

CHAPTER TWENTY-ONE

Changing Minds

Persuasion in Negotiation and Conflict Resolution

Alison Ledgerwood
Shelly Chaiken
Deborah H. Gruenfeld
Charles M. Judd

The focus of this chapter is on persuasion and attitude change in negotiation, mediation, and conflict resolution. We define *persuasion* as the principles and processes by which people's attitudes, beliefs, and behaviors are formed, modified, or resist change in the face of others' attempts at influence. These attempts are designed to convince targets of persuasion to accept a position on some issue that differs from their current position.

Persuasion is distinct from coercion in that persuasion involves influence designed to change people's minds, whereas coercion involves influence designed to change people's behavior (with little regard for whether they have actually changed their minds). For example, in a conflict between labor and management, company employees might attempt to *persuade* the managers to raise wages by pointing out that higher wages will increase motivation and commitment among workers, thereby benefiting the company as a whole. Or, they might attempt to *coerce* the managers to raise wages by threatening to strike if their demands are not met. Research on social influence has established that if public compliance is not accompanied by private acceptance (in this case, truly believing that there is good reason to raise wages), the outcomes of influence are typically ephemeral and unstable. (See Eagly and Chaiken, 1993.) Persuasion is therefore an important tool in creating lasting settlements between parties in conflict.

This chapter was written with the partial support of a National Science Foundation Predoctoral Fellowship to the first author.

Although many participants in negotiation bring an impressive amount of implicit knowledge to the conflict resolution setting, an increased understanding of the principles and processes that underlie persuasion can help improve the processes and outcomes of a negotiation. In this chapter, we review major theories and findings in the field of persuasion, summarize related research in negotiation or intergroup settings, and discuss implications for conflict resolution.

AN OVERVIEW OF PERSUASION THEORY AND RESEARCH

Although theory and research on persuasion have been brought to bear on the study of negotiation, mediation, and conflict resolution, our perusal of recent reviews (Bazerman, Curhan, Moore, and Valley, 2000; Pruitt, 1998) suggests that conflict researchers may be largely unaware of current advances in understanding persuasion. We begin by illustrating the research paradigm that has guided both historical and contemporary approaches to persuasion. We then discuss a broad theoretical perspective on persuasion that distinguishes between two basic ways in which people think (called a *dual-process* perspective).

The Paradigmatic Persuasion Experiment

Before we discuss theory and research in persuasion, it is important to understand how research is typically conducted in this area of social psychology and how we can (and cannot) relate the results obtained in such settings to real-world situations such as negotiation. In this section, we describe the prototypical persuasion experiment, highlight key differences between the laboratory and the "real world," and discuss how persuasion research has addressed this gap.

The prototypical persuasion study takes place in a university laboratory and investigates what effect exposure to persuasive messages has on an audience's attitudes, beliefs, or behavioral intentions. These studies typically involve a *message* (information about a given issue), a *source* (the communicator of the message), and an *audience* or *recipient* (the person receiving the persuasive message). Most notably, such studies examine the extent to which message recipients' attitudes move toward the position advocated in the message. Such messages are designed to convey not only the specific position advocated by the source, but also a series of arguments that support the truth, desirability, or reasonableness of that position. In most studies, a single message, attributable to a single source, is presented to each recipient. Researchers then typically measure recipients' attitudes toward the issue discussed, perceptions of the source, memory of the arguments presented, and/or freely generated thoughts or ideas about the issue.

The issues addressed in such paradigmatic persuasion studies are wide-ranging, including foreign affairs (for example, should Israel withdraw from the West Bank?), racial issues (affirmative action, policing policies), business and government

proposals (retirement benefits, corporate mergers), and a host of more mundane issues of relevance to targeted audience members' work, school, or personal lives. The traditional paradigm allows experimenters to study how aspects of the source, the message, and the recipient influence attitude change. For example, research has established that persuasion tends to increase as the perceived trustworthiness, expertise, and likeability of a source increase or as the number and strength of the arguments presented increase. (See Eagly and Chaiken, 1993.)

Despite the range of issues and variables studied in persuasion research, the essential paradigm is somewhat constrained in its portrayal of natural persuasion settings. A one-way, source-to-audience model of persuasion only directly reflects some of the contexts in which social influence occurs. Although it might afford an accurate picture of persuasion through exposure to public media such as television, newspaper, and the Internet, or in public forums such as political rallies, it is unlikely to capture the dynamic aspects of persuasion that occur in the kinds of interpersonal interaction that characterize negotiations.

In contrast to the one-shot, one-way message transmissions used in the persuasion paradigm, conflict and conflict resolution involve dynamic, repeated interactions between sources and targets who together engage in bidirectional, mutual attempts at persuasion. Additionally, attempts at influence may be directed not only at one's opponent, but also at the groups represented by each party and at any mediators who might be present (and the mediator may meanwhile attempt to influence the negotiators). Moreover, the messages exchanged during negotiations often address multiple, related issues and the relations among them (such as order of priority), rather than single, independent ones. Finally, in negotiations, the parties are interdependent, rather than autonomous: their outcomes depend on one another's actions (Neal and Bazerman, 1991). These differences between the typical negotiation setting and the typical persuasion paradigm are important to bear in mind as we review the persuasion literature.

Persuasion researchers can and do study persuasion as it relates to complex social settings; they traditionally do so by adding layers of complexity to the basic paradigm described earlier. This involves introducing new variables that capture the essential features of particular settings. For example, researchers have explored the role of multiple sources by varying whether persuasive messages are attributed to a single source or to multiple sources and have examined the effects of direct interpersonal influence by leading study participants to expect an interaction with the message source. (See Eagly and Chaiken, 1993; Petty and Wegener, 1998.)

So, although the prototypical persuasion paradigm serves as the underlying framework for theory and research, it has been treated only as a skeletal framework onto which variables are added to understand more fully the complex processes of persuasion. At the same time, it is clear that the framework represents in some ways a simplification of social influence in real-life contexts, such as those

involving conflict resolution, and it is probably the case that no one experimental paradigm in persuasion can ever address all the inherent complexities of persuasion in such situations with complete success. Nevertheless, we believe that the study of persuasion, using variations of its basic paradigm, can inform us about how attitude change occurs in a wide range of conflict resolution settings. The basic paradigm and its modifications permit us to address a host of issues manageably. The leap from there to real-world conflict resolution settings is sizeable but feasible, given good theory about both conflict and persuasion.

The Heuristic-Systematic Model

Theories of persuasion that explain how attitude change occurs as a result of two qualitatively different modes of processing are called *dual-process theories*. Dual-process perspectives have been increasingly influential in numerous domains of social psychology, including prejudice, stereotyping, and decision making (see Chaiken and Trope, 1999) and have recently been applied in the negotiation domain as well (see De Dreu, 2004).

Our theoretical perspective, called the *heuristic-systematic model* (Chaiken, Giner-Sorolla, and Chen, 1996; Chen and Chaiken, 1999), is one of several dual-process models proven to be important in contemporary social psychology. We treat this model simply as a perspective, borrowing terms and insights from other dual-process models wherever it is useful to do so. Our goal is to acquaint the reader with dual-process models in general and exploit the general perspective these models offer for understanding conflict and negotiation.

Modes of Information Processing. Like other dual-process theories, the heuristic-systematic model proposes two distinct modes of information processing. *Systematic processing* involves attempts to thoroughly understand any information encountered through careful attention, deep thinking, and intensive reasoning about relevant stimuli (such as arguments, sources, and the causes of sources' behavior) and to integrate this information as a basis for subsequent attitudes, judgments, and behaviors. A systematic approach to processing information about the Israeli-Palestinian conflict might entail reading as many magazine and newspaper reports as possible to learn and develop an opinion about the "best" course of action for a given party. Not surprisingly, such systematic information processing entails a great deal of mental effort, requiring both deliberate attention and allocation of mental resources. Thus, systematic processing is unlikely to occur unless a person is both *able* and *motivated* to do it.

Relative to systematic processing, *heuristic processing* is much less demanding in terms of the mental work required and much less dependent on adequate levels of personal or situational capacity (such as knowledge and time). In fact, heuristic processing has often been characterized as relatively automatic insofar

as it requires little cognitive effort and capacity (Chaiken and Trope, 1999). Heuristic processing involves focusing on salient and easily comprehended cues, such as a source's credentials, the group membership of those endorsing an opinion, or the number of arguments presented. These cues activate well-learned decision rules known as heuristics. Examples include "experts know best," "in-group but not out-group sources can be trusted," and "argument length implies argument strength." These simple associative rules allow judgments, attitudes, and intentions to be formed quickly and efficiently, with little additional cognitive processing. A heuristic approach to the Israeli-Palestinian conflict might involve simply adopting the opinion of a noted Middle-East political expert. Put simply, heuristics are the *ifs* in an if-then rule structure, and judgments are the *thens* ("If expert, then agree").

