

Emotional Aperture and Strategic Change: The Accurate Recognition of Collective Emotions

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This paper introduces *emotional aperture*, defined as the ability to recognize the composition of diverse emotions in a collective (e.g., group or business unit). We develop the thesis that a leader's ability to respond effectively to patterns of shared emotions that arise during strategic change and other emotionally turbulent organizational processes depends on the leader's ability to use emotional aperture. Additionally, we describe key cultural, psychological, and contextual enablers and impediments to achieving the necessary focus and accuracy that characterize the effective use of emotional aperture in organizations. This paper provides an initial conceptualization of how individuals can adjust their attention to group-level emotions and thus extends existing notions of emotional competencies (e.g., emotional intelligence) that have focused more narrowly on individual-level emotions.

Key words: emotions; strategic change; emotional intelligence; collective emotions; leadership; emotional contagion; culture; holistic perception

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The ability to accurately recognize collective emotions is proposed to contribute to a leader's ability to manage emotionally turbulent situations that are characteristic of strategic change. Strategic change denotes a temporal process that interrupts organizational inertia, causing changes in routines, core competencies, and strategic direction, in response to competitors (Chakravarthy and Doz 1992, Helfat and Peteraf 2003). Leaders' tasks include recognizing cues that signal the need for strategic change (e.g., organizational stress), fostering bottom-up experimentation, and implementing a new strategic direction (Huff et al. 1992, Floyd and Lane 2000). As this process unfolds, top- and mid-level managers can face many challenges in their attempts to facilitate learning among their employees (Chakravarthy 1982); empower, motivate, and inspire them (Quinn 1980, Hart 1992).

Dynamic managerial abilities are central to this process (Adner and Helfat 2003). To accomplish strategic change, leaders often have to manage the tension between deploying existing competencies and fostering the development and implementation of new ones (Crossan et al. 1999). These seemingly conflicting goals can generate role conflict and emotional discord among employees who are already worried about time pressure and resources (Floyd and Lane 2000). Individual employees' as well as upper and middle managers' emotional reactions to alternative strategic direction can be particularly intense (Kanter 1983, Fineman 2003) as

these are amplified in a context of new, contested, and shifting ideas.

Emotions in organizations, however, have implications that extend beyond those related to specific individuals. Collective reactions and informal coalitions can form in response to change proposals and their perceived implications for various groups that have different roles and interests in an organization (Lazarus 1991, Cyert and March 1992). Collective emotions can influence the ways in which various groups think and behave in relation to both the organization and other groups within it (Mackie et al. 2000, Weiss and Brief 2001, Barsade 2002). These emotional responses are tightly woven throughout the process of strategic change, and therefore highlight the need for a dynamic managerial ability that has heretofore not been articulated: accurately reading collective emotions.

In this paper, we articulate this ability by introducing and describing *emotional aperture*; that is, the ability to perceive various shared emotions that exist in a collective. Analogous to how a still or motion picture camera's aperture setting can be adjusted to increase depth of field, and thus bring into focus not only one person nearby, but others scattered across an extended landscape, emotional aperture refers to the perceptual ability to adjust one's focus from a single individual's emotional cues to the broader patterns of shared emotional cues that comprise the emotional composition of a collective.

Bringing into focus patterns of shared emotions of different valence (e.g., positive and negative) as well as specific emotions (e.g., contempt, excitement, anger, surprise) may be particularly important in the context of strategic change, for example, by allowing leaders to assess the specific interpretations and reactions of their teams, departments, and business units. Prior research on collective emotions has revealed its import on organizational dynamics through a focus on the most common or modal emotion in a collective, sometimes referred to as a group's affective tone (e.g., Barsade and Gibson 1998, Bartel and Saavedra 2000). Beyond this single attribute of modal emotion, other features of the composition of collective emotions also may be important to recognize. Compositional features such as the level of emotional heterogeneity, proportion of negative or positive emotions, or proportion of specific emotions all may provide information diagnostic of collective action tendencies (van Zomeren et al. 2004).

