

## Affect as Embodied Information

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## COMMENTARIES

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## Affect as Embodied Information

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If the study of cognition concerns knowledge, the study of emotion concerns value. That is, in contrast to cognitions that are about the presence and absence of attributes, the inclusiveness of categories, and the truth and falsity of propositions, emotions are about the goodness and badness of these things (Ortony, Clore, & Collins, 1988). In this commentary, we argue that the cognitive consequences that follow from mood depend on the information about goodness and badness that is conveyed by pleasant and unpleasant feelings. An alternative possibility is that moods have such consequences because they bring positive and negative concepts to mind (e.g., Forgas, 1995, this issue). However, we think that when affect enters into judgments and decisions, it does so directly through the informa-

tion embodied in affective feelings and only indirectly by activating positive or negative thoughts.

In addition to conveying information about value, emotions are psychological states, which means that they involve multiple systems (e.g., cognitive, experiential, physiological, expressive, behavioral, etc.), all dedicated to the same evaluation at the same time. Thus, for a person to be in an emotional state of joy or fear, for example, some reflection of that joy or fear should be evident in more than one system. Moreover, each representation of an emotional state appears to have its own function. For example, emotional expressions play a role in the social consequences of affect by conveying affective information to others, and emotional feelings play a role in the cognitive conse-

quences of affect by conveying affective information to oneself.

In response to that proposal, critics often ask, "Why is it necessary to be informed about one's own appraisals?" One answer is that the parallel, distributed nature of cognitive processes is such that the "I" that appraises situations and the "I" that acts on them are not necessarily a single, unitary "I." In this regard, an analogy to the sense of balance is useful. Even though it is our own inner ear that computes whether we are right side up, upside down, or somewhere in between, feelings of balance still provide crucial information. This is presumably true in part because we have limited access to the computations involved in assessing balance. In addition, as in the case of emotional feelings, the urgency felt when feelings of imbalance are intense (i.e., when we are in a state of falling) mobilizes resources to cope with the problem. By being felt, both affective and vestibular cues convey information in a form that also activates attention and motivates change. In contrast, it is probably not the case that feelings of imbalance help us right ourselves by priming thoughts, concepts, or memories about imbalance.

The larger implication of these assertions is that the feelings themselves are informative about goodness and badness, and as such, they may provide a sufficient basis for judgments, decisions, and changes in processing priorities. If so, then many of the effects of mood and emotion may be direct reflections of the information embodied in feelings. It may not be the case, as suggested by priming interpretations of the mood and judgment literature (e.g., Bower, Montiero, & Gilligan, 1978;Forgas & Bower, 1988; Isen, Shalker, Clark, & Karp, 1978), that the influence of moods and emotions depends on the priming of positive and negative concepts and memories. We believe instead that affective feelings provide information about the outcome of appraisal processes and that judgments and processing decisions are made directly from feelings rather than indirectly from thoughts made accessible by feelings (e.g., Clore, 1992; Schwarz & Clore, 1983, 1988, 1996).

In the hope that being explicit will facilitate the systematic study of the effects of mood and emotion, we have recently outlined a set of assumptions basic to our view of affect-as-information processes (Clore et al., 2001). Several of the most basic of these principles are listed here, with brief explanations.

#### **The Information Principle: Emotional Feelings Provide Conscious Information From Unconscious Appraisals of Situations**

According to this principle, affective feelings serve as feedback from nonconscious appraisal processes.

We assume that an appraisal process is always active. As a result, in addition to occasional strong emotional feelings, minimal affective cues are always available as evaluations of our current situation (Bargh, 1997; Clore, 1992). Thus, when asked if we want to go to the movies or to eat Chinese food, our affective reactions to the prospect of doing these things is likely to figure into our judgments, regardless of whether we also engage in extensive deliberation.

