Interaction between Cognition and Emotion on Processes of Strategic Renewal

Abstract

We theorize on how cognition and emotion interact with each other to impact various organizational processes that are central to strategic renewal through the proposed concept of team emotional tones—defined as teams' dominant emotional states toward particular events. We propose ways in which firm leaders can create team emotional tones that involve appraisals of reduced uncertainty in work interactions and coping ability (e.g., calmness, agentic disappointment) in order to help the competence modification process; team emotional tones that involve appraisals of novelty-complexity and coping ability (e.g., interest, frustration) to help the competence definition process; and team emotional tones that involve appraisals of future achievement of valued goals and coping ability (e.g., hope, agentic fear) to help the competence deployment process. We illustrate our theory with organizational actions drawn from the renewal of Nissan between 1999 and 2002. Finally, we link our model to the literature on dynamic capability and temporary advantage.

This paper explores how emotion interacts with cognition at the collective level to influence various processes of strategic renewal. Although recent psychological research has demonstrated the interaction between cognition and emotion at the individual level in influencing the quality of decision making and important behaviors such as cooperation or negotiation with others (e.g., Damasio, 1994; Frijda, 1988; Fong, 2006), we know relatively little about how emotion and cognition interact to influence the collective thinking and behavior that are central to the processes of strategic renewal. Teams involved in strategic renewal often operate in an emotion-laden context (e.g., Brown and Eisenhardt, 1997; Floyd and Lane, 2000; Huy, 2005), which in turn can influence the quality of their collective decisions and actions.

Strategic renewal refers to an evolutionary process that interrupts organizational inertia in an attempt to bring about a change in an organization's competencies and strategic direction in response to an evolving competitive business environment or create new product-market domains to extend competitive advantage (Chakravarthy and Doz, 1992). Strategic renewal differs from radical change more in regard to organizational processes than outcomes. Compared to radical change (Tushman and Romanelli, 1985), renewal processes tend to be evolutionary rather than revolutionary (Weick and Quinn, 1999), more gradual than rapid, collective and bottom-up rather than exclusive and top-down, more consultative than directive, and to have goals that tend to be initially equivocal and ambiguous rather than unitary and clear (Brown and Eisenhardt, 1997; Burgelman, 1994). Hence, the cognitive and emotional dynamics elicited by (or that enable) the processes of renewal are unlikely to be similar to those related to radical change. ¹

Studying strategic renewal is important to the understanding of how firms achieve a se-

ries of temporary advantages. Some scholars have questioned the sustainability of firm-specific advantages, which may have become more transient due to the increasing pace of global competition and dispersion of new knowledge (D'Aveni, Dagnino, and Smith, 2008). Firms may attempt to outperform their competitors by engaging in a periodic or continuous process of strategic renewal in which they modify or create new product-market domains designed to provide them with a series of temporary advantages. Renewal seems less risky than radical change because the latter generally involves discontinuous, rapid, concurrent, and deep changes in a variety of organizational dimensions such as strategy, structure, and culture that affect a large number of business units (Bartunek, 1984; Pettigrew, 1985; Huy, 2002). Indeed, scholars have observed that disappointments and firm mortality risks related to radical change are significant (Hambrick and D'Aveni, 1988; Singh, House, and Tucker, 1986)

However, initiating and persisting with strategic renewal can also be cognitively and emotionally difficult for managers (Burgelman, 1994; Teece, 2007). In addition to cognitive biases, delusion and hubris that heighten the firm's risk aversion and delay the renewal process (e.g., Kahneman and Tversky, 1979), strategic renewal may precipitate firm decline (and even death) if the process is not managed competently (Baden-Fuller and Volberda, 1997). Such events also have important consequences for the individual's psychological and economic well-being, and thus arouse widespread and intense emotions such as fear, anger, frustration, but also excitement and passion in regard to the strategic renewal process.

There has been relatively scant theorizing on how cognition interacts with emotion to in-

¹ To illustrate, Huy's (1999) construal of radical change as iteration between three processes of receptivity to proposed radical change, collective mobilization, and learning from changing, is different from strategy renewal scholars' construal of processes of strategic renewal described further in this article.

fluence the process of strategic renewal and how firm leaders can facilitate this interaction.² Floyd and Lane (2000) are among the few early scholars who have begun to hypothesize the link between what they call distinct "emotional tones" and each of the three organizational processes involved in strategic renewal. They outline the importance of "tolerance to ambiguity" for competence modification, "impassioned exploration" for competence definition, and "focused commitment" for competence deployment. However, in our view these scholars have not sufficiently elaborated upon 1) the emotional nature of these tones and 2) how cognition and emotion interact with each other at the collective level to influence different renewal processes, two interrelated questions which we explore below by drawing on the burgeoning research on emotions.