Collective action tendencies are useful to understand for change leaders to effectively coordinate action to respond to the emotional realities in an organization effectively. Imagine, for example, that in response to an organization's announced plan for turning around a three-year decline in market share, a leader attends only to a business unit's affective tone, and accurately recognizes the cues of fear. Further imagine that although fear indeed is prevalent among a clear majority of employees of this business unit; say, 80%, another emotion with very different action tendencies is prevalent among the remaining 20% of this unit: hope. Whereas the experience of fear generally stimulates risk-averse behaviors that likely slow the implementation of strategic change as people experience lower levels of personal control (Lerner and Keltner 2001), experiencing hope in contrast could prompt energetic collective mobilization for change (Huy 1999). The change leader can, for example, involve this minority group to share the reasons of their positivity with their fearful colleagues, and foster an open and honest debate about the perceived benefits and costs of the proposed change. In this way, using emotional aperture can be conceptualized in terms of encoding more features of a group's affective distribution than just a single group's mean or modal emotion. This more comprehensive encoding of emotional information provides cues that can help change leaders, for example, to assess the level of support, antagonism, or suspended judgment for specific proposals for change and think about how to mobilize employees (Flier et al. 2003); how to schedule and pace the various change actions (Gersick 1994, Brown and Eisenhardt 1997, Huy 2001); and to evaluate midcourse outcomes that provide feedback useful for adjusting leaders' actions along the way (Ashford 1986, Huy 2002). In short, we propose that managing strategic change requires a functional, dynamic emotional aperture to capture diverse patterns

of shared emotions that constitute a collective's affective composition.

The remainder of the paper is organized as follows. First, we briefly review the role of emotions in organizations and the traditional focus on abilities to recognize individuals' emotions. We distinguish the latter from perceiving collective emotions and argue that recognizing patterns of shared emotions in a collective requires abilities that go beyond those that enable recognizing individuals' emotions. Next, we discuss several psychological, cultural, and contextual enablers and impediments to the effective use of emotional aperture; that is, attending to collective emotions and being able to decode specific shared negative or positive emotions. Finally, we discuss the implications of emotional aperture for emotion perception theory and various streams of research.

Emotions in Organizational Life

Emotions refer to the constellation of psychobiological responses elicited by an appraisal of a particular target or situation and often include subjective experiences and specific action tendencies (Frijda 1986, Lazarus 1991, Zeelenberg et al. 2000). People can express these both verbally and through facial expressions and other nonverbal behavior (Ekman and Friesen 1974, Rosenthal et al. 1979). Emotions reflect the ways in which people perceive and interact with others in their social contexts (Kemper 1978, 1993). Emotion and strategic changes are linked insofar as emotions are not necessarily aroused by favorable or unfavorable conditions; sometimes they are aroused by actual or expected changes in these conditions (Frijda 1988). Scholars have shown that personal emotions play a significant role in the effectiveness of collective efforts (George 1990; George and Brief 1992; Fineman 1993, 2001). Emotions help direct attention, prompt and inhibit particular behavioral tendencies, and allow employees to coordinate their efforts (Kemper 1978, Ekman 1992b, DePaulo and Friedman 1998, Keltner and Haidt 1999).

Emotional cues are often subtle, particularly when the social context makes them difficult to convey explicitly, for example, when a group of employees feel contempt for their superior or when they are expected to be happy about a proposed change initiative, but instead feel deep fear (Ekman 1985, Choi et al. 2005, Elfenbein 2007). Emotional cues, such as vocal intonations, facial displays, and other nonverbal gestures, indicate how others construe their role in changing events and social structures (Kemper 1981, Rafaeli and Sutton 1987). Recognizing emotional cues therefore provides useful information about opinions, preferences, and potential behaviors—even when people are unaware of their emotions or consciously try to control their expressions (Scherer et al. 1985, DePaulo 1992, Ashkanasy et al. 2000, Ekman 1972).

Recognizing Individuals' Emotions

The ability to recognize emotions in other people is a key component of social emotional intelligence (O'Sullivan et al. 1965, Davies et al. 1998, Salovey and Grewal 2005). Scholars have shown empirically that accuracy, with respect to individuals' emotional displays, is related to effectiveness in managing interpersonal relationships in many occupations and organizational roles (Rosenthal et al. 1979, Lopez et al. 2007, Côté and Miners 2006, Elfenbein et al. 2007). For example, studies have shown that high emotion recognition ability among managers correlates positively with perceptions of transformational leadership among their subordinates (Bass 1999, Rubin et al. 2005); and in negotiation, accuracy correlates with value for both parties (Elfenbein et al. 2007). Surprisingly, decoding emotions accurately can happen very quickly and with limited temporal exposure to the emotional cues (cf. Elfenbein and Ambady 2002).

Together, research has demonstrated the importance of accurately decoding emotional expressions. The extant literature on emotion recognition, however, generally has been limited to the recognition of individual-level emotions. Recent evidence of collective emotions and their importance to organizational dynamics offers new perspectives about emotions at work, but it also raises important new questions about how to understand the perception and interpretation of these collective emotions.

Collective Emotions. Social psychologists and organizational scholars have gathered compelling empirical evidence that emotions spread across individuals, creating clusters of shared emotions in groups and organizations (Barsade and Gibson 1998, Brief and Weiss 2002). Collective emotions can be described as the composition of various shared emotions of the group's members (Barsade and Gibson 1998). Collective emotions can reflect an emotionally homogenous group (i.e., all members of the group experience the same emotion). The veracity of collective emotions, however, is not diminished by a lack of complete homogeneity in emotion across group members. That is, the composition of a collective emotion can consist of sizable proportions of different shared emotions. A sales unit reacting to a new change initiative, for example, could have 80% of members experiencing negative emotions and 20% experiencing positive emotions. At a more specific emotional level, the composition could consist of 70% experiencing fear, 10% experiencing contempt, and 20% experiencing joy. Indeed, empirical studies of collective emotions tend to reveal meaningful levels of variance in group members' emotions even where there exists enough consensus to justify aggregation (e.g., ICC is $p < 0.05$ or $R_{wg} > 0.70$, Barsade 2002, Barsade et al. 2000, Bartel and Saavedra 2000, Duffy and Shaw 2000, George 1990,

Totterdell et al. 1998). More broadly, collective emotions and perceptions of them are important to study because they have been shown to influence a variety of group outcomes (van Zomeren et al. 2004). For example, positive collective emotions have been linked to greater customer service and lower absenteeism (George 1995). Similarly, negative collective emotions, specifically envy, have been associated with lower group performance and satisfaction by reducing group potency and cohesion (Duffy and Shaw 2000).

Individual members' emotions converging into collective ones can occur in small groups (Totterdell 2000, Bartel and Saavedra 2000, Barsade 2002) as well as in large work units to form distinct affective tones (George 1990). Because strategic change is unlikely to affect all work units or groups in the same way, the composition of collective emotions might be particularly complex in large organizations inhabited by groups with distinctive roles, values, and interests (Cyert and March 1992). For instance, some clusters of group members might feel proud because they perceive that managers are heeding their calls for a new strategic direction. Other clusters of group members might feel contemptuous, on the other hand, because they believe their own ideas about new strategic directions are better than the ones their managers have proposed. In turn, these collective emotions can prompt either action or inaction among subgroups within the collective motivating mobilization for or against change (Huy 2002, Reus and Liu 2004, Sy et al. 2005). In this way, collective emotions can influence leaders' success in implementing strategic change (LaNuez and Jermier 1994, Piderit 2000).

Several mechanisms contribute to the emergence of shared emotions. These include similar interpretations, experiences, identities, and organizational culture (Van Maanen and Kunda 1989, Schein 1992, Mackie et al. 2000). Faced with an important event (e.g., announcement of a new strategic direction), employees can experience emotions similar to one another if they have similar interpretations about the impetus for strategic change, or if they have had similar experiences regarding the ensuing costs and benefits for their work units (Schein 1992, Gump and Kulick 1997). For example, employees who strongly identify themselves with their companies are likely to experience emotions similar to one another when faced with events that enhance or threaten the organization's identity through a radical shift in strategic focus (Dutton and Dukerich 1991). Organizational culture represents another subtle yet powerful form of control that informs and guides the emotions of employees and contributes to shared emotional experiences (Van Maanen and Kunda 1989).

Emotional contagion is another mechanism through which emotions spread from group member to group member, often occurring automatically without conscious knowledge (although it can be consciously induced),

and produces shared emotions (Barsade 2002). This mechanism reflects an innate human propensity to adopt the emotional experiences of those around us (Hatfield et al. 1994, Neumann and Strack 2000a). The mere perception of a person showing anguish, for example, can lead to a sad expression on the perceiver's face (Ekman 2004). In turn, these unintentional changes in facial and other muscles can lead to similar emotional states in perceivers. (For a recent review, see Niedenthal et al. 2005.) Studies have found that these nonconscious but contagious effects produce clusters of shared emotional experiences in a variety of organizational settings (Totterdell et al. 1998, 2004; Bartel and Saavedra 2000; Barsade 2002).

In summary, recent empirical studies in psychological and organizational behavior have established the veracity of collective emotions, the mechanisms that contribute to their development, and their effects on important organizational outcomes. Next, we use the context of strategic change to elaborate how perceiving collective emotions provides leaders important diagnostic information for facilitating strategic change. The attributes of collective emotions brought into focus through emotional aperture include the group's affective tone (i.e., mean or modal group emotion), the level of heterogeneity of shared emotions, the proportion of positive and negative emotions, as well as the proportion of shared specific emotions. These emotional cues can take the form of facial expressions, nonverbal gestures, vocal cues, or any combination thereof.

Perceiving Collective Emotions. Research on emotional experiences in organizations and of groups within them suggests the need to expand theories to cover collective emotions (Barsade and Gibson 2007). So far, though, knowledge and understanding about emotion perception has been limited to the domain of individual-level emotions. Our goal here is to fill this gap in understanding by introducing *emotional aperture*—an ability that complements and extends existing notions of managerial social and emotional intelligence (Barrett and Salovey 2002, Côté and Miners 2006) within the context of organizational strategic change.

Strategic change provides a particularly apt context for understanding emotional aperture in several ways. First, it is an emotion-laden context where collective emotions are likely to change, gradually or suddenly. Collective emotions expressing surprise, sadness, or disappointment, for example, can provide diagnostic cues about the effective pacing of change initiatives. Additionally, the shared roles of top- and mid-level managers in the change process (facilitating, directing, or implementing strategic change) suggest application of emotional aperture that is not exclusive to any one level of leadership. Moreover, the heightened demands and limited resources that strategic change presents to all leadership ranks highlight the need for managers to share the task in perceiving and responding to collective emotions.

In the next section, we integrate research on cognitive and cultural psychology to discuss specific challenges to the use of emotional aperture in organizational contexts, the distinct perceptual lens that it requires, and the specific hurdles to distinguishing between negative and positive emotions. We draw on cross-cultural studies of emotion recognition, moreover, to discuss the use of emotional aperture in globally connected and culturally diverse organizations. Following this, we develop testable propositions around a novel research agenda: perceiving and responding to collective emotions in organizations undergoing strategic change.

Emotional Aperture

Emotional aperture entails a person's ability to recognize the dynamic emotional composition of a collective. By emotional composition, we refer to substantive proportions of diverse shared emotions that are experienced by various subgroups in a given collective, and the distribution and heterogeneity of these shared emotions. Upon the announcement of a pending change in a company's strategic direction, for example, nearly three-quarters of the marketing group may react with hope, whereas the other quarter reacts with contempt.¹ Four months later, the proportion of group members experiencing hope may decline while the proportion of people feeling contempt may increase significantly. The effective use of emotional aperture would involve distinguishing more than a single dominant group emotion (i.e., the mean or modal group emotion) and an ongoing perceptiveness to recognize such changes in the emotional composition of the collective. Our focus beyond the predominant emotion of a collective takes into account Barsade and Gibson's (1998) call for greater focus on the various characteristics of the distribution of affect in a group. We propose that change leaders' success is contingent, in part, on their ability to adjust their emotional aperture from a "setting" that brings into focus a single individual to a setting in which one can bring into focus and decode broader patterns of shared emotions in a collective (e.g., see Figure 1).

During the tumultuous times of strategic change, constraints such as the pressure on leaders to multitask while using fewer resources and less time, place heavy demands on the cognitive and temporal resources that they might otherwise productively devote to recognizing the emotions of their employees (Van Kleef et al. 2004a). Emotional aperture requires taking a particular holistic and cognitive-perceptual perspective to emotion perception (Nisbett et al. 2001) wherein managers derive a relatively accurate portrait of an organization's emotional landscape from a brief but deeper perceptual focus on emotional distributions. This possibility of achieving accuracy with relatively brief snapshots would be consistent with research showing that time

Figure 1 Differences Between These Photographs Illustrate How a Group's Emotional Reactions to an Organizational Event Are Perceived as a Function of a Leader's Emotional Aperture



Notes. (a) Shows an example where the focus is limited to the emotional reactions of a single individual. (b) Shows an example of adjusting one's emotional aperture to bring into focus the patterns of emotional reactions distributed throughout the collective.

spent processing nonverbal cues and accuracy at detection are not always positively related (Rosenthal et al. 1979, Choi et al. 2005, Todorov et al. 2007). Indeed, there is compelling evidence that brief “thin slice” perceptions can lead to greater accuracy than assessments based on longer observations (Gottman 1993, Ambady et al. 2000, Ekman 2004). This suggests that quick automatic assessment of the emotions that occur both within and between groups might provide critical information for effective coordination of relational and task resources that already may be stretched in the context of strategic change.

By defining emotional aperture regarding perceiving emotional compositions that change over time, our construct explicitly takes into account the temporal shifts in collective emotional experiences during strategic change (Eisenhardt 1989; Hackman 1993; Huy 1999, 2002; George and Jones 2001). Initial emotional reactions to

organizational stress, for example, evolve as employees evaluate and respond to events, and strategic change gains momentum (Isabella 1990, Liu and Perrewé 2005). The proportions of various shared emotions within a collective are likely to shift for other reasons as well. For example, because of the passage of time and/or managerial interventions, some fearful employees might become hopeful; contempt because of perceived unfairness might grow within one group but diminish within another (cf. Wiesenfeld et al. 2000). As organizational power and influence shift among various groups, employees who believe that their own in-groups are becoming stronger may become angry at the threatening out-group and take action against it (Mackie et al. 2000). These emotional changes suggest that the collective's emotional composition is not static, and a dynamic use of emotional aperture can be particularly useful throughout the change process.

Emerging psychological and organizational research on emotion perception suggests several distinct challenges, however, for emotional aperture regarding the accurate perception of various shared emotions in organizations. In the next section, we develop testable propositions for each of these challenges.

Attending to Emotional Information at Work: Initial Hurdle

The initial step of emotional aperture involves a dual perceptual focus of decoding social-emotional information embedded in organizational behavior and processing task-specific information (e.g., items on a meeting's agenda). Accuracy in emotion perception is often proposed to be the initial stage in models of emotional intelligence (e.g., Mayer et al. 2004b), but there is evidence of an even more basic yet underappreciated initial hurdle to emotion perception: overcoming the common bias of filtering out emotion-related information while at work (Gross 1998a). Recent research indicates a widespread perceptual habit among Westerners to filter out much of what unfolds in the social and emotional domains (for a review, see Sanchez-Burks 2005). Though it is neither uncommon nor inappropriate to focus on emotional cues (such as someone's tone of voice, facial expression, or nonverbal gestures) beyond the workplace, it is both less common and often considered inappropriate to do so in the workplace. The cultural norms of professionalism therefore create emotional blind spots.

Scholars have explained this reduced sensitivity to emotions as a pervasive work ethos: the Protestant relational ideology (PRI) (Sanchez-Burks 2002), a concept closely associated with beliefs about the moral importance of work that underpins the Protestant work ethic (PWE) (Weber 1930). Although these two belief systems have long been secularized and incorporated into contemporary organizational practices, they are based on

beliefs of the Calvinist Puritans.² These early Protestant communities set in motion a mode of organizational behavior that exemplified two beliefs, both novel at the time: (1) that work is a moral obligation and (2) that it requires restricted attention to emotional and relational matters (Bendix 1977, Lenski 1961, Weber 1930). One result of these deep-seated beliefs is the assumption that social and emotional matters will interfere with business effectiveness. To be professional, therefore, is de facto to focus attention exclusively on tasks instead of social emotional concerns (Sanchez-Burks 2005).

In some workplace contexts, this assumption is justifiable. Medical first responders, for instance, must make priority judgments for urgent care and they must base these on unemotional assessments of injury. Their training teaches them to ignore patients who cry out intensely for help, because those patients who cry out most intensely are seldom the ones most in need of immediate help. But other contexts imply the opposite. Consider the postdivestiture situation of AT&T. Top management's inadequate dealing with middle managers' emotional stress, caused by massive restructuring and firing, produced widespread but covert anger and depression. These emotions de-energized AT&T managers and reduced the collective and innovative dynamism of the restructured organization (Moses 1987).

Nonetheless, earlier research suggests a general tendency within Western-based organizations to decrease attention to emotional information in the workplace. Remarkably, the same people who show impoverished attention to emotional cues at work might be highly alert to similar emotional cues away from work (Sanchez-Burks and Lee 2007). This contextual variation in emotional sensitivity suggests that emotional aperture might require breaking a habit of emotion perception; that is, unknowingly switching it off at work. Personal and cultural differences found for PRI suggest that the need to do so varies from one person to another, but might be particularly important wherever PRI is widespread (cf. Sanchez-Burks 2005). The implication of PRI for organizations and managers during strategic change is that they must learn about the deep-seated habit of filtering out precisely the type of information they need in responding to emotional behaviors. This bias in workplace cognition inhibits the necessary and initial step in emotional aperture, perceiving emotional information in others, a bias that can affect the organization and its members.

PROPOSITION 1. (a) *The strength of PRI within an organization is negatively associated with the emotional aperture level of its members by reducing overall attention to emotion-related information.* (b) *The strength of PRI for specific organization members is negatively associated with their level of emotional aperture by restricting their overall attention to the emotional dimension of work activities.*

Thus the first step in increasing emotional aperture is to overcome culturally grounded cognitive habits that restrict attention to emotional cues at work. A focus that includes emotion perception is especially important for leaders who manage the role conflicts and emotional tensions that arise during strategic change. Attention to collective emotions may provide leaders with the information they need, for example, during times of particular crisis, to deal sensitively and promptly with their employees' most acute emotional needs (Fox and Amichai-Hamburger 2001, George et al. 2001, Huy 2002, Liu and Perrewé 2005).

Adjusting Emotional Aperture: From the Individual to the Collective

Focusing on emotional information is a necessary but not sufficient step in perceiving accurately the collective's emotional composition. Emotional aperture departs from other constructs of emotion perception by switching from a research focus on sensitivity to the emotion-laden cues of an individual (or other objects such as paintings, see Mayer et al. 2004b) to cues that are embedded in a collective. Through emotional aperture, individuals are able to focus on and perceive the emotional composition of a collective.

Our focus on the emotional composition of collective emotions does not downplay the importance of a focus on individual-level emotional cues. Particularly with direct reports, accurate perception of a specific individual's emotional cues has been shown to be important to the quality of interpersonal interactions, negotiations, and perceived leadership (Foo et al. 2004, George 2000, Rubin et al. 2005). But a managerial focus on that alone, perhaps on the emotions of very close or very outspoken employees, could be misleading about the prevalence and distribution of that specific emotion as well as other shared emotions across the organization. Therefore, adjusting one's perception so as to read collective emotions is complementary to—rather than a substitute for—perceiving another individual's emotions.

It is possible to conceptualize emotional aperture as a one-time perception; that is, an ability to recognize the composition of emotions in a collective at a given moment (i.e., as with a still versus motion picture camera). However, we propose it is most effective when used continually throughout the strategic change process. The dynamic nature of strategic change suggests, for example, that beyond simply perceiving the proportion of contempt that emerges on the initial announcement of a strategic change initiative, it is also necessary to perceive the extent to which this emotion spreads or subsides over time. To the extent that contempt signals a high likelihood that the end of a productive relationship is near (Gottman 1993, Pelzer 2005), such dynamic perception of collective emotions could provide timely clues about whether the change initiative is being accepted or not.

Similarly, perception of the stability of collective emotions also may provide useful information. For example, a moderate and stable level of shared frustration about the slow progress of product innovation might be healthy, because it can motivate increased effort to meet organization members' aspirations (George and Zhou 2002).

Recent research on analytic versus holistic perception provides insight into the basic challenges involved in perceiving a collective's emotional composition. (For a review, see Nisbett et al. 2001.) People vary widely in their ability to process social information holistically—seeing patterns in an entire field (“forest”) as opposed to focusing on specific individuals (“trees”). In a study of particular importance to holistic processing of emotional information, Masuda et al. (2008) asked participants to evaluate a cartoon drawing depicting a person surrounded by others who showed a contrasting emotion. A common response of participants was to focus on the individual and ignore information about the surrounding group. A followup experiment, using eye-tracking measurements, confirmed that participants were not simply discounting information about the group, but literally narrowing their attention on one or two individuals instead of perceiving the group more holistically. Thus, when perceiving a group, it is not uncommon to narrow one's attention to a few *individuals* and to evaluate only them in detail (Masuda et al. 2008). As a result, people automatically filter out information embedded in the larger social context, such as a collective's emotional composition.

Illustrating a different attentional focus are members of various East Asian societies. Scholars have found that they more often process social information holistically (i.e., focusing on broad patterns within the group as opposed to those of a few salient individuals) (Nisbett et al. 2001). Thus, this challenge to achieving this collective-level focus of attention appears particularly tied to Western societies, where it is more common to focus on individuating information at the expense of social and contextual information (Nisbett et al. 2001).³

In sum, research on holistic processing suggests that a person's ability for processing individual-level information might not translate into a similar ability for processing collective-level information. Using one's emotional aperture would therefore entail, for many people, breaking their perceptual habits to recognize the affective composition of an organization undergoing strategic change.

PROPOSITION 2. (a) *Individuals high in holistic cognition will show high levels of ability in using emotional aperture in their organizations.* (b) *Conversely, individuals high in analytic cognition will show low levels of ability in using emotional aperture in their organizations.*

Challenge of Asymmetry in Perceiving Accurately Negative Emotions vs. Positive Emotions

During emotionally turbulent times, accurately recognizing clusters of shared positive emotions (e.g., the proportion of group members experiencing happiness or hope) and negative emotions (e.g., that of contempt or fear) is necessary for understanding a collective's emotional composition. Although scholars have shown that experiencing positive emotions (e.g., hope and attachment) is as critical to personal and organizational success as negative ones (Fredrickson 1998; Fredrickson et al. 2003; Huy 1999, 2002), the latter remain more difficult to decode accurately (but see Walbott and Scherer 1986, which we will discuss later). Empirical evidence indicates a reliable asymmetry in emotion recognition, showing less accuracy for negative emotions than for positive ones (Elfenbein and Ambady 2002). Therefore, attention to collective emotions alone does not necessarily lead to accurate recognition of emotions across the spectrum of valence.

Misreading the proportion of negative emotions within either the organization as a whole or its departments in particular, we propose, can impede strategic change. A leader who underestimates the prevalence of contempt in a given department might unwittingly press on with a particular change initiative, for instance, only to encounter attempts to sabotage its success (cf. LaNuez and Jermier 1994, Piderit 2000). To illustrate the predictive power of specific negative emotions, we have highlighted the emotion *contempt*: an emotion that can wreak havoc, but also one that few scholars have discussed (Fischer and Roseman 2007, Pelzer 2005). Contempt arises when people think more highly of themselves than they do of their targets (i.e., leaders of change), thus denying the latter legitimate authority. Charles Darwin's (1965) seminal study of emotions underscored contempt as a potent emotion, which entails scorn and disdain. Later research has supported this observation as well as Darwin's (1965) proposition that contempt is a basic emotion that generates distinct facial and other physical expressions (Mackie et al. 2000, Matsumoto and Ekman 2004). Even a brief video clip of an interpersonal interaction is enough to reveal contempt. Its presence provides a signal that a social relationship will likely be antagonistic or even end quickly (e.g., Herzog 1998, Gottman 1993).