#### **The Attribution Principle: The Informativeness of Affect and its Cognitive Consequences Depend on How the Experience of Affect is Attributed**

Like emotions, moods are evaluative states characterized by positive and negative feelings. However, unlike the case of emotions, the object of the good or bad information embodied in the feelings of mood is unspecified. Thus, the information that appears to be conveyed by mood can depend on what happens to be in mind at the time. Evidence of the mediating role of affective information comes from studies in which the apparent source of feelings is varied. For example, in one of the original Schwarz and Clore (1983) studies, experimenters showed that by making salient an external plausible cause of people's feelings (e.g., sunny and warm vs. rainy and cold weather), the influence of mood on participants' judgments of their life satisfaction was eliminated. Frequent replications of such attribution effects have suggested that mood influences judgment and processing only when the pleasant or unpleasant feelings are experienced as information about the goodness or badness of the object of judgment.

#### **The Immediacy Principle: Affective Feelings Tend to Be Experienced as Reactions to Current Mental Content**

When we feel nauseated, the feeling may implicate what we ate several hours ago. When we feel the symptoms of the flu, they may implicate any ill person we encountered 2 weeks ago. When we feel angry or delighted, or experience any other affective feelings, they implicate whatever is in mind at the time. Affective feelings are immediate reactions to current mental content, and this immediacy is presumably important in the adaptive power of affect. In the case of mood, however, the feelings tend not to have salient objects, and for this reason the induction of mood states has been an important tool to enable psychologists to vary affect independently of affective beliefs to which the affect is usually wedded in everyday life. One implication of the

immediacy principle can be seen in depression and anxiety in which persons who experience chronic negative affect may come to view many things as problematic, including themselves and the world around them. Another implication is seen in findings showing that mood effects are greater among individuals who report a preference for thinking (Petty, 2000) and on tasks that require more rather than less thought (Forgas, this issue). In other words, the more thoughts that occur, the more opportunity for ambient affective cues to find a suitable object. Still another implication of the immediacy principle is seen in the judgment and processing principles.

**The Affective Judgment Principle:  
When One is Object-Focused,  
Affective Reactions May Be  
Experienced as Liking or Disliking,  
Leading to Higher or Lower  
Evaluation of the Object of Judgment**

**The Affective Processing Principle:  
When One is Task Oriented, Affective  
Reactions May Be Experienced as  
Confidence or Doubt About  
Cognitively Accessible Information,  
Leading to Greater or Lesser Reliance  
on One's Beliefs, Expectations, and  
Inclinations**

These principles assert that predictions about the kind of influence of affective feelings depend on a person's momentary mental focus. When focused on an object with a goal of evaluating it, unassigned feelings of mood may be experienced as liking or disliking for the object of judgment. When focused on a task with a performance goal, the same unassigned feelings may be experienced as information about the value of one's current construction of the situation. For example, when participants were asked to make risk judgments about possible problem situations (e.g., having something of value stolen), they tended to experience their affect as information about those situations. As a result, individuals in positive moods made lower risk estimates, whereas those in negative moods perceived higher levels of risk (Gasper & Clore, 1998). In another study (Gasper, 1999), in which participants performed Tversky's and Kahneman's (1973) heuristic reasoning tasks, moods cues tended to be experienced as information about the participants themselves and the adequacy of their expectations about the task. For example, in the Linda problem, participants are led to form an impression about Linda as a social activist when she was in college. They are then asked whether it is more likely that she later became merely a bank teller or became a feminist as well as a bank teller. Happy participants tended to have greater confidence

in their initial impressions, saying that she must be both a feminist and a bank teller (thus committing the conjunction fallacy). In contrast, the negative affective cues of those in sad moods made them doubt their initial impressions, which in this instance tended to result in correct answers.

These and a number of related experiments suggest that although affective feelings are always experienced as evaluations, the particular object that they imbue with value depends on one's focus of attention. They show that positive and negative affect may be experienced as liking or disliking when one is focused on an object. However, when one is focused on a task, the same feelings may be experienced as feedback about one's initial orientation to the task. In the latter situation, individuals in happy moods are more likely to rely on accessible cognitions, including expectations and stereotypes, whereas those in sad moods are more likely to rely on new information from the environment.

These and related principles constitute our current view of the ways in which affective feelings can have cognitive consequences. With this as a background, we turn now to more specific comments on the target article and some comparative thoughts on alternative views of the role of affect in cognition.

### Commentary

The research summarized in the last half of Forgas's target article confirms again that he is an ingenious and insightful experimenter. The body of research that Forgas has generated is impressive, interesting, and informative. His work has greatly expanded what we know about affective processes in social judgment. Moreover, the experiments are described in sufficient detail that this article should be a useful resource for individuals interested in pursuing work on affect as well as a guide for how to conduct programmatic research generally. However, our assignment is to contrast our view with that of Forgas, not simply to praise him for his enviably creative and productive research program.

### Heuristic and Substantive Affective Influences

The target article uses the affect infusion model (Forgas, 1995) to organize the presentation of Forgas's recent work on mood and social cognition. The model is really a framework that specifies the situations in which irrelevant mood is more likely and less likely to have an influence. A virtue of the approach is that it seeks to accommodate multiple processes. It differentiates situations into those that are open versus those that are closed and those that involve high versus low effort. It says that mood should have an influence in open but not closed

situations. A closed situation is one in which a specific answer already exists in memory or is dictated by motivation. An open situation involves some amount of processing, which can be either heuristic (i.e., low effort) or substantive (i.e., high effort). Forgas categorizes the affect-as-information approach (Clore, Schwarz, & Conway, 1994; Schwarz & Clore, 1983) as low effort or heuristic and the memory-based approach (Forgas & Bower, 1988) as high effort or substantive.

In his comparison of the two views, the point that Forgas emphasizes most is that the use of affect as information is limited to heuristic judgment situations in which mood provides a judgment shortcut. Most judgment situations, he argues, involve more substantive processing, and these situations turn out to be the most likely ones to show mood effects. We agree that it is useful to distinguish heuristic and substantive judgment situations, and we agree that Forgas's data make a strong case for the idea that mood influences are found in deliberative as well as quick and dirty judgments.

The informational role of affective cues is not, however, limited to heuristic judgment situations. Indeed, we view such informational processes as operative at multiple levels and in all situations (Clore, Gasper, & Garvin, 2001). In this regard, our approach is similar to that outlined by Carver and Scheier (1981), who explained behavior regulation by alluding to a hierarchy of feedback loops in which the output information from one level often serves as input for the next level. Bless (Bless et al., 1996) also stressed that informational influences need not be heuristic in the sense of involving reduced effort. Wyer, Clore, and Isbell (1999, p. 31) also treated this issue explicitly by specifying two kinds of informational influences.

### **Postulate 3**

Persons use the affect they are experiencing to make judgments of their feelings about themselves, other persons, objects, or events, or to make other judgments for which these feelings are the primary criterion.

### **Postulate 4**

People may use the affect they are experiencing as a heuristic basis for evaluative judgments that are not typically based on affective reactions when they are either unable or unmotivated to use other, more directly relevant criteria.

Of this distinction, Wyer et al. (p. 30) noted

This difference has sometimes been ignored in formulations of the role of affect in inference processes. Forgas (1992, 1995), for example, assumes that affect functions as a heuristic that is applied only when peo-

ple are either unable or unmotivated to employ other, nonaffective criteria. Schwarz and Clore (1988) also refer to a "how-do-I-feel-about-it?" heuristic in conceptualizing the informational influence of affect. Although circumstances arise in which such a heuristic is applied, we believe that affective reactions are often the *primary* basis for many judgments and are not simply used when other criteria are unavailable.

Thus, the affect-as-information position need not be limited to instances in which affect is used as a shortcut or heuristic route to judgments and decisions, despite our prior emphasis (e.g., Schwarz & Clore, 1988) on heuristic processing. Indeed, most decisions, even those that involve a detailed consideration of facts and figures, also involve affective appraisals. A study by Isen and Means (1983) involving decisions about which of three cars to buy is illustrative. Despite having made detailed comparisons of the technical information about the three cars, affect still had a potent role in helping the decision makers determine when to exit the decision process and whether their tentative choice was a good one. In positive moods, participants tended to exit the decision process relatively early, feeling that they had made a good choice, whereas those in negative moods tended to go over and over the same information because they were confronted with negative rather than positive feelings as they appraised their tentative choices. Our point is that even careful decision making involves an appraisal in which one asks oneself (at least implicitly), "Everything considered, is my tentative choice a good one or should I reconsider the alternatives?" The answer to such questions often involve attention to affective cues, positive feelings leading one to exit the process and negative feelings leading one to continue.

### **Comparing Priming and Informational Models**

In this section, we compare the implications of the idea that feelings prime concepts and memories (Bower & Forgas, 2001) and the idea that feelings convey information (e.g., Bless, 2001; Clore et al., 2001; Martin, 2001; Schwarz, 2001). To compare these views, we focus on the three phenomena that have attracted the most research in the mood and cognition literature, namely, the effects of mood on judgment, memory, and processing.

### **Mood and Judgment**

As shown in Table 1, the concept-priming hypothesis assumes that moods automatically prime mood-congruent material in memory, which in turn

**Table 1. Mood and Judgment**

Conceptual priming	Affect → priming affect-congruent concepts/memories → affect-congruent judgments
Feelings-as-information	Affect → feelings attributed to judgment object → affect-congruent judgments

serves as the basis for evaluative judgments. In contrast, the affect-as-information hypothesis assumes that evaluative judgments are often based directly on how one feels rather than indirectly on the thoughts primed by those feelings (Clore, 1992).

In general, we concur in the view espoused by Haidt (in press) in which emotional influences on judgment are viewed as direct and intuitive, and reasons often serve as justifications rather than as causes of affective judgments. For example, one's distaste for bitterness (including interpersonal bitterness) is simple and direct, rather than being based on the retrieval from memory of reasons why one dislikes bitterness. Similarly, one's negative judgments of social and moral shortcomings are less often based on retrieval of material from memory about why they are negative and more often based directly on negative affective reactions to the idea of such behavior.

We are not suggesting that affective judgments do not have reasons but rather that affect that is congruent with the reasons is more likely than the reasons themselves to be the proximal basis for evaluative judgments. Thus, for example, we may judge the prospect of taking a vacation positively because we find the prospect delightful, rather than because we retrieve positive concepts about vacations. Similarly, when asked how we like the food we have ordered for lunch, we are likely to base our answer directly on the pleasantness of the taste, rather than on beliefs about the food. Indeed, we assume that the point of affective feelings is to allow judgments, decisions, and actions without retrieving reasons.

In this regard, LeDoux (1996) suggested that "emotion is memory," by which he meant that emotional reactions are embodied representations of the personal significance of situations. Emotions are our affective memory, that is, our memory for the goodness and badness of situations. Thus, in situations experienced as threatening in the past, we may find ourselves frightened in the future. In many instances, that felt information about the situation is more immediately relevant and useful than the retrieval of other anxious memories or the retrieval of relevant concepts.

A similar implication can be seen in the case studies related by Damasio (1994) concerning damage to the prefrontal cortex. He argued that the cause of poor judgment among these individuals is not that they are deficient in retrieving material from memory but rather

that they are unable to use their own affective reactions directly as feedback. As a result, they cannot experience whether or not their decisions are consistent with their goals.

Thus, although we concur withForgas's observation that mood effects are more likely to occur in judgment situations involving some bottom-up processing, we differ in the proposed mechanism of influence. For the priming model, elaborative processing is believed to be necessary so that primed concepts and memories can have an influence, whereas in our view, such processing promotes mood effects by allowing feelings to have an influence.

The general idea of the priming model is that if judgments were based on what is retrieved from memory, then mood could control judgment by influencing what is accessible in memory. However, questions can be raised about whether judgments are in fact typically based on the retrieval of instances from memory. Research generally shows little or no relation between judgments of persons and the content of recall about them (Wyer & Srull, 1989). The research on judgment and decision making also casts doubt on such normative models (e.g., Loewenstein, 1996; Tversky & Kahneman, 1973). Although the judgment and decision-making community has been late in recognizing it, many judgments and decisions appear not to be based on the retrieval of instances and attributes at all. If so, then models that explain mood effects on the basis of biased retrieval may leave important aspects of judgments unexplained.

We are not suggesting an irrationalist view of emotions or of decisions. For the most part, emotions can be assumed to arise for good reasons and to reflect people's experiences accurately. However, we assume that a key function of emotions is to provide embodied representations of the affective meanings of situations. Affective meaning often reflects numerous goals and motives of varying importance, all summarized by the quality and intensity of affective feeling, which incline us more or less urgently toward or away from the object of the affect. Because the information from emotions arises from within, rather than coming from without, it is convincing and tends to be acted on without debate. Indeed, emotional feelings indicate a commitment to a particular interpretation of reality—anger being a commitment to the belief that one has been wronged; fear, a commitment to the belief that one is under threat, and so on. Given that commitment, accessing underlying reasons before making a judgment or decision would be a step backward, allowing one to second guess one's emotional reaction and in the process undermining what we presume to be its adaptive significance. (For a more extended discussion of the difference between the assumptions of traditional judgment theory and feeling-based judgment, see Clore, 1992; Loewenstein, 1996).

The same analysis holds in the less explicitly emotional domain of attitudes. Fishbein and Ajzen (1975) maintained that attitudes are a sum of the evaluations associated with each of an individual's beliefs about an object. For example, one's attitude toward a particular political candidate may depend on one's beliefs about his or her characteristics and how good or bad one evaluates each characteristic to be. The knowledge that attitudes are based on beliefs is potentially useful because it suggests ways of changing attitudes. However, we assume that an important function of attitudes is to keep from having to access each belief and its evaluation every time one thinks about or talks about an attitude object. For many judgments, decisions, and actions regarding attitude objects, we access the affective information that is the attitude rather than depending on the attitude to remind us of the underlying reasons. There is more to be said about the differences in these views, of course, but space limitations dictate moving on to the topic of mood and memory.

## Mood and Memory

Bower (1981) outlined some intriguing studies suggesting that mood effects on memory may provide a general mechanism for explaining emotional effects on cognition. It was an important paper in part because Bower's considerable scientific reputation helped promote further study of the cognitive effects of mood and emotion. The priming idea was proposed independently at the same time by Isen et al. (1978). Bower treated mood as a node in memory similar to other concept nodes. In happy or sad moods, activation was believed to spread from the mood node to all other concept or memory nodes sharing a similar valence. Thus, having positive or negative feelings was assumed to selectively activate positive or negative concepts and memories.

Recently, we argued that it may not be the case that feelings prime feeling-congruent memories automatically and that the effect may occur only when individuals interpret their feelings with appropriate concepts (Wyer et al., 1999). That is, happy or sad feelings may trigger happy or sad memories only to the extent that happy or sad concepts are used to interpret the feelings. If so, demonstrations of mood-congruent memory may often really be demonstrations of concept-congruent memory. These differences are summarized in Table 2.

**Table 2. Mood and Memory**

Conceptual priming
Affect → priming affect-congruent memories
Feelings-as-information
Affect → affect-congruent interpretive concepts → concept-congruent memories

The assumption that mood automatically primes mood-congruent material in memory is problematic on numerous grounds. First, the literature examining the influence of mood on memory has been inconsistent, leading some reviewers to doubt the generality of the relation (e.g., Blaney, 1986). Second, others (e.g., Johnson & Tversky, 1983) have noted logical problems with the idea that being in a good or bad mood could activate all positive or negative episodes and concepts stored in memory. If one uses an electrical metaphor for spreading activation, one suspects that being in a good or bad mood would lead to a cognitive brownout.

We should mention that the cognitive brownout idea is similar to positions taken by Mackie and Worth (1989) for positive moods and by Ellis and Ashbrook (1988) for negative moods. These explanations predict impaired cognitive performance in positive (Mackie & Worth, 1989) or negative (Ellis & Ashbrook, 1988) mood states, and of course the idea that emotion limits reason has plenty of precedent. We expect, however, that such an analysis is more applicable to extreme, intense, or chronic affective conditions such as depression than to the minimal affective cues operating in most laboratory studies.

Empirically, the priming model is also problematic. For example, Johnson and Tversky (1983) noted that mood effects on judgment do not show the kinds of graded effects one would expect as a function of variations in the thematic similarity between mood induction themes and judgment themes. Similar findings were obtained by Clore, Schwarz, and Kirsch (1983). Such results suggest that the mood effects may not be guided by priming.

In addition, Wyer et al. (1999) reviewed the literature on mood and memory and found that the effects of mood on memory occur mainly in situations where the mood manipulation procedure explicitly or implicitly activates concepts of mood as well as feelings of mood. In an unpublished master's thesis, Garvin (1999) conducted a direct test of the hypothesis that mood concepts, rather than feelings of mood, are responsible for mood-congruent memory. She crossed concept priming and mood induction procedures to examine the recall of happy and sad events from a story originally used by Bower, Gilligan, and Monteiro (1981). She found that priming the concept of happy or sad mood influenced recall of happy or sad events in a story but that actual happy and sad feelings did not. Similarly, Parrott and Sabini (1990) found that when mood was subtly induced (e.g., weather, music), mood congruence was seen in autobiographical memory only when participants were also explicitly told to get in a happy or sad mood. Their results suggest that affective concepts rather than affect itself is responsible for priming affective material in declarative memory.

It should be noted that neither Bower (1981) norForgas (this issue) distinguished between mood and

concepts about mood. To the extent that they intended to include mood concepts as part of mood, then their predictions stand. However, most interpreters of such work have implicitly assumed that the affect does the work. Thus, it may be important that felt affect, as opposed to conceptualized affect, may not show the same effects. If so, then mood priming of material from memory may not be a reliable basis for explaining many of the cognitive effects of mood.

## Mood and Processing

The final topic concerns mood and processing. Much of the current research in the literature on mood concerns its effects on styles of information processing. In general, individuals in happy moods tend to rely on scripts (Bless et al., 1996), stereotypes (Isbell, 1999), and initial expectations (Gasper, 1999), whereas individuals in sad moods are more likely to reject weak persuasive arguments (Sinclair, Mark, & Clore, 1994), solve heuristic reasoning problems correctly (Gasper, 1999), and break mental sets (Gasper & Clore, 2000). There is a good deal of disagreement in the literature on how to characterize and explain such mood-induced differences in style. Consistent with the processing principle mentioned previously, we have proposed that when positive mood cues are experienced as efficacy feedback, individuals should tend to rely on their own cognitive constructions, expectations, and inclinations. In contrast, when negative mood cues are experienced as negative task feedback, they should inhibit reliance on one's cognitions and lead to a focus on new perceptual information from the environment. As a result, individuals in happy moods should focus on top-down processing (i.e., assimilating new information to existing concepts), whereas those in sad moods should focus on bottom-up processing (i.e., accommodating concepts to new information; Clore et al., 2001). Fiedler (2001) made similar predictions.

Forgas too, in the target article, predicts that "negative mood should promote a more careful, systematic, bottom-up processing style that is more attuned to the requirements of a particular situation" and "positive affect should promote a more schematic, internally driven, and top-down information-processing style." However, the basis of these predictions about processing was somewhat less clear. Presumably, these effects depend on the content of the material in memory that is primed by mood, as shown in Table 3.

Relevant research comes from Forgas's study of mood effects on request styles (Forgas, 1999). In explaining the direct style of requests adopted by happy participants, he commented:

**Table 3. Mood and Processing**

Conceptual priming
Affect → priming affect-congruent concepts/memories → affect-congruent processing
Feelings-as-information
Affect → feelings attributed as efficacy feedback → affect-congruent processing

Happy people should adopt a more confident, direct requesting style, as a result of the greater availability and use of positively valenced thoughts and associations in their minds as they assess the "felicity conditions" for their request. (p. 25)

Similarly discussing research on the effects of mood on bargaining strategies (Forgas, 1998), he explained the effects of mood on bargaining strategies by suggesting that