The remainder of our paper is organized as follows. First, we review briefly the strategic renewal literature that highlights the importance of various organizational processes, and show how the latter can be emotionally laden. Second, we elaborate on the collective concept of team emotional tone and discuss how it can be important for strategic renewal. Third, we discuss the interaction between cognition and emotion by specifying distinct appraisal processes that give rise to various team emotional tones that facilitate the three processes of strategic renewal (competence definition, modification, and deployment). We then illustrate our theory with organizational actions drawn from the strategic renewal of Nissan between 1999 and 2002. We end by discussing how our cognition-emotion team-centered actions extend the literature on temporary advantage, strategic renewal, and the micro foundations of dynamic capability.

Organizational processes involved in strategic renewal

A number of scholars have posited three organizational processes that are central to strate-

² One of the notable exceptions include Huy's (2005) treatment of strategic renewal. This work discusses renewal processes that are mainly similar to those related to radical change discussed in Huy (1999). We will argue that many of these processes are different and thus elicit different kinds of emotional responses and organizational attention.

gic renewal: competence modification, competence definition, and competence deployment (e.g., Huff *et al.*, 1992; Floyd and Lane, 2000). Competence modification refers to the process whereby managers recognize the need for change, question the firm's strategy or competencies (Huff et al., 1992) and, since the existing strategy is in flux, typically deviate from the formal strategy and its control systems. However, this strategic drift, if prolonged, may impair the firm's performance in the long run as attention becomes unfocused and organizational resources are scattered. Except in the most benign and munificent environments, managers in the dominant coalition must ultimately decide on a new strategic direction or reinforce their commitment to the status quo (Cyert and March, 1992; Floyd and Lane, 2000).

Competence definition is the organizational process whereby managers encourage experimentation with new skills and exploration of new product-market opportunities. A variety of initiatives may be explored, each with its own diagnosis of, and solution to, the firm's problems (Burgelman, 1983). Through a process of mutual negotiation, coalitions may form around certain alternatives and be championed as formal proposals to top executives. Ultimately, one or more of these initiatives will be officially authorized and given the resources to grow into a company's core competence (Burgelman, 1994; Huff et al., 1992).

Competence deployment refers to the process of implementing a company strategy, either by reinforcing an existing product-market position or moving into new product-markets (Floyd and Lane, 2000). Deployment activities include modifications to organizational structures, systems, and people in order to achieve the strategic plan, which is guided by an accepted definition of strategic ends and means (Hrebiniak and Joyce, 1984).³

³ The deployment process seems the only renewal process that bears some conceptual similarity to the collective mobilization process involved in radical change as conceptualized by Huy (1999). But it is important to note that deployment is considered at the work team level in regard to strategic renewal, whereas it is construed at the organization-wide level for radical change.

Although these three processes can unfold in a linear sequence from competence definition to modification, then deployment (Huff et al., 1992), in reality other sequences may arise. These processes can be sequential or concurrent, as different teams can engage in different processes (Bower, 1970; Burgelman, 1994). Moreover, the three processes of renewal can be closely linked to recent calls to examine dynamic capabilities related to the search for, selection, and deployment of firm resources and capabilities.

These processes can also be emotionally laden. And emotions can themselves help or hinder the contribution of each process to successful strategic renewal. For example, in the competence modification process, groups that are close to the market are likely to be the first to experience the shortcomings of current strategy and experience a number of negative emotions such as distress, sadness, and frustration with underperformance. These, in part, provide the initial signals of organizational stress (Huff et al., 1992) and help draw organizational attention to underperformance issues. However, such early warning signals may not be explicitly expressed due to employees' fear that behavior which does not conform to the existing strategy may be punished (Argyris, 1993). As a result, top management may not become aware of these warning signals until a point where company performance has declined so significantly and persistently that it can no longer be hidden or rationalized as a short-term fluctuation (Leonard-Barton, 1992).

Similarly, during the competence definition process, in which lower level employees experiment with novel solutions to emerging problems, a shared fear of failure can sap the goodwill and energy of employees to engage in exploratory, creative search activities. Generally, people who experience positive affect tend to be more creative (Amabile et al., 2005). Fearful people, in contrast, tend to favor risk-averse choices (Lerner and Keltner, 2001). Finally, collective alienation can de-energize the process of competence deployment among teams working together to

coordinate their efforts to find solutions to unforeseen implementation challenges (Huy, 2002). In sum, the three processes of strategic renewal can be intensely emotional and may cause beneficial or dysfunctional outcomes, depending on how firm leaders manage them (George, 2000). We propose that firm leaders deal with collective emotion by attending to various teams' emotional tones.