Within organizations, the ability to detect shifting proportions of contempt during strategic change provides leaders with valuable information about the effectiveness of past actions and the likely success of new ones. Contempt signals the belief among employees that those in charge of change have inadequate ideas, act incompetently or unprofessionally, and are therefore unworthy of trust. It may predict whether some groups of employees will quit their jobs, or resort to quiet disobedience or even sabotage (LaNuez and Jermier 1994).

Moreover, leaders can use emotional aperture to monitor the changing proportion of specific negative emotions within various groups. Unlike differentiating between global negative and positive emotions, differentiating between specific ones provides fine-grained cues about potential behavior, for example, emotions associated with a relational orientation to engage with or disengage from others (Lutz and White 1986, Kitayama et al. 2000). Consider, for example, two specific negative emotions: contempt and anger. Whereas anger is amenable to resolution because it motivates engagement (Folger 1987), the more disengaged emotion of contempt most often is not (Gottman 1999, Fischer and Roseman 2007). Thus, misreading one negative emotion (anger) for another (contempt) can lead to adverse unintended consequences.

Despite the utility of recognizing specific negative emotions, because they typically signal a problematic state of affairs, many people are unable to detect negative emotions as accurately as positive emotions. (For a review, see Elfenbein and Ambady 2002, Barrett 2006b.) In their meta-analysis of 97 studies, Elfenbein and Ambady (2002) found that accuracy rates ranged from 68% to 79% for detecting positive emotions, but only from 43% to 67% for negative ones. Contempt had the lowest rate (43.2%), followed by fear (57.5%); but happiness had the highest (79%). The explanation for this handicap might have to do with the lower frequency with which people encounter displays of negative emotions. Another complementary explanation is that given their potentially destructive consequences in social interactions, most people might try to hide their own negative emotions—especially in front of their more powerful superiors (Argyris 1993), inhibiting the latter's ability to decode their subordinates' negative emotions. This adversely affects leaders' collective emotion recognition by increasing the odds of underestimating the proportion of negative emotions.

PROPOSITION 3. *The level of individuals' emotional aperture for assessing the proportion of negative emotions in an organization will be lower than that of positive emotions; consequently, leaders are likely to underestimate the prevalence of negatively valenced emotions among their followers.*

Unique Challenges of Culturally Diverse and Globally Situated Businesses

As with many other features of interpersonal relations, emotion perception abilities reflect the interplay between culture and cognition (Sanchez-Burks and Lee 2007). Although there is some degree of universality in non-verbal displays of emotions (Ekman 1972, Haidt and Keltner 1999, Mesquita and Frijda 1997), enough variation remains to produce culturally unique “accents” in emotional displays that create a handicap at decoding the

emotions expressed by people with cultural backgrounds different from those of the perceivers (cf. Elfenbein and Ambady 2002). In increasingly global and culturally diverse companies that undergo various forms of strategic change (e.g., global acquisitions and international alliances), cultural differences in emotional display can present yet another challenge to accurately reading the composition of diverse collective emotions in a group.

Scholars have suggested that this disadvantage is because of people's common greater exposure to people from similar backgrounds than to those from different ones (Elfenbein and Ambady 2003a, Beaupré and Hess 2006, Elfenbein 2006). For example, Chinese people living in China are less accurate than Chinese people living in the United States at decoding Anglo-American faces. Similarly, Africans living in the United States are more accurate at decoding African and Anglo-American faces than at decoding Chinese ones (Elfenbein and Ambady 2003a). However, training in recognizing emotional facial expressions produces greater improvement for emotions expressed by out-groups than by in-groups, supporting the argument that exposure increases accuracy (Elfenbein 2006). Although this disadvantage at decoding out-groups' emotions has been demonstrated only at the individual level, this finding suggests that at the level of collective emotions, people's inferences about various shared emotions of the out-groups will be less accurate than those related to the in-groups. This bias presents another challenge to accurate emotion perception.

PROPOSITION 4. (a) *Accuracy at perceiving proportions of shared specific emotions in collectives will decrease as the level of ethnic/cultural diversity in the target group increases.* (b) *This relation between accuracy and diversity will be moderated by the level of the perceivers' experience with ethnic/cultural diversity.*

Having explored key factors that enable or hinder emotional aperture in work settings, we conclude in the next section with additional empirical research questions suggested by the construct of emotional aperture.