Cognitive Consequences of Processing Modes. Although heuristic processing is more superficial, and systematic processing involves greater depth of detail, neither mode is necessarily more or less rational. Nonoptimal, poor, or biased judgments can ensue from either mode. In the case of heuristic processing, many of the mental rules of thumb that people use to make judgments have proven useful and reliable in the past and should presumably remain so in the present. Moreover, in a world that offers abundant information but too little time or opportunity to think in a detailed, systematic way about every decision, heuristic processing can be highly functional.

However, heuristic processing is obviously fallible. Experts can sometimes be wrong, one's own group is not always right, and numerous reasons are not always good reasons. Thus, although heuristic processing can and often does produce reasonable judgments that people hold with relatively high confidence, it can sometimes produce judgments that are different—and subjectively poorer—than those people would reach if they processed information more systematically. This is because systematic processing of persuasive appeals can increase both the breadth and depth of a person's issue-relevant knowledge in ways that heuristic processing cannot.

Systematic processing involves sustained attention and information search. This can increase the depth of understanding about a particular issue, or at least about a particular point of view. Moreover, when driven by a need for accuracy, systematic processing can involve more objective and evenhanded thinking than heuristic processing, which tends to be biased in favor of prior judgments and habitual responses. Controlled, objective, systematic thought can increase the breadth of knowledge about a given issue and, more importantly, about alternative perspectives from which it can be understood.

For example, systematic processing driven by accuracy motivation can lead to complex thought patterns that involve examining issues from multiple viewpoints and weighing the pros and cons of opposing perspectives. Research on cognitive complexity has established that a number of advantages are

associated with this kind of reasoning, including diminished susceptibility to overconfidence, and superior performance in group problem solving (Gruenfeld and Hollingshead, 1993; Tetlock, 1992). Of special relevance to conflict settings, cognitive complexity has been associated with increasing tolerance for alternative viewpoints, facilitating compromise, and identifying integrative solutions to conflict (Pruitt and Lewis, 1975; Tetlock, Armor, and Peterson, 1994). Hence, individuals who process information in cognitively complex ways are often more effective in conflict and decision-making settings.

Importantly, systematic processing is more likely than heuristic processing to lead to deep, pervasive cognitive restructuring. This means that the cognitive changes that occur as a consequence of systematic processing are likely to persist and thus affect future judgments and behavior, relative to the changes that accompany heuristic processing. (See Eagly and Chaiken, 1993; Petty and Wegener, 1998.) Hence, in the long run, systematic processing may well produce more optimal judgments than heuristic processing.

Sources of Bias. Although enduring, systematic processing is far from foolproof. This is because the cognitive effort associated with systematic processing does not necessarily mean that all possible information will be sought out and weighed in an evenhanded manner. In fact, sometimes systematic processing simply strengthens prior convictions. Systematic processing can be biased both by “cool” cognitive factors (such as a message recipient’s existing attitudes and knowledge structures) and, as discussed later, “hotter” motivational factors (such as a recipient’s goals or ideological commitments).

People’s attitudes can exert a selective effect at virtually all stages of information processing. Existing attitudes bias our attention to information in the environment (we tend to selectively seek and attend to information that confirms our existing attitudes), our interpretation of this information (for example, how extreme we judge a statement to be that is dissimilar to our existing attitudes), and our memory for attitude-relevant information (see Eagly and Chaiken, 1993). The way our minds organize information often makes it easier for us to process information that is congenial to our own attitudes (Eagly and Chaiken, 1993, 1998). Thus, through the cool, cognitive process of critically thinking about a source’s arguments, perceivers may find themselves genuinely swayed by arguments that fit their preexisting beliefs and attitudes.

Importantly, even if perceivers engage in modest to high amounts of systematic processing, heuristics can provide one such source of cognitive bias. For example, consider the possible impact of listening to a Democratic senator versus a Republican senator argue for a new law designed to provide a compromise between prolife and prochoice positions on abortion in the United States. Perhaps you are a Democrat and share a social identity with the Democratic senator. Before hearing the speaker, and without necessarily consciously

thinking about it, you are likely to have already formed the tentative, heuristic-based expectation that a Democrat’s arguments will be more compelling and valid than a Republican’s. This may guide systematic processing in a way that verifies your initial expectation. As you attend to a Democrat’s arguments, you may perceive them to be compelling, and you may elaborate them in ways that make them even more convincing (“This will not only help decrease the number of poor women resorting to unsafe abortions, but also focus attention on other problem areas”). In contrast, if you instead hear exactly the same arguments put forth by a Republican, you may not perceive them to be very credible and may interpret and elaborate the arguments in ways that make them even less plausible (“... and besides, in the long run this will undermine progress toward a woman’s right to choose”).

Motives for Processing

Researchers have identified three types of motives that influence how individuals process information. An *accuracy* motive is geared toward discovering what is correct. The other two “directional” motives are geared toward validating a particular judgment or stance: *defense* motivation is self-focused and egoistic, whereas *impression* motivation is other-focused and relational. (See Chaiken, Giner-Sorolla, and Chen, 1996; Kunda, 1990.)

The motivation to attain accurate judgments is pervasive in everyday life, because we need to accurately understand the world around us in order to behave effectively. When *accuracy motivation* is present but not particularly great, people tend to look for heuristic cues that signal accuracy, such as source credibility. Indeed, communicators often seek to enhance others’ perceptions of them as trustworthy experts and likeable individuals, because this provides heuristic information to the recipients about the accuracy of the advocated position. However, if accuracy motivation increases, heuristic processing may be accompanied by systematic processing: if we want to be very confident that a judgment is accurate, we are often uncomfortable making a snap decision based on a simple heuristic.

How much processing occurs, and thus whether heuristic or systematic processing dominates judgment, depends primarily on (1) the extent to which judgment-relevant heuristics are accessible (for example, the “in-group sources can be trusted” heuristic may be particularly salient in conflict situations; see Chen and Chaiken, 1999); (2) the extent to which personal and situational capacity for systematic processing is adequate (in negotiations, anxiety or time constraints could decrease the capacity for systematic processing); (3) the extent to which one believes that systematic processing will indeed confer better judgments; and (4) the level of judgmental confidence a perceiver desires. Assuming the first three factors are in place, our theoretical perspective predicts that people will process as little as possible but as much as necessary: in

general, people want to satisfy their goals as efficiently as possible, without expending unnecessary effort. As the desired level of confidence increases, the minimal amount of processing necessary to reach this "sufficiency threshold" increases as well (Chaiken, Giner-Sorolla, and Chen, 1996).

Thus, when accuracy motivation is modest (or when capacity is inadequate), heuristic cues such as source expertise, consensus opinion, and people's own attitudes and ideologies can exert a powerful influence on judgment—regardless of persuasive arguments or other information that might otherwise temper or reverse the heuristic-based judgment (Chaiken, Wood, and Eagly, 1996; Petty and Wegener, 1998). Ample systematic processing occurs only if accuracy motivation is higher—for example, if the issue is of great personal importance or the perceiver is accountable to others (but bear in mind that accuracy-motivated systematic processing can still be biased by initial heuristics).

Although accuracy motivation is pervasive, other motivations may often supplant or at least compete with it (Chaiken, Giner-Sorolla, and Chen, 1996). *Defense motivation* compels message recipients to process information in ways that protect and validate beliefs, images, and interests that are important to their sense of self. For instance, these beliefs could be about one's own valued qualities ("I'm intelligent"), one's fundamental underlying value commitments ("Anyone can achieve success in my society through hard work"), or one's identity in valued groups ("Being Jewish is important to who I am and what I value"). These self-interests or self-definitional beliefs are defended because the perceiver feels, at least unconsciously, that overall personal integrity and well-being would be threatened if they were challenged.

When defense motivation is present but moderate, desired confidence and therefore the amount of processing are also moderate. Thus, heuristic processing dominates judgment—but defensively, or selectively. In other words, since the goal of processing is to arrive at judgments that protect the self, heuristics are selected to the extent that they serve this goal. For example, a defense-motivated target might invoke the heuristic "experts know best" if the position of an expert source reinforced the target's cherished values and social identity, but might choose a different heuristic (for example, "out-group sources can't be trusted") if the position threatened his social identity. When defense motivation is strong, additional, systematic processing occurs until the target is sufficiently confident in her self-protective judgment. However, defense-motivated systematic processing is biased by one's favored position. For example, targets tend to counterargue information that threatens their preferred position (Eagly, Kulesa, Chen, and Chaiken, 2001).

The third broad motivational concern addressed by our perspective is *impression motivation*, which involves considering the interpersonal consequences of expressing a particular judgment in a given social context (such as in an interaction between two negotiators). Here, the target's goal is to express positions

that are socially acceptable to other people in their environment. As with defense motivation, impression-motivated processing is not necessarily self-conscious and is marked by a selective bias.