Positive mood should then selectively prime more positive thoughts and associations, and these ideas should ultimately lead to the formulation of more optimistic expectations and the adoption of more cooperative and integrative bargaining strategies. On the other hand, negative affect should prime more pessimistic, negative memories and associations, and should lead to the use of less integrative and ultimately, less successful bargaining strategies. (p. 29)

Again, our view is that these interesting effects are equally compatible with predictions from the affect-as-information approach. We believe that the optimism and self-confidence found to be associated with positive affect would have been a direct reflection of on-line affective experience rather than of affective concepts and memories. Even if positive and negative memories were involved, it seems plausible that any resulting optimism and self-confidence would depend on the feelings elicited by those memories rather than on the memories themselves. Optimism and self-confidence would surely depend, after all, on the affective significance of whatever memories came to mind, rather than on the memories themselves.

## Conclusions

It appears that what is true of the research on judgment is also true of the research on processing. Using generally similar designs focused on common phenomena, Forgas's research and the research of others in this area have converged on a common set of findings and a generally similar way of characterizing them. The resulting body of robust and replicable effects is impressive and is a result that is surprising, given that the research concerns how people feel. Con-

sistent differences do emerge in aspects of the explanations offered.Forgas has focused on the idea that mood-congruent cognitive content is primed by mood, and we have focused on the idea that judgment and processing decisions may be influenced directly by affective feelings rather than indirectly by primed cognitions.

What is perhaps more important than any divergence of explanations for the effects of mood, however, are the innovative directions in which Forgas is taking research on mood. In each domain, he has asked new questions and achieved clear results. Methodologically too, this report of Forgas's work is exciting. He reports a number of new experiments focused on real-world behavior. Moreover, he has begun to ask how we can apply what we have learned about affect to health-related and other behaviors. Finally, we applaud Forgas's call for new work that focuses on measures of the intervening processes proposed by competing theories.

### Notes

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## A Second-Generation Psychology of Emotion

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The scope and promise of current emotion research is greater than ever before. Still, the burgeoning empirical findings in the field have outpaced efforts to integrate these findings into an efficient and compelling theoretical framework. This situation is not a shortcoming but a sign of the process and progress of emotion research. Although many fundamental issues remain unresolved, including the very definition of emotion and the distinction between various affective phenomena (such as mood, motivation, temperament, and meta-mood cognition), research continues to be highly productive and occasionally hints at resolutions to these basic issues. This endeavor is a process of empirical bootstrapping. It challenges us, as researchers, to proceed ahead of theory without losing sight of theoretical understanding as our ultimate goal.

Many emotion researchers have met the challenge of empirical bootstrapping. Among them, Joseph Forgas is a psychologist whose contributions to the study of emotion range from basic social cognitive research to highly integrative theory building. Forgas has recently introduced, in his target article (this issue) and elsewhere (e.g., Forgas, 1995), the affect infusion model (AIM), an impressive framework that accounts for the influence of mood on social thought and behavior. This model is of special interest to us given our related efforts to develop an integrative model of

emotional intelligence, in which we emphasize the close collaborative relation between emotion and reason (e.g., Mayer & Salovey, 1997; Salovey, Bedell, Detweiler, & Mayer, 2000; Salovey & Mayer, 1990). In this commentary, we discuss emotional intelligence and the AIM as indicators of the current state of theorizing in the field of emotion. We argue that the strength of these models goes beyond their positive contributions to our understanding of emotion. Equally important is their capacity to identify and focus our attention on specific aspects of affective phenomena that remain obscure.

### A First Generation

Over the past few decades, the misgivings psychology has had about emotion have given way to a collective sense of excitement. The historic view, espoused by most philosophers and early psychologists, holds that feelings are disruptive, irrational "passions" without any discernable purpose (see Solomon, 2000). Yet empirically minded thinkers, from David Hume and Charles Darwin to a host of contemporary researchers, have come to recognize that emotions play a vital role in human psychology. At a basic level, emotions confer an impressive survival advantage through their ability to energize adaptive behaviors and rapidly to