Conclusion and Future Directions

In this paper, we have advanced emotional aperture as an ability to perceive the composition of various shared emotions that make up the emotional composition of a collective. This metaemotional recognition ability (Barsade and Gibson 2007) explains how leaders recognize patterns of diverse emotions distributed across various groups in an organization. In turn, this recognition ability provides leaders with critical information necessary for appropriate and timely responding actions. We thus advance the literature on emotion perception competencies, that has heretofore focused on recognizing a single individual's emotions accurately, and the extant

literature of collective emotions that has focused primarily on a group's dominant or modal affective tone. We have proposed a set of factors that moderate the effective use of emotional aperture. In doing so, we have tried to explicate how change leaders' dynamic use of emotional aperture is neither natural nor easy—particularly during the challenging organizational demands that arise during strategic change. The factors that contribute to these challenges of using emotional aperture include influences embedded in cultural, contextual, and social cognitive predispositions.

It remains an interesting empirical question as to whether individuals who are skilled at recognizing emotions in others at the individual level will be similarly competent in doing so at the collective level. We have argued that this might not always be the case. Using emotional aperture to bring into focus the composition of collective emotions may, in fact, represent a distinct ability complementary to existing conceptualizations of social emotional intelligence. Empirical tests of this and the other proposed relationships are needed in future research to validate and deepen our understanding of collective emotion perception.

Several empirical projects on emotional aperture can be derived from this theoretical development. First, our theory of emotional aperture has delineated conditions that moderate its utility in organizations. The importance of emotional aperture for leaders' success in realizing strategic change is likely to increase, for example, with the level of emotional turbulence and with the level of cultural diversity in an organization. The interaction hypothesis suggested by the emotional turbulence moderator could be examined empirically, for example, in a longitudinal cross-panel research of diverse employee groups, inhabiting one organization in flux or between companies that vary in the magnitude of change as perceived by their employees.

Future researchers also could investigate the degree to which emotional aperture is an ability that people can be trained to improve. Recent studies have provided data suggesting that training can increase people's ability to decode personal emotional displays (Elfenbein 2006). Similar results might be found for increasing people's ability in using emotional aperture at work. The ability measures of emotional aperture required to assess the effectiveness of such training also would provide a metric that organizations could use to evaluate their success in building this dynamic managerial capability. Importantly, such a metric should avoid exclusive reliance on self-reported measures of accuracy—and include, instead, various multichannel stimuli with ecological validity (e.g., audio, pictures, or movies of people in context). People are generally overconfident about their accuracy in their judgments about others (Todorov et al. 2007), yet the most confident judgments are not the most accurate. As Ames (2007) has recently shown, the

drivers of confidence differ from the drivers of accuracy (also see Nisbett and Wilson 1977). Studying emotional aperture in more naturalistic settings also may further our understanding about moderating factors. For example, although meta-analyses show a disadvantage in recognizing negative emotions compared to positive ones, some researchers suggest this effect may be erased when the perceiver has access to both vocal and visual cues (e.g., Walbott and Scherer 1986). This implies, for example, that in a meeting where employees are mostly quiet, the leader's handicap at reading negative versus positive emotions may not be reduced significantly. However, cues from the vocal ambience of a group, for example, in the moments leading up to a meeting—perhaps when the leader is approaching, but not in view—may eliminate or possibly reverse this handicap.

Although we have restricted our discussion about the applicability of emotional aperture to managing strategic change, future researchers can explore this ability in related contexts such as transformational leadership, organizational learning, and creativity in addition to broader settings from the classroom to boardroom. In extremely intense, high-stakes situations such as those faced by peacekeeping soldiers in the field, the ability to quickly assess the emotions of a collective may well be critical to the well-being of all people involved in the situation. More broadly, emotional aperture is likely to be useful in contexts where there is a need to respond rapidly to the emotional needs of diverse groups. The concept of emotional aperture promises to open new and exciting terrains of research regarding collective emotions, emotion perception, and their centrality to organizational theory.

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Endnotes

¹For the sake of illustration only, we describe displays of a single dominant emotion at any moment. Recognition becomes difficult when people display several contradicting emotions at once (Young et al. 1997).

²PRI appears unique to the Calvinist Protestants; however, there are many analogues to the PWE and its emphasis on the moral obligation tied to work (Sanchez-Burks 2002). Examples include the mores established by the Arthashastra in Hindu culture (Kautilya 1992), during the Tokugawa period in Japan (Bellah 1957), and within ancient Hebrew culture (Furnham 1990).

³For an analogous discussion on the holistic processing of individual human facial features, see Ellison and Massaro (1997) and Tanaka and Farah (1993).

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