Impression-motivated heuristic processing entails selective application of heuristics that ensure a smooth interaction with specific others. For example, when interacting with a person or group whose views on an issue are unknown or vague, a perceiver might invoke the heuristic "moderate judgment minimizes disagreement." On the other hand, when others' views are known, a "go along to get along" heuristic might better serve the same goal.

With sufficient cognitive capacity and higher levels of impression motivation, people may also process systematically, but selectively. Thus, a negotiator who is motivated not only to be well-liked by others but also to appear forceful and expert may systematically process information from other participants so as to be prepared to counterargue their positions and arguments. Importantly, parties in conflict resolution are often concerned with the impressions they make on multiple audiences, and the content of the desired impressions may differ depending on the audience. For example, a negotiator seeking to resolve an international conflict may be motivated to look collaborative to the other party, tough and competent to his constituency, and dignified to the world at large. Which of these audiences is most salient at a given moment may influence which desired impression motivates the negotiator's information processing.

Illustrating the importance of impression-motivated processing, Chen and Chaiken (1999) reported a study in which participants anticipated a discussion about a social issue with a partner who allegedly held either a favorable or an unfavorable opinion on the issue. Before this discussion, participants read "imagination scenarios" subtly designed to activate (or "prime") either the accuracy goal of determining a valid opinion or the impression goal of getting along with another person. After this task, participants familiarized themselves with the discussion issue by reading an evaluatively balanced essay concerning the issue (in this case, whether election returns should be broadcast while polls are still open). Participants then listed the thoughts that had occurred to them as they read the essay and indicated their own issue attitudes. Finally, they learned that there would be no actual discussion and were excused.

Impression-motivated participants expressed attitudes that were much more congruent with their alleged partners' attitudes than did accuracy-motivated participants: when the partner favored one side of the issue, they favored the same side, whereas when the partner opposed it, they opposed it. Interestingly, accuracy-motivated and impression-motivated participants exhibited the same amount of systematic processing (as measured by the number of issue-relevant thoughts that were listed). However, whereas accuracy-motivated participants' systematic processing was open-minded and unbiased by their partners' attitudes, impression-motivated participants exhibited systematic processing that

was biased toward their partners' attitudes. For example, when the partner favored allowing broadcasts of election returns while the polls were still open, impression-motivated participants listed thoughts that revealed much more favorable thinking about arguments supporting the broadcasting of returns and more unfavorable thinking about arguments opposing it.

Although accuracy motivation, defense motivation, and impression motivation may sometimes operate in isolation from one another, it is likely that multiple motives may be relevant in any given setting. A negotiator, for example, may be motivated both to attain an accurate understanding of the opposing party's needs and demands and to present an image of himself as tough and assertive. Thus, both heuristic and systematic processing may be influenced by more than a single motivation.

To examine contexts in which multiple motives are operative, Zuckerman and Chaiken (cited in Chen and Chaiken, 1999) conducted an experiment similar to the Chen and Chaiken study described above. Instead of directly activating accuracy versus impression motivation, Zuckerman and Chaiken used a mood manipulation to influence the relative importance of the motivations. Participants were randomly assigned to watch either a comedy routine by Jerry Seinfeld (the "good mood" condition) or a videotape concerning house building (the "neutral mood" condition). Because positive mood generally increases people's confidence in their own abilities and hence their tolerance for interpersonal conflict, it was hypothesized that placing participants in a good mood would mitigate impression motivation.

Consistent with the idea that impression motivation would drive information processing in a basic get-acquainted discussion with a partner, participants who watched the neutral film engaged in impression-motivated processing, favoring the issue more when their alleged partner did so. In contrast, consistent with the idea that being in a positive mood increases toleration for disagreement or self-confidence in expressing one's own attitude, positive-mood participants expressed attitudes that were relatively unaffected by their partner's position. Moreover, they arrived at their attitudes through unbiased, accuracy-motivated systematic processing.

Conclusions Regarding the Two Modes of Cognitive Processing

Although the heuristic-systematic model focuses primarily on the motivational and processing mechanisms that govern *recipients'* responses to persuasive communications, it also has important implications for those who seek to persuade. To increase the potential for evenhanded consideration of issues and long-term attitude change, negotiators and mediators should in general seek to facilitate accuracy goals and maximize systematic processing among all parties. Additionally, negotiators should attempt to manage the heuristic cues included in their messages. Negotiators can, for example, demonstrate their knowledge

and authenticity to maximize others' perceptions that they are expert, trustworthy, and likable. They can also be aware of and try to mitigate factors, such as time pressure and stress, that heighten reliance on heuristic processing by limiting motivation and capacity to process. By facilitating mutual persuasion, participants in conflict resolution can increase the likelihood of identifying win-win solutions and creating long-lasting agreements.

PERSUASION IN THE CONTEXT OF CONFLICT RESOLUTION

In recent years, persuasion theory has been increasingly incorporated into research on the processes underlying negotiation and conflict resolution. In this section, we discuss these advances in light of our heuristic-systematic perspective and address other areas of persuasion research that have implications for conflict situations.

Heuristic and Systematic Processing in Negotiation Settings

Recent research exploring heuristic and systematic processing in negotiation simulations has confirmed the utility of the dual-process perspective for understanding information processing in conflict settings. When negotiators have modest levels of motivation (or low cognitive capacity), they often rely on heuristics such as fixed pie assumptions (the perception that a negotiation is a zero-sum game), initial anchor values (for example, first offers, or information about the value of agreements typically reached), and stereotypes about an opponent's group membership. (See De Dreu, 2004, for a review.) In contrast, when motivation and capacity are relatively high, reliance on these heuristics tends to decrease as systematic processing increases.

Researchers have identified several factors that influence the extent to which people process information in negotiations. (See De Dreu, 2004.) These factors include both stable individual differences and temporary elements of a given situation that influence motivation and/or capacity. For instance, individuals high in the dispositional need for cognitive closure—that is, the desire to reach a judgment quickly and avoid ambiguity (Webster and Kruglanski, 1994)—are more likely to rely solely on heuristics than are those who have a low need for closure.

Temporary, situation-specific factors such as the presence of a highly involving task or process accountability (the need to justify the way in which a decision is made) tend to increase the extent of systematic processing, whereas time pressure and aversive conditions (noise, for instance) tend to decrease such processing. For example, De Dreu (2003) examined the effect of time pressure on fixed-pie perceptions. Business students were placed into pairs and asked to play the role of a buyer or seller in a negotiation over the purchase of a car. The

negotiation task was designed to hold integrative potential: the different issues varied in importance to the two negotiators, so that an integrative solution that capitalized on this variation in priorities would be more beneficial to both negotiators than a 50/50 split based on a fixed-pie assumption. Participants were led to believe that they had either plenty of time in which to complete the negotiation (low time pressure condition) or relatively little time (high time pressure condition). Participants were more likely to revise their fixed-pie assumptions, which led to higher joint outcomes, under low rather than high time pressure. These results suggest that time pressure reduces systematic processing, heightening reliance on heuristic cues such as fixed-pie perceptions and preventing negotiators from capitalizing on integrative potential.

Multiple Motives in Conflict Resolution

Historically, the study of conflict has emphasized the importance of underlying motives in driving behavior. A negotiator may be motivated to further her own party's interests, to cooperatively explore integrative potential in an effort to expand the pie, to defend her own beliefs and those of her group, and/or to convey a favorable image of herself to her opponent, any third parties, and her constituency. Although the classic definition of the negotiation as a "mixed-motive" situation focuses mainly on negotiators' conflicting motives of cooperation and competition, conflict settings can be characterized by a wide range of motivations held by a wide range of participants. In the following discussion, we examine the cooperation-competition distinction common in the negotiation field, and then return to our three broad motives of accuracy, defense, and impression, now in the context of conflict resolution.

Social Motivation. The theory of cooperation and competition (Deutsch, 1973) and dual-concern theory (Pruitt and Rubin, 1986) suggest that social motives are critical to understanding negotiator behavior. A basic distinction between two broad social motives—motivation to maximize one's own outcomes (a competitive, egoistic motivation) and motivation to maximize joint outcomes (a cooperative, prosocial motivation)—is frequently utilized in conflict research and has been shown to influence information processing in these settings. (See De Dreu and Carnevale, 2003.)

Social motivation may arise from individual differences (such as *social value orientation*: the tendency to prefer a certain distribution of outcomes between oneself and another person, see Kuhlman and Marshello, 1975) or from elements of the situation. Situational elements shown to increase prosocial motivation include instructions from trusted authorities to be cooperative (versus competitive), reinforcement for cooperative (versus competitive) behavior, expecting a future interaction with the other party, viewing a task as a cooperative (rather than competitive) enterprise, and focusing on similar (versus

differing) group memberships. (See De Dreu, 2004, for a review.) For example, Liberman, Samuels, and Ross (2004) found that simply changing the title of a Prisoner's Dilemma Game from "The Wall Street Game" to "The Community Game" drastically increased cooperative behavior among Stanford undergraduates, presumably by increasing participants' motivation to cooperate with their partner during the task. Negotiators and mediators can use such techniques to increase prosocial motivation in conflict settings. Changing the terminology associated with a negotiation (for example, calling it "joint problem solving"), emphasizing the ongoing relationship between parties, and highlighting shared group membership could all help to increase cooperative behavior.

Like defense and impression motivation, social motivations can lead to selective processing geared toward fulfilling competitive or cooperative goals. For example, De Dreu and Boles (1998) measured participants' social value orientation and asked them to read a list of competitive and cooperative heuristics (for example, "your gain equals my loss" and "equal split is fair") in preparation for a negotiation task. Participants were later given a surprise memory quiz in which they were asked to recall as many of the heuristics on the original list as possible. Prosocial participants recalled more cooperative than competitive heuristics, whereas egoistic participants recalled more competitive than cooperative heuristics. Social motivation thus influenced information processing such that individuals remembered heuristics consistent with their goal to be competitive or cooperative.

Although competitive and cooperative motives are clearly basic elements of conflict situations, we may gain a finer-grained understanding of persuasion in these contexts by linking social motives with the tripartite analysis of motivation discussed earlier. Competitive, or egoistic, motivation is often comparable to defense motivation: both involve concern with protecting the self or the in-group against threats to actual resources or to self- or group esteem. Consistent with this idea, cross-cultural research has shown that members of individualist cultures (typically assumed to be more egoistic) often view themselves as more fair than other people, whereas members of collectivist cultures (typically assumed to be more prosocial) are less likely to exhibit this self-serving bias (Gelfand and others, 2002). Egoistic motivation may therefore involve a desire to defend oneself and one's group.

In contrast, prosocial motivation may often be associated with accuracy and/or impression motivations. Concern with both parties' outcomes should give rise to accuracy motivation, because open-minded processing of all available information provides the best route to discovering integrative potential and maximizing joint outcomes. Prosocial motivation may also be associated with impression motivation: the desire to cooperate and the desire to make a good impression seem reciprocally linked. If two countries want to cooperate with each other, their leaders will probably seek to establish and maintain a positive

relationship; conversely, if the leaders are motivated to maintain a positive relationship, they will often seek to cooperate.

Thus, whereas egoistic motivation and defense motivation seem closely intertwined, prosocial motivation may be linked to accuracy and/or impression motivation. We turn now to consider how these three broad motives operate in conflict settings.

Accuracy Motivation. Accuracy motivation in conflict situations may be induced by a number of factors, including prosocial motivation as discussed above. Certain kinds of accountability can also give rise to accuracy motivation (see Lerner and Tetlock, 1999). When an individual expects to discuss an issue with, justify a decision to, or be evaluated by an unknown audience, he or she tends to engage in preemptive self-criticism, displaying motivation to arrive at an accurate conclusion (see for example Tetlock, Skitka, and Boettger, 1989). Thus, when a negotiator is accountable to an audience whose views are unknown, he is likely to process information in an open-minded fashion. To test this idea in a negotiation context, De Dreu, Koole, and Steinel (2000) randomly assigned business student participants to high-accountability and low-accountability conditions before asking them to engage in a mock negotiation over the purchase of a car. In the high-accountability condition, participants expected that their negotiation strategies and decisions would be reviewed and evaluated several days later by an experienced negotiator and a psychologist. In the low-accountability condition, participants did not receive this information. The results showed that under high accountability, participants were more likely to revise their fixed-pie assumptions and obtain higher joint outcomes. Increasing accuracy motivation therefore increases the likelihood that integrative solutions will be identified and utilized when they exist. In general, accuracy goals seem desirable in conflict situations because they motivate people to seek out and consider information in an open-minded way, which is critical for discovering potential solutions and accepting necessary compromises.

Defense Motivation. Unfortunately, we suspect that accuracy motivation is unlikely to naturally dominate in conflict situations, especially in the early stages of a negotiation. Parties often assume that their interests are diametrically opposed, at least in Western cultures (see Morris and Gelfand, 2004), and therefore any gain by an opposing party seems to mean a loss for one's own. Group or individual identities can also be perceived as zero-sum, in that the validation of one party's identity and history delegitimizes that of the other (Kelman, 1999). A wife involved in a divorce might assume not only that her husband values the antique dresser as much as she does, but also that any acknowledgment of the validity of his position will undermine the legitimacy of her own. Such perceptions motivate people to defend their resources and

identities and result in selective processing of information to bolster their positions.

Egoistic, competitive motives may also be triggered by aspects of the situation that cue competition in a given culture. For example, Kay, Wheeler, Bargh, and Ross (2004) found that exposing participants to objects associated with the business world (such as briefcases and business suits) increased their selfish, competitive behavior in an ultimatum game (a task in which participants proposed a take-it-or-leave-it split of money between themselves and an unknown partner). Simply seeing objects typically associated with competition can therefore lead to competitive behavior and may trigger defense-motivated, selective information processing. Removing such objects from a negotiation context or using a setting associated with cooperation may help limit defense motivation and encourage cooperation between parties.

Accountability to a mediator, arbitrator, or one's constituents can also activate defense motivation when a negotiator is committed to a certain position. Research shows that although accountability to an unknown audience can increase accuracy motivation, as discussed above, accountability instead results in "defensive bolstering" of an initial viewpoint when a person is highly committed to this position (Tetlock, Skitka, and Boettger, 1989). Because opposing parties often enter negotiations highly committed to their opinions, accountability to others may tend to activate defense, rather than accuracy, motivation.

Persuasion research indicates that if systematic processing is activated by defense motivation, parties seek out and attend to information that supports the desire to dismiss, resist, and reject an opponent's overtures, and they resist attending to information that supports the appropriateness of cooperative responses. When defense motivation is primary, one's goal in processing is to resist influence, to maintain prior beliefs and commitments, and to look for confirmation of those beliefs in the messages that are processed. This sort of motivated processing leads parties to overestimate the divergence between their positions and can exacerbate conflict (Keltner and Robinson, 1993).

Impression Motivation. In addition to defense motives, impression motives may also operate in the early stages of negotiation, since parties are eager to create a specific impression for various audiences. The actual or imagined presence of others determines the audience toward whom an impression motive is geared. For example, a negotiator may focus on conveying an impression of toughness when face-to-face with an opponent, but might instead play the role of a victim when communicating with a third party to gain sympathy. If both parties are in the room at once, the target of the impression goal may vary depending on the relative salience of the two parties from moment to moment. When the negotiator's attention is drawn toward one party as opposed to the other, the salient party may become the focus of impression management attempts.

A number of factors may influence impression motivation in negotiation situations. When an individual is accountable to a known audience and has low commitment to a position, impression motivation is triggered and the individual processes information so as to align his own position with that of the target audience (Lerner and Tetlock, 1999). If, for example, a mediator is accountable to his superiors and knows that they believe Party A aggressed against Party B, he may process information to selectively support his superiors' position and therefore come to believe in Party A's culpability himself.

One's role as an advisor may also affect impression motivation. Jonas, Schulz-Hardt, and Frey (2005) found that participants playing the role of an advisor who made a nonbinding *recommendation* to a client were more even-handed in their information processing than were the clients. However, when advisors were asked to make a binding *decision* on behalf of their client, impression motivation was triggered, and information processing was selectively geared toward being able to justify their recommendation to their client. These results suggest that when a representative is negotiating on behalf of a client, asking for a nonbinding recommendation will maximize accuracy motivation, whereas allowing the representative to make a binding decision on behalf of the client can lead to biased processing and suboptimal decisions.

Impression motivation may have both positive and negative effects on information processing in conflict situations. On the one hand, when negotiators wish to project an image of themselves as cooperative, they may be motivated to process information open-mindedly and seek to maximize fairness and joint outcomes. For example, Ohbuchi and Fukushima (1997) found that individuals higher in general impression-management concerns were more cooperative in their responses to an unreasonable request, when capacity and motivation were sufficient. In such instances, impression motivation and cooperative tendencies may be closely associated. On the other hand, when the desired image is more competitive, impression motivation may lead to selective processing toward justifying one's competitive behavior. If a negotiator wants to appear tough, she may selectively attend to and remember information that allows her to successfully convey and justify a tough image. An impression-motivated negotiator seeking to project a cooperative image should be especially likely to discover integrative potential in a conflict situation; an impression-motivated negotiator who instead wants to project a competitive image may be especially unlikely to question fixed-pie assumptions.

Implications. Parties in conflict often perceive their positions to be opposing and irreconcilable. Initially, negotiators may therefore attempt to coerce the opposition into accepting an outcome that fails to achieve the latter's own stated position. However, successful conflict resolution requires that opposing parties turn away from their public positions to find compatible issues within their

underlying interests (Neale and Bazerman, 1991; Rouhana and Kelman, 1994). The discussion of underlying needs and interests makes it increasingly possible to persuade one another both that these needs are legitimate and that sacrificing some things of lesser interest may allow each side to gain what is more important to them. It is only through this sort of persuasion—rather than coercion—that successful and lasting resolution can be achieved. This can occur, however, only if opponents are both willing and able not only to transmit but also to receive information. In other words, negotiators must be willing and able to persuade and to be persuaded. Moreover, they must want to search for information that disconfirms, as well as information that confirms, their prior beliefs about their opponents' interests. If parties in negotiation begin to change one another's minds about the nature of the conflict, the issues at stake, and the compatibility of underlying interests, then cooperation can ensue.

From a persuasion perspective, then, the key to successful conflict resolution is to move parties toward open-minded, accuracy-motivated processing. Participants should seek to increase the accuracy motivation of all parties, including themselves, and to dampen defense and impression motives that inhibit cognitive flexibility and willingness to consider information that disconfirms prior beliefs.

In the final sections of this chapter, we discuss other factors that may influence the extent of accuracy-driven processing in conflict situations. Awareness of these factors should help negotiation participants craft situations that encourage open-minded processing and identify potential sources of bias in their own and others' reasoning.

Self-Affirmation

Affirming an important aspect of self-image can reduce defense-motivated processing in response to self-relevant threats in other domains. According to self-affirmation theory (Steele, 1988), individuals are motivated to maintain a positive image of themselves and respond to threatening information defensively in order to maintain this positive self-concept. However, if the self is positively affirmed in some way, this can buffer the self-concept against a subsequent threat and reduce defensive processing.

To test this idea, Sherman, Nelson, and Steele (2000) asked undergraduates who did or did not drink coffee to read an (actually fictitious) article about the serious health risks posed by caffeine consumption. Beforehand, some participants rated their agreement with ten statements, half of which were associated with a personal value that they had previously ranked as highly important. This manipulation therefore affirmed a central value for each participant. The experimenters then measured participants' acceptance of the message relating caffeine and health risks. In the absence of self-affirmation, coffee drinkers (for whom the message was personally threatening) showed less acceptance of the

article's conclusions, compared to noncoffee drinkers. Self-affirmation reversed this effect: coffee drinkers were even more accepting of the message than non-coffee drinkers, suggesting that affirmation decreased defensive processing and allowed accuracy motivation to dominate. After self-affirmation, coffee drinkers were motivated to systematically process the self-relevant information in an open-minded way.

Further research has confirmed that self-affirmation increases openness to belief-disconfirming information, buffering against the threat of messages that counter self-relevant attitudes. When such messages no longer feel threatening, self-relevance motivates systematic and accuracy-driven processing. (See, for example, Correll, Spencer, and Zanna, 2004.) Self-affirmation has also been shown to effectively de-bias processing when identity concerns are high and can increase concession-making and positive attitudes toward one's partner in a negotiation situation (Cohen and others, 2005). The most salient identities in conflict situations tend to be those most likely to interfere with open-minded processing of information related to the conflict: an individual is most likely to think of his identity as a Democrat when debating with a Republican, as a manager when negotiating with labor, and as a father when arguing with his son. Research on self-affirmation suggests that affirming the self-concepts of those involved in conflict resolution can reduce motivation to defend salient identities and increase accuracy-motivated processing.¹

Social Identity

Because social identities tend to be highly activated in conflict situations, it is important to understand the role that group identification plays in persuasion. Group identification, or the subjective perception that one belongs to a group, defines a particular group as an in-group, opposing groups as out-groups, and irrelevant groups as neutral groups. For example, during the Balkan civil wars, a Bosnian Serb would probably have considered other Bosnian Serbs part of their in-group, Bosnian Muslims part of an opposing out-group, and Italians a neutral group.

Despite the intuitive importance of understanding how group categorizations affect persuasion, there is relatively little research on the topic. Early theories of social influence suggested that an in-group can exert considerable impact on the attitudes and behaviors of its members, either through normative pressure resulting in public compliance or through providing information about reality, resulting in more private, long-term acceptance (for example, Deutsch and Gerard, 1955). Kelman (1958) expanded this dichotomy, proposing three general processes by which social influence occurs: compliance, or public acceptance of a group's stance in response to social incentives for agreement; identification, or private and relationship-specific acceptance of another's position in order to maintain a positive relationship; and internalization, or private and

complete acceptance of another's position by integrating it into one's own value system.

In recent years, persuasion researchers have again begun to explore how group membership influences attitude change. The application of dual-process logic and methods has provided new insight into when and how group identification affects persuasion, although much remains to be learned. Here, we summarize findings of particular relevance to conflict resolution.

In general, shared group membership—the perception that the audience and the source belong to the same social category—tends to increase persuasion relative to unshared group membership. Depending on the context, this can occur primarily through heuristic or systematic processing. (See Fleming and Petty, 2000; Mackie and Queller, 2000 for reviews.) When an issue is not particularly relevant to an individual or their in-group (for example, acid rain problems in the northeastern United States are not particularly relevant to university students in California), and when a source's position is known, individuals tend to rely on an in-group agreement heuristic and accept the position advocated by the in-group member without attention to argument strength. However, when an in-group source's position is unknown, individuals process systematically in an effort to determine the source's position, and thus strong arguments lead to greater persuasion compared to weak arguments. Moreover, when an issue is relevant to group members (for example, oil drilling off the California coast is relevant to university students in the area), the attribution of a message to an in-group source may increase both motivation and capacity for systematic processing by making the in-group salient. (See Mackie and Queller, 2000.)

In all of these studies, messages from a neutral group source had no substantial effect on attitudes. There is little research on out-group sources. A message from an opposing group may be subject to the same "ignore" heuristic as messages from a neutral group; on the other hand, because the presence of an out-group source is likely to make in-group identity salient, "ignore" or "don't trust out-groups" heuristics may combine with more motivated, systematic processing to determine persuasion outcomes.

It is clear, however, that highlighting a common in-group identity between source and target can increase persuasion by providing an important heuristic cue that the message is valid. Negotiators and mediators would therefore do well to make common in-groups salient when conveying information to each other. For example, a mediator might increase the persuasiveness of a proposed agreement by highlighting an identity she shares with each negotiator (such as mother or Muslim). Importantly, a social identity must be salient in order to influence persuasion (Fleming and Petty, 2000). So, a mediator and negotiator's shared identity as mothers will increase mutual persuasion only so long as they continue to think of themselves as mothers.

Group endorsement of a position can also lead individuals to *selectively* process information. Individuals may be motivated by defense or impression concerns to agree with the in-group and disagree with the out-group and may therefore process information selectively to arrive at these preferred judgments (Fleming and Petty, 2000). For example, Cohen (2003, Study 4) asked liberal undergraduate students to evaluate a proposal for a generous (stereotypically liberal) federally funded job training program. Half the participants learned that Democrats opposed and Republicans supported the program, while half received no information about group endorsement. On average, participants in the latter condition supported the program, in keeping with their ideological beliefs. However, when participants were told that their in-group opposed the program, they showed biased processing of the information presented in the proposal, selectively interpreting ambiguous information and selectively attending to unambiguous information to support the in-group position. As a result, participants in the in-group-oppose condition were more likely to oppose the program themselves, compared to participants in the no-information condition. Moreover, the Democrat participants believed that group endorsement influenced the attitudes of other Democrats and (even more strongly) Republicans, but perceived themselves to be relatively unaffected by this information.

Information about group positions can thus strongly influence attitudes by inducing selective information processing in support of the in-group position, but people may be unaware of this bias in their own judgments. Such effects can hinder conflict resolution: once a group takes a position on an issue, in-group and out-group members will likely diverge in their attitudes regardless of actual issue content, exacerbating conflict. Furthermore, self-serving and group-serving perceptions of bias ("I am more objective than anyone else," "my group is more objective than the out-group") make it difficult to convince someone that other opinions may be legitimate or that changing their own opinion may be necessary. On the other hand, there may be a silver lining: if individuals tend to follow their group's lead in forming opinions about relevant issues, then in-group endorsement of peaceful conflict resolution should be a powerful persuasive tool. Publicizing in-group support for de-escalation, or later in the process for a particular agreement, may help consolidate general support for reconciliation.

Majority and Minority Sources

In addition to being delivered by an in-group, neutral group, or out-group, messages can come from numerical majority or minority sources within those groups. Initially, theorists assumed that majority and minority sources always led to fundamentally different modes of processing. Moscovici (1980) proposed that numeric majorities engender relatively superficial information processing, which is focused on the stated position and geared toward aligning oneself with

that position to gain approval and avoid rejection. This, he suggested, leads mainly to short-term public compliance, rather than true change in one's private attitudes. Minorities, on the other hand, can instigate deeper processing of information as an individual attempts to "see what the minority saw, to understand what it understood" (Moscovici, 1980, p. 214). This should lead to more real, enduring change in an individual's privately held attitudes. In a similar vein, Nemeth (1986) argued that majority sources focus the perceiver's attention on the proposed position, resulting in convergent thinking (concentration on information that relates to the position), whereas minority sources focus attention on the existence of alternate positions, resulting in divergent thinking (examination of information that does not necessarily relate to the majority position and detection of novel solutions). In both theories, majorities are associated with more superficial processing and minorities with deeper, more systematic processing.

Subsequent research provided considerable support for these dual-process views. (See Maass and Clark, 1984.) Majority influence was often associated with public conformity, while minority influence tended to cause changes in private judgments. Furthermore, private acceptance of minority positions, but not public conformity to majority positions, was found to be associated with increased systematic processing and increased resistance to counterpersuasion (Martin, Hewstone, and Martin, 2003). Several limiting conditions on minority influence were also identified. For example, a minority source is influential to the extent that it behaves consistently; that arguments are presented flexibly as opposed to rigidly; that the position advocated is becoming more, rather than less, mainstream over time; and that minority and majority differ only in terms of position, not group membership. (See Maass and Clark, 1984.)

Although evidence from numerous studies confirmed that minority influence can lead to private attitude change (see Wood, Lundgren, Ouellette, Busceme, and Blackstone, 1994), other research challenged the notion that minority sources are uniquely associated with systematic processing. For instance, Martin and Hewstone (2003) found that when an advocated position would only moderately affect participants' self-interest, a minority source led to systematic processing, whereas a majority source did not. However, when the advocated position was linked to a highly negative personal outcome, only majority sources instigated systematic processing.

One way to integrate these findings is to consider how majority and minority sources can influence information processing at a number of distinct steps. First, heuristic associations with majority and minority sources initially suggest to perceivers that the majority is correct and the minority is incorrect. Thus, when capacity or motivation are relatively low, majority positions should be accepted and minority positions rejected with little further processing of information (Moskowitz and Chaiken, 2001). Second, when majority or minority positions are unexpected

(for example, a majority arguing against its own interests or a minority consistently and thoughtfully arguing against the majority), it may lead people to question their initial preconceptions and increase their motivation to accurately understand a given issue. Third, majorities and minorities may influence type of motivation, as well as overall level: a majority source, if present, will probably induce impression motivation, as well as accuracy motivation in some cases (Maass and Clark, 1984); a minority source may instigate accuracy motivation when countering the majority on a low-relevance issue, but defense motivation when countering the majority on a high-relevance issue (Martin and Hewstone, 2003). Thus, although a variety of contextual variables may influence whether majority and/or minority sources lead to systematic processing and attitude change, understanding the effects of these variables at each stage of information processing should allow us to predict whether a persuasion attempt is likely to be successful.

Taken as a whole, the literature on majority and minority influence has a number of implications for conflict resolution. First, it suggests that when seeking to persuade a constituency to adopt a peaceful resolution strategy or a particular agreement, the impact of the appeal may depend upon whether a majority of the public endorses the advocated position. Much of the research on minority influence suggests that minority sources will promote greater systematic processing and longer lasting attitude change, but it may be that if negative personal outcomes are salient (as they may often be in such situations), majority persuasion will induce more extensive processing. In addition, appeals will be more persuasive when support for the advocated change seems to be increasing. (See also Kay, Jimenez, and Jost, 2002.)

Finally, this literature draws attention to the idea that what is unexpected can sometimes induce accuracy-motivated, systematic processing, leading to a revision of assumptions and an open-minded consideration of all available information. Negotiators often assume their opponents to be competitive and self-interested; these assumptions may be revised if negotiators offer unexpected concessions, talk about the other's interests rather than their own, or focus on gains that the other can accrue from settlement rather than losses that loom if a suboptimal settlement is adopted. Initially, the opposition might meet such tactics with great suspicion, since defense motives are apt to be strong and the belief that communications are motivated by something other than self-interest seems unlikely. Nevertheless, with persistence, this sort of tactic should gradually induce the opposition to adopt more of an accuracy motivation orientation, at which point true persuasion rather than coercion is possible.

Affect

Specific emotions and general positive or negative moods permeate our lives across a variety of situations, including those involving conflict. Initially,

dual-process-oriented research suggested that mood influences whether information is predominantly processed in a heuristic or systematic mode. The picture that emerged from a large number of experiments indicated that people in a positive mood rely more heavily on heuristics and show reduced levels of systematic processing, whereas people in a negative mood rely less on heuristics and process more systematically. (For a review, see Mackie and Worth, 1991.) For example, Bodenhausen, Kramer, and Süsner (1994) induced positive mood in a variety of ways, asking some participants to write about a happy event, to contract facial muscles associated with smiling, or to listen to happy music. After the mood manipulation, happy and neutral mood participants took part in an ostensibly unrelated study, in which they were asked to make judgments about the guilt of a student who had been accused of an offense (such as cheating). Half the participants also learned that the student was a member of a group stereotypically associated with that offense. The results showed that participants in a neutral mood did not rely on the stereotype information when making their judgments about the students' guilt, whereas participants in a happy mood believed it was more likely that the student was guilty when stereotype information was present. In other words, happy mood increased reliance on stereotypes as heuristic cues about the student's guilt.

Why might positive and negative moods influence reliance on heuristic and systematic processing? Schwarz (1990) has proposed that positive moods signal a safe and satisfactory environment, indicating that effortful processing and problem solving is unnecessary. In contrast, negative moods suggest that something is wrong with the current situation and promote systematic processing in an effort to address the current problem. Other researchers have proposed that individuals are motivated to maintain positive moods and therefore avoid complex thinking that might detract from general elation; meanwhile, negative moods motivate people to change how they feel and therefore process systematically in order to discover what is causing the negative state and how to fix it. (See, for example, Cialdini, Darby, and Vincent, 1973.)

Mood may also function as a heuristic. When motivation and capacity are low, individuals may tend to assume that their moods are related to a persuasive message or source, and form their attitudes accordingly. For example, Schwarz and Clore (1983) asked participants to remember happy or sad events or interviewed them on sunny or rainy days to induce positive or negative moods, respectively. When subsequently asked about their general life satisfaction, happy participants reported higher satisfaction than sad participants. Such results suggest that even when mood is unrelated to the question at hand, people may use their feelings as a heuristic cue in forming their attitudes. Schwarz and Clore (1983) also found that when participants in a

negative mood realized their mood state was unrelated to the current judgment, it ceased to influence their attitudes. Negotiators may therefore lessen the negative effects of a bad mood on their own or others' attitudes by attributing the mood to an outside source when possible. For instance, acknowledging a rainy day's influence on one's mood should decrease one's tendency to mistakenly attribute a dejected feeling to the proposed agreement at hand.

The general picture emerging from the research just described suggests that positive mood increases heuristic processing, while negative mood increases systematic processing. However, the story is more complex. Alice Isen and her colleagues have demonstrated that positive mood can lead to increased cognitive flexibility and heightened creativity. For example, Carnevale and Isen (1986) explored the effect of positive mood on integrative behavior in a bargaining task. Positive- and neutral-mood dyads negotiated over the purchase price of three commodities in a hypothetical market. In a face-to-face interaction, positive-mood pairs found more creative, integrative solutions than negative-mood pairs. Other research has shown that positive affect can lead people to focus on shared group memberships (Dovidio, Gaertner, Isen, and Lowrance, 1995). Thus, whereas a large body of literature would suggest that positive mood should increase reliance on heuristics, such as fixed-pie assumptions and stereotypes, other research indicates that a happy mood can improve integrative outcomes in a bargaining task and increase perceptions of common in-group identity.

Other complexities deserve attention as well. Although dividing affect into the broad categories of positive and negative mood is parsimonious, specific emotions and the intensity of affect are also important to consider. For example, anxiety could be categorized as a negative mood, but further attention to this specific emotion has revealed that its effects on information processing are considerably more complex than the positive-negative mood distinction would imply (see Sengupta and Johar, 2001). Categories besides positive versus negative may also prove useful for understanding the effects of moods. For example, some researchers have distinguished between affect associated with uncertainty (including sadness, anxiety, fear, and so on) and affect associated with certainty (including many positive moods, as well as anger and disgust; see, for example, Tiedens and Linton, 2001).

New theories in the field continue to emerge in an attempt to reconcile and integrate these diverse findings. One particularly promising class of theories suggests that mood influences type of processing: negative moods increase bottom-up, detail-oriented, externally focused processing, whereas positive moods increase top-down, schema-oriented, internally focused information processing (Fiedler, 2001). This distinction is similar to a heuristic-systematic

perspective and helps to integrate many diverse findings. By increasing attention to the concrete, external stimulus details, negative moods facilitate systematic processing based on information in the external environment, with little reliance on internal associations and assumptions about the stimulus. In contrast, positive moods facilitate top-down processing or the application of prior knowledge structures (stereotypes, heuristics, and other associations) to the stimulus. This increases stereotyping and reliance on heuristic cues, but also creative, "big-picture" thinking.

Additionally, individuals may be motivated to seek out positive, pleasant moods and avoid negative, unpleasant moods. They therefore may be motivated by the affective consequences of information processing in certain situations, processing information only when it improves a negative mood or maintains a positive mood (Handley and Lassiter, 2002). These mood regulation effects may apply particularly when mood is an individual's primary concern at the moment, so that affect is used to assess enjoyment, rather than whether sufficient processing has occurred (Clore and Schnall, 2005).

In general, then, positive moods seem to increase heuristic, associative, and creative processing, whereas negative moods tend to increase systematic, detail-oriented processing. Positive moods are therefore a mixed blessing in conflict resolution: they may increase creative, integrative behavior, but they may also increase stereotyping and hinder systematic processing of persuasive arguments. Optimal mood may vary across different time points in a negotiation. Positive affect is often portrayed as a general panacea for integrative negotiations (for example, Barry, Fulmer, and Van Kleef, 2004) but inducing positive mood at the start of a negotiation may also prevent negotiators from revising their stereotypes about each other. It may be better to induce positive mood later, ideally after stereotypes are revised but before parties begin looking for an integrative solution. More research is obviously necessary to clarify the benefits and drawbacks to introducing certain moods at different time points in the negotiation process.

In summary, affect plays an important role in persuasion and social influence. The recent decades have witnessed large strides in understanding how general moods and, to some extent, specific emotions may influence information processing, yet further research is needed to determine how best to integrate existing findings and explanations, as well as how best to apply these results to negotiation settings. The dual-process perspective has proven integral to the accumulation of knowledge in the field, and the sophistication of current theorizing and research suggests that a clearer and crisper picture of affect may soon emerge. Meanwhile, however, practitioners should be aware of the mixed findings in this area, and generalizations from one context to another should be made carefully and critically.

CONCLUSION

We had two primary goals in this chapter. First, we wanted to give an overview of current psychological research from a dual-process perspective on persuasion. The first part of the chapter thus presented a dual-process theory describing how persuasion results from two types of information processing—one based on heuristics and the other involving systematic processing. Additionally, we argued that there are three classes of motives (accuracy, defense, and impression) that may influence information processing and hence persuasion. Each of these can be associated with both heuristic and systematic processing. As a result, it is the level of motivation, not the specific type, that influences the extent of systematic processing.

The goal in the second part of the chapter was to review theory and research that relates persuasion to conflict situations. Here we described research applying the heuristic-systematic perspective to negotiation settings. Additionally, we discussed research in self-affirmation, social identity, majority and minority influence, and affect, and suggested implications for conflict resolution. We highlighted the need for negotiators to move beyond defense and impression motives to process information in an accuracy-oriented, open-minded fashion, and identified strategies for maximizing accuracy motivation in conflict settings.

Our hope is that the considerations raised by persuasion research can encourage new insights into the process of conflict resolution and how to achieve both integrative and long lasting agreements. By understanding and attending to factors that influence information processing, practitioners can better facilitate open-minded, thoughtful consideration of alternate viewpoints by all parties involved in a conflict, and ultimately, its resolution.

Note

1. Self-affirmation research has yet to be applied to non-Western cultures. In collectivistic cultures, self-affirmation may be more effective when focused on interdependent aspects of self. (See Kitayama, Snibbe, Markus, and Suzuki, 2004.)

References

- Barry, B., Fulmer, I. S., and Van Kleef, G. A. "I Laughed, I Cried, I Settled: The Role of Emotion in Negotiation." In M. Gelfand and J. M. Brett (eds.), *Handbook of Negotiation and Culture*. Palo Alto, Calif.: Stanford University Press, 2004.
- Bazerman, M. H., Curhan, J. R., Moore, D. A., and Valley, K. L. "Negotiation." *Annual Review of Psychology*, 2000, 51, 279–314.
- Bodenhausen, G. V., Kramer, G. P., and Stüsser, K. "Happiness and Stereotypic Thinking in Social Judgment." *Journal of Personality and Social Psychology*, 1994, 66, 621–632.
- Carnevale, P. J., and Isen, A. M. "The Influence of Positive Affect and Visual Access on the Discovery of Integrative Solutions in Bilateral Negotiation." *Organizational Behavior and Human Decision Processes*, 1986, 37, 1–13.
- Chaiken, S., Giner-Sorolla, R., and Chen, S. "Beyond Accuracy: Multiple Motives in Heuristic and Systematic Processing." In P. M. Gollwitzer and J. A. Bargh (eds.), *The Psychology of Action: Linking Motivation and Cognition to Action*. New York: Guilford Press, 1996.
- Chaiken, S., and Trope, Y. (eds.). *Dual-Process Theories in Social Psychology*. New York: Guilford Press, 1999.
- Chaiken, S., Wood, W., and Eagly, A. H. "Principles of Persuasion." In E. T. Higgins and A. W. Kruglanski (eds.), *Social Psychology: A Handbook of Basic Principles*. New York: Guilford Press, 1996.
- Chen, S., and Chaiken, S. "The Heuristic-Systematic Model in Its Broader Context." In S. Chaiken and Y. Trope (eds.), *Dual-Process Theories in Social Psychology*. New York: Guilford Press, 1999.
- Cialdini, R. B., Darby, B. L., and Vincent, J. E. "Transgression and Altruism: A Case for Hedonism." *Journal of Experimental Social Psychology*, 1973, 9, 502–516.
- Clore, G. L., and Schnall, S. "The Influence of Affect on Attitude." In D. Albarracín, B. T. Johnson, and M. P. Zanna (eds.), *Handbook of Attitudes*. Mahwah, N.J.: Erlbaum, 2005.
- Cohen, G. L. "Party Over Policy: The Dominating Impact of Group Influence on Political Beliefs." *Journal of Personality and Social Psychology*, 2003, 85, 808–822.
- Cohen, G. L., and others. "Bridging the Partisan Divide: Self-Affirmation and the Reduction of Ideological Bias." Manuscript in preparation, 2005.
- Correll, J., Spencer, S. J., and Zanna, M. P. "An Affirmed Self and an Open Mind: Self-Affirmation and Sensitivity to Argument Strength." *Journal of Experimental Social Psychology*, 2004, 40, 350–356.
- De Dreu, C.K.W. "Time Pressure and Closing of the Mind in Negotiation." *Organizational Behavior and Human Decision Processes*, 2003, 91, 280–295.
- De Dreu, C.K.W. "Motivation in Negotiation: A Social Psychological Analysis." In M. Gelfand and J. M. Brett (eds.), *Handbook of Negotiation and Culture*. Palo Alto, Calif.: Stanford University Press, 2004.
- De Dreu, C.K.W., and Boles, T. L. "Share and Share Alike or Winner Takes All? Effects of Social Value Orientation upon the Choice and Recall of Decision Heuristics in Negotiation." *Organizational Behavior and Human Decision Processes*, 1998, 76, 253–276.
- De Dreu, C.K.W., and Carnevale, P. J. "Motivational Bases of Information Processing and Strategy in Conflict and Negotiation." In M. P. Zanna (ed.), *Advances in Experimental Social Psychology*. New York: Academic Press, 2003.
- De Dreu, C.K.W., Koole, S. L., and Steinel, S. "Unfixing the Fixed Pie: A Motivated Information-Processing Approach to Integrative Negotiation." *Journal of Personality and Social Psychology*, 2000, 79, 975–987.