Team emotional tone

We focus on teams because many organizational actions rely on the pooling of diverse competencies and collective effort, rather than single individuals (Klein et al., 2006). A team refers to a set of individuals who socially interact, possess one or more common goals, are brought together to perform organizationally relevant tasks, exhibit interdependencies with respect to workflow, goals and outcomes, and are together embedded in an organizational context. We use "group" and "team" interchangeably in this paper.

Drawing on the behavioral theory of the firm (Cyert and March, 1992), we start with the assumption that in any organizational setting various teams performing different organizational tasks will have divergent goals and interests. These teams likely compete with one another to find new business strategies and product-markets (i.e. competence definition) if they are dissatisfied with performance in their existing product-markets (i.e. competence modification), develop and implement them without other teams' approval, and promote their team's output as a new viable corporate strategy (i.e. competence deployment) (Burgelman, 1983, 1994; Floyd and Lane, 2000). In large and complex organizations, people who work in teams that perform the same tasks and share similar experiences are likely to identify with their own teams more strongly than with other teams or the larger organization (Edmondson, 2002).

We propose the concept of 'team emotional tone' as an extension of group affective tone

that involves similar group moods (George, 1990). "Moods" generally refer to coarse (positive versus negative) feeling states that may not be clearly linked to an object or cause (i.e. people mayfeel positive or negative without knowing the reason). In contrast, emotions (e.g., hope, pride, fear, anger) refer to more fine-grained feeling states (positive versus negative, high versus low activation) that are caused by specific cognitive appraisals and can cause distinct action tendencies. For example, fear is caused by a cognitive appraisal of a harmful event over which one has little control, is associated with a sense of uncertainty, and can produce an urge to escape. Anger is caused by appraisal of a harmful event that is caused intentionally by another person, is associated with a sense of certainty about what happened, and can produce an urge to retaliate (see Elfenbein, 2007). Both fear and anger are characterized by the same negative feeling but are caused by different cognitive appraisals and produce almost opposing action tendencies.

Interaction between cognition and emotion. Emotion scholars argue that people are "hardwired" to appraise events along dimensions such as responsibility, control or coping ability, certainty, or novelty, the combinations of which give rise to different emotions (C.A. Smith and Ellsworth, 1985; Roseman, 1991). Although cognition can cause emotions through cognitive appraisal, the emotion generated can in turn influence subsequent cognitive appraisals. Cognition and emotion thus interact with each other. For example, angry people were more likely to blame someone else for a subsequent negative event (an appraisal associated with anger), whereas sad participants were more likely to blame the situation (the agency appraisal associated with sadness) (Keltner, Ellsworth, and Edwards, 1993). Tiedens and Linton (2001) found that when people feel emotions that are accompanied by certainty appraisals (e.g., anger, contentment), they are more likely to feel certain in subsequent situations than when they feel emotions accompanied by uncertainty appraisals (e.g., fear, surprise).

More generally, we propose that attention to both cognition and emotion and the interaction between these two constructs provides a fuller understanding of the psychological causes and effects underlying organizational behavior than focusing on any one construct alone. At the individual level, research has shown that emotion is *essential* to sensible, "rational" choice in the social domain. It allows people to face uncertainty and set long-term goals; it permits choice among incommensurable alternatives, such as ethics and values, to visualize a desirable future, to speed up decision making, and to make the leap of faith into the unknown. Without emotion, cognition can lead to endless analyses and inaction in uncertain or ambiguous situations (Damasio, 1994; Haidt, 2001; Zajonc, 1980), which are typical of renewal contexts.

Moreover, firms undergoing strategic renewal can present their employees with an over-whelming number of equivocal issues that may dilute organizational attention (Ocasio, 1997), dissipate organizational efforts, or paralyze the firm by analysis that hampers timely action (Floyd and Lane, 2000; Langley, 1989). Emotions complement cognition by providing work teams with feelings of heightened priority and energy to focus their attention on dealing with a limited set of organizational issues to increase the odds of addressing the latter successfully.

Team-level emotion. Researchers have established links between group affective tone (i.e. group moods) and several aspects of performance (George, 1996). For instance, positive affective tone is related to group coordination, whereas negative affective tone is related to effort (Sy, Côté, and Saavