgment-relevant message.

In the two partner-attitude-known conditions, although both high and low self-monitors aligned their immediate attitudes with those of their alleged partners, this effect was stronger among high self-monitors. To serve their impression-motivated goals of "getting along with others" or "having a smooth interaction," high self-monitors were especially likely to use their partners' attitudes as a heuristic to determine their own attitudes. High self-monitors in the partner-attitude-known condition expressed significantly less extreme attitudes on the issue than did their counterparts in the partner-attitude-known conditions; in contrast, the attitudes of low self-monitors in the unknown condition differed only from those of their counterparts in the favorable partner-attitude condition. Presumably, particularly nonextreme opinions reflected high self-monitors' use of a "Moderation minimizes disagreement" heuristic in addressing their interpersonal objectives in a situation where a simple agreement heuristic was not applicable (i.e., their partners' attitudes were unknown).

For the two partner-attitude-known conditions, thought-listing analyses revealed that high and low self-monitors engaged in similar overall amounts of processing. However, on a valenced index of systematic processing (specific message-related thoughts), a significant partner attitude effect emerged only among high self-monitors, indicating that the valence of their systematic processing was directionally congruent with their partners' attitudes. In contrast, the valence of low self-monitors' thoughts was not significantly affected by our manipulation of partner attitude. Thus, it appears that high self-monitors selectively processed judgment-relevant information in a way that was appropriate for their upcoming discussion, not with the goal of forming an accurate judgment.

To extend our findings, we conducted a second study using a similar discussion situation (Chen et al., 1995). In this second study, however, we sought to directly compare impression and accuracy motivation by using a motivation-priming manipulation (see Bargh, 1990). In an ostensibly unrelated study, subjects were asked to read and respond to a set of three "imagination" scenarios specifically designed to prime either accuracy or impression motivation concerns. All subjects were then led to anticipate a discussion with a partner who they were told held either a favorable or an unfavorable opinion on the discussion issue. Subjects' laboratory expressed attitudes, thoughts, and delayed attitudes were recorded after exposure to an essay containing arguments for both sides of the issue.

Analyses on laboratory expressed attitudes revealed that only those subjects who were primed for impression motivation were affected by knowledge of their partners' attitude; impression-motivated subjects reliably aligned their attitudes with those of their partners. Moreover, in several regression analyses, we found that while both impression- and accuracy-motivated subjects' valenced thoughts predicted their laboratory expressed attitudes, our partner attitude manipulation significantly predicted the valence of only impression-motivated subjects' thoughts. Once again, impression motivation led to biased systematic processing, or processing tailored to fit prevailing interpersonal goals. Finally, laboratory expressed attitudes for all of our subjects were reliably correlated with delayed attitudes. These final results appear to bolster the notion that systematic processing in the service of strategic impression-motivated goals may subsequently lead to attitudinal persistence.

Taken together, our two studies have produced results that are consistent with our impression motivation propositions. We have shown that the
nature of both impression-motivated heuristic and systematic processing differs qualitatively from that of relatively more accuracy-motivated processing. Impression motivated individuals took as their primary referent the social situation; that is, they used the opinion of their anticipated partner as a cue in addressing their interpersonal agenda. Furthermore, we have presented evidence suggesting that impression motivated systematic processing may result in judgments that persist over time.

CONCLUSION

We have described the motivated individual throughout this chapter as one who "strategically" processes information in accordance with certain motivational "goals." In spite of the connotations of these terms, we do not necessarily believe that the individual is always aware of motivational influences on information processing. Recent trends in social-psychological research are leading to an increased appreciation of the power of motives to guide thought and behavior without the motivated person's conscious knowledge (Bargh & Bargh, Chapter 20, this volume). In this light, we can ask two questions about the motivational states we have heretofore described. Are people aware that their processing strategies are motivationally influenced? And are they aware of even the existence of the motivation?

Of the three motives we have described, accuracy motivation is the least reprehensible motive with which to deal with information in contemporary Western culture, especially in the context of young students brought into laboratory settings (see Sears, 1986). Pressures to hide the existence of influence of truth-seeking motives, either from others or from oneself, are virtually nonexistent. Although the accuracy-motivated individual may not be aware of habitual flaws in reasoning, or of the influence of certain heuristics on judgments, we are reasonably confident that accuracy-motivated people believe themselves and their processing strategies to be accuracy-motivated.

Defense motivation, on the other hand, has been associated with the unilluminated side of human consciousness ever since Freud proposed the notion of psychological defenses. Indeed, the "sine qua non" of an effective ego defense is its invisibility to full awareness. Similarly, the most effective world views rest on the acceptance of their central values and beliefs as the stuff of objective reality. Thus, whether or not the core concepts to be defended have emerged into awareness, we believe that people are generally unaware of biases originating in defensive concerns. Like Pyszczynski and Greenberg (1987), we suspect that defense-motivated individuals maintain an "illusion of objectivity"—a belief that their processing is guided by accuracy concerns.

Although research has not directly addressed this question, Lord, Lepper, and Preston (1984) found that instructions to "be objective" were effective in reducing biased processing, suggesting that subjects' defensive biases can coexist with a conscious accuracy goal. Research on the "hostile media" phenomenon (Vallone, Ross, & Lepper, 1985; Giner-Sorolla & Chaiken, 1994) also indicates that, far from recognizing their own biases, defense-motivated partisans see a hostile bias in balanced presentations, which they judge to be imperfect conveyors of the partisan "truth." Nevertheless, these findings are only suggestive, and we believe that future research should strive to empirically clarify the claim that defensively biased people are unaware of their own biases.

Similarly, our characterization of impression motivation as strategically directed toward fulfilling interpersonal goals by no means implies that people are always aware of these goals or of the influence that these goals may have on their processing and subsequently expressed judgments. For example, one can imagine that for some individuals (e.g., high self-monitors), certain frequently encountered interpersonal situations may unconsciously lead to impression-motivated processing. Tetlock and Manstead (1988) support this idea in suggesting that impression management, a form of impression motivation, may be the "product of highly overlearned scripts, the original functions of which people have long forgotten" (p. 63). Jones and his colleagues (Jones, 1990; Jones & Pittman, 1982) concur with this notion in their assertion that various self-presentational strategies (e.g., ingratiation) may become "semiautomatic reactions triggered by interpersonal threats and opportunities" (Jones & Pittman, 1982, p. 258).

Although it seems possible that individuals may not be consciously aware of their impression-motivated concerns, we consider it more likely that impression-motivated perceivers are aware of their particular social goals, but unaware of the ways in which these interpersonal goals color their information processing and judgments. For example, it is likely that individuals who are motivated to agree with an attractive date are aware that they are seeking the affections of this other person, yet unaware that this goal leads them to selectively process information that is favored by this person. These speculations, however, await future empirical testing.

Finally, in drawing distinctions among accuracy, defense, and impression motives, we do not wish to imply that only one motive is present in all or even most situations. When multiple motives are present, their effects on information processing may counteract or complement one another. For instance, the fact that people are not entirely free to reinterpret the world as they would like it has been interpreted in terms of a dialectic between accuracy and defense motives (Kunda, 1989; Pyszczynski & Greenberg, 1987), implying that many situations present a conflict between the biased processing demanded by defensive concerns and the more objective view demanded by accuracy concerns. Impression management concerns calling for greater scrutiny of information may also conflict with, and indeed override, defensive processing (Baumeister & Cains, 1992).

Despite the existing literature's focus on conflicting motivations, we be-
lieve that under the right circumstances, motivations may have a complementary
effect on processing outcomes. Sometimes, impression motives can actually reinforce
the biases created by defense motives—as when a Republican is
given the chance to discuss politics with his or her conservative idol, Rush
Limbaugh. Accuracy motives, too, may work to reinforce defensive biases
if the information to be scrutinized itself tends to favor the person's point
of view—as when a Democrat peruses the liberal-leaning editorial page of
*The New York Times*. Although the complexity of multiple-motive situations
is great, we see them as especially fertile grounds for future inquiry.

**ACKNOWLEDGMENTS**

We thank Stacey Lutz, Eva Pomerantz, Rosalind Torodesillas, and Jonathan Zimmerman
for their comments on an earlier version of this chapter.

**NOTES**

1. Although our taxonomy does not categorically rule out other motives, we be-
lieve that this set of three adequately represents the possible reference points of most
epistemic motivations. Defense motivation takes the self as a reference point; impres-
imotion motivation takes others as a reference point; and accuracy motivation refers
to an objective reality independent of the personal perspective of either self or others.
2. As Solomon, Greenberg, and Pyszczynski (1991) assert, beliefs serve to
fend off thoughts of one's mortality can play an important role in the self-system.
The idea that one's health is not in danger, which people are evidently motivated
to defend (Ditto & Lopez, 1992; Kunda, 1990; Liberman & Chaiken, 1992), is a rela-
tively self-evident example of such beliefs.
3. We side with Kunda (1990) and Pyszczynski and Greenberg (1987) in asserting
that defensive biases in processing are ultimately motivational, and not merely
rational, in nature. Although we have defined defense motivation as a tendency
to protect certain self-definitional cognitions, we also recognize that motivational
factors determine which cognitions are protected—namely, those closest to the self-concept.
4. Although Kruglanski's (1990) need for specific closure encompasses defense
motives, it can also describe impression motivation (see our later discussion) when
a desired conclusion is dictated by interpersonal concerns.
5. By including the value-expressive function under defensive rather than ac-
curacy motivation, we assume that values function primarily as ends in themselves,
rather than as guides to the nature of objective reality.
6. It should be noted that some of the studies reviewed by Frey (1980) may not
have involved defense motivation as we have defined it. For example, Frey and Rosch
(1984) asked subjects to choose whether or not to prolong a manager's contract—a
decision apparently with little consequence for self-relevant attitudes or beliefs.
Moreover, high levels of cognitive dissonance may produce results more akin to ac-
curacy motivation, as the individual seeks to change his or her beliefs to fit reality.

Frey (1982) has in fact found a curvilinear relation between intensity of dissonance
and selective information seeking.

7. Smith et al.'s (1956) social adjustment function can be used to refer to atti-
itudes that are strategically expressed to achieve current interpersonal goals, or to
those attitudes that are expressed to affirm one's valued group identities (see Eagly
& Chaiken, 1993). Impression motivation is more closely aligned with a strategic in-
terpretation of the social adjustment function, whereas one's valued group identi-
ities may invoke defense-motivated processes.

8. The obvious connection drawn between the public self and impression
motivation is not meant to rule out the possibility that other motives may also implicate
the public self. For instance, Cialdini's (1985) theory of symbolic self-completion
proposes that identity goals, conceptually related to defense motives, are best served
in the public domain; that is, "people feel that they need to make self-symbolorizing
public in order to move toward attainment of their identity goals" (p. 148).

9. Tellock (e.g., Tellock et al., 1989) has proposed that accountability concerns
may lead to the use of the low-effort acceptability heuristic; to multidimensional, flex-
ible processing; or to defensive forms of processing. The accountability strategy that
people choose to employ depends on whether the views of an anticipated audience
are known and on the attitudinal constraints of past commitments. We propose that
accountability is appropriately characterized as an impression motivation manipu-
lation in cases where the views of an audience are either known or unknown, and
past attitudinal commitments are minimal. When past commitments are high, ac-
countability is likely to lead to defense-motivated processing.

10. The idea that attitudes once expressed for primarily strategic reasons may
nevertheless persist is consistent with the notion of "sleeping effects" in attitude
research. That is, over time the initial strategic or goal-directed intent of impression-
motivated processing becomes disassociated with expressed judgments, thereby lead-
ing to the delayed impact of judgment-relevant information on later assessed judg-
ments (Eagly & Chaiken, 1993). The sleeper effect interpretation is also consistent
with research on the "communication game" (e.g., Higgins, 1992), which has repe-
tedly demonstrated that communication and judgments that are initially tailored to
fit one's audience may act back on the communicator's own attitude over time.

**REFERENCES**


Barnes, R. E., & Cairns, K. J. (1992). Repression and self-presentation: When audi-
ces interfere with self-deceptive strategies. *Journal of Personality and Social Psy-
chology, 62*, 851-862.


Beyond Accuracy

of its moderating effect on the persuasive impact of source cues. Journal of Consumer Research, 18, 52–62.