- Deutsch, M. *The Resolution of Conflict: Constructive and Destructive Processes*. New Haven, Conn.: Yale University Press, 1973.
- Deutsch, M., and Gerard, H. B. "A Study of Normative and Informational Influences upon Individual Judgment." *Journal of Abnormal and Social Psychology*, 1955, 51, 629-636.
- Dovidio, J. F., Gaertner, S. L., Isen, A. M., and Lowrance, R. "Group Representations and Intergroup Bias: Positive Affect, Similarity, and Group Size." *Personality and Social Psychology Bulletin*, 1995, 21, 856-865.
- Eagly, A. H., and Chaiken, S. C. *The Psychology of Attitudes*. Belmont, Calif.: Wadsworth, 1993.
- Eagly, A. H., and Chaiken, S. C. "Attitude Structure and Function." In D. T. Gilbert, S. T. Fiske, and G. Lindzey (eds.), *The Handbook of Social Psychology*, Vol. 1 (4th ed.). New York: McGraw-Hill, 1998.
- Eagly, A. H., Kulesa, P., Chen, S., and Chaiken, S. "Do Attitudes Affect Memory? Tests of the Congeniality Hypothesis." *Current Directions in Psychological Science*, 2001, 10, 5-9.
- Fiedler, K. "Affective Influences on Social Information Processing." In J. P. Forgas (ed.), *Handbook of Affect and Social Cognition*. Mahwah, N.J.: Erlbaum, 2001.
- Fleming, M. A., and Petty, R. E. "Identity and Persuasion: An Elaboration Likelihood Approach." In D. J. Terry and M. A. Hogg (eds.), *Attitudes, Behavior, and Social Context: The Role of Norms and Group Membership*. Mahwah, N.J.: Erlbaum, 2000.
- Gelfand, M. J., and others. "Culture and Egocentric Biases of Fairness in Conflict and Negotiation." *Journal of Applied Psychology*, 2002, 87, 833-845.
- Gruenfeld, D. H., and Hollingshead, A. B. "Sociocognition in Work Groups: The Evolution of Group Integrative Complexity and Its Relation to Task Performance." *Small Group Research*, 1993, 24, 383-405.
- Handley, I. M., and Lassiter, G. D. "Mood and Information Processing: When Happy and Sad Look the Same." *Motivation and Emotion*, 2002, 26, 223-255.
- Jonas, E., Schulz-Hardt, S., and Frey, D. "Giving Advice or Making Decisions in Someone Else's Place: The Influence of Impression, Defense, and Accuracy Motivation on the Search for New Information." *Personality and Social Psychology Bulletin*, 2005, 31, 977-990.
- Kay, A. C., Jimenez, M. C., and Jost, J. T. "Sour Grapes, Sweet Lemons, and the Anticipatory Rationalization of the Status Quo." *Personality and Social Psychology Bulletin*, 2002, 28, 1300-1312.
- Kay, A. C., Wheeler, S. C., Bargh, J. A., and Ross, L. "Material Priming: The Influence of Mundane Physical Objects on Situational Construal and Behavioral Choice." *Organizational Behavior and Human Decision Processes: Special Social Comparison Process*, 2004, 95, 83-96.
- Kelman, H. C. "Compliance, Identification, and Internalization: Three Processes of Attitude Change." *Journal of Conflict Resolution*, 1958, 2, 51-60.
- Kelman, H. C. "The Interdependence of Israeli and Palestinian National Identities: The Role of the Other in Existential Conflicts." *Journal of Social Issues*, 1999, 55, 581-600.
- Keltner, D., and Robinson, R. J. "Imagined Ideological Differences in Conflict Escalation and Resolution." *International Journal of Conflict Management*, 1993, 4, 249-262.
- Kitayama, S., Snibbe, A. C., Markus, H. R., and Suzuki, T. "Is There Any Free Choice? Self and Dissonance in Two Cultures." *Psychological Science*, 2004, 15, 527-533.
- Kuhlman, D. M., and Marshello, A. "Individual Differences in Game Motivation as Moderators of Preprogrammed Strategic Effects in Prisoner's Dilemma." *Journal of Personality and Social Psychology*, 1975, 32, 922-931.
- Kunda, Z. "The Case for Motivated Reasoning." *Psychological Bulletin*, 1990, 108, 480-498.
- Lerner, J. S., and Tetlock, P. E. "Accounting for the Effects of Accountability." *Psychological Bulletin*, 1999, 125, 255-275.
- Lieberman, V., Samuels, S., and Ross, L. "The Name of the Game: Predictive Power of Reputation vs. Situational Labels in Determining Prisoner's Dilemma Game Moves." *Personality and Social Psychology Bulletin*, 2004, 30, 1175-1185.
- Maass, A., and Clark, R. D. "Hidden Impact of Minorities: Fifteen Years of Minority Influence Research." *Psychological Bulletin*, 1984, 95, 428-450.
- Mackie, D. M., and Queller, S. "The Impact of Group Membership on Persuasion: Revisiting 'Who Says What to Whom with What Effect?'" In D. J. Terry and M. A. Hogg (eds.), *Attitudes, Behavior, and Social Context: The Role of Norms and Group Membership*. Mahwah, N.J.: Erlbaum, 2000.
- Mackie, D. M., and Worth, L. "Feeling Good, but Not Thinking Straight: The Impact of Positive Mood on Persuasion." In J. P. Forgas (ed.), *Emotion and Social Judgment*. Oxford, U.K.: Pergamon Press, 1991.
- Martin, R., and Hewstone, M. "Majority Versus Minority Influence: When, Not Whether, Source Status Instigates Heuristic or Systematic Processing." *European Journal of Social Psychology*, 2003, 33, 313-330.
- Martin, R., Hewstone, M., and Martin, P. Y. "Resistance to Persuasive Messages as a Function of Majority and Minority Source Status." *Journal of Experimental Social Psychology*, 2003, 39, 585-593.
- Morris, M. W., and Gelfand, M. J. "Cultural Differences and Cognitive Dynamics: Expanding the Cognitive Perspective on Negotiation." In M. Gelfand and J. M. Brett (eds.), *Handbook of Negotiation and Culture*. Palo Alto, Calif.: Stanford University Press, 2004.
- Moscovici, S. "Toward a Theory of Conversion Behavior." *Advances in Experimental Social Psychology*, 1980, 13, 209-239.
- Moskowitz, G. B., and Chaiken, S. "Mediators of Minority Social Influence: Cognitive Processing Mechanisms Revealed Through a Persuasion Paradigm." In C.K.W. De Dreu and N. K. De Vries (eds.), *Group Consensus and Minority Influence: Implications for Innovation*. Cambridge, Mass.: Blackwell, 2001.

- Neale, M. A., and Bazerman, M. *Cognition and Rationality in Negotiation*. New York: Free Press, 1991.
- Nemeth, C. J. "Differential Contributions of Majority and Minority Influence." *Psychological Review*, 1986, 93, 1-10.
- Ohtuchi K.-I., and Fukushima, O. "Personality and Interpersonal Conflict: Aggressiveness, Self-Monitoring, and Situational Variables." *International Journal of Conflict Management*, 1997, 8, 99-113.
- Petty, R. E., and Wegener, D. T. "Attitude Change: Multiple Roles for Persuasion Variables." In D. T. Gilbert, S. T. Fiske, and G. Lindzey (eds.), *The Handbook of Social Psychology*, Vol. 2 (4th ed.). New York: McGraw-Hill, 1998.
- Pruitt, D. G. "Social Conflict." In D. T. Gilbert, S. T. Fiske, and G. Lindzey (eds.), *The Handbook of Social Psychology*, Vol. 2 (4th ed.). New York: McGraw-Hill, 1998.
- Pruitt, D. G., and Lewis, S. A. "Development of Integrative Solutions in Bilateral Negotiation." *Journal of Personality and Social Psychology*, 1975, 31, 621-630.
- Pruitt, D. G., and Rubin, J. Z. *Social Conflict: Escalation, Stalemate, and Settlement*. New York: McGraw-Hill, 1986.
- Rouhana, N. N., and Kelman, H. C. "Promoting Joint Thinking in International Conflicts: An Israeli-Palestinian Continuing Workshop." *Journal of Social Issues*, 1994, 50, 157-178.
- Schwarz, N. "Feelings as Information: Informational and Motivational Functions of Affective States." In E. T. Higgins and R. M. Sorrentino (eds.), *Handbook of Motivation and Cognition* (Vol. 2). New York: Guilford Press, 1990.
- Schwarz, N., and Clore, G. L. "Mood, Misattribution, and Judgments of Well-Being: Informative and Directive Functions of Affective States." *Journal of Personality and Social Psychology*, 1983, 45, 513-523.
- Sengupta, J., and Johar, G. V. "Contingent Effects of Anxiety on Message Elaboration and Persuasion." *Personality and Social Psychology Bulletin*, 2001, 27, 139-150.
- Sherman, D.A.K., Nelson, L. D., and Steele, C. M. "Do Messages About Health Risks Threaten the Self? Increasing the Acceptance of Threatening Health Messages via Self-Affirmation." *Personality and Social Psychology Bulletin*, 2000, 26, 1046-1058.
- Steele, C. M. "The Psychology of Self-Affirmation: Sustaining the Integrity of the Self." *Advances in Experimental Social Psychology*, 1988, 21, 261-302.
- Tetlock, P. E. "Good Judgment in International Politics: Three Psychological Perspectives." *Political Psychology*, 1992, 13, 517-540.
- Tetlock, P. E., Armor, D., and Peterson, R. S. "The Slavery Debate in Ante-Bellum America: Cognitive Style, Value Conflicts, and the Limits of Compromise." *Journal of Personality and Social Psychology*, 1994, 66, 115-126.
- Tetlock, P. E., Skitka, L., and Boettger, R. "Social and Cognitive Strategies for Coping with Accountability: Conformity, Complexity, and Bolstering." *Journal of Personality and Social Psychology*, 1989, 57, 632-640.
- Tiedens, L. Z., and Linton, S. "Judgment Under Emotional Certainty and Uncertainty: The Effects of Specific Emotions on Information Processing." *Journal of Personality and Social Psychology*, 2001, 81, 973-988.
- Webster, D. M., and Kruglanski, A. W. "Individual Differences in Need for Cognitive Closure." *Journal of Personality and Social Psychology*, 1994, 67, 1049-1062.
- Wood, W., Lundgren, S., Ouellette, J. A., Busceme, S., and Blackstone, T. "Minority Influence: A Meta-Analytic Review of Social Influence Processes." *Psychological Bulletin*, 1994, 115, 323-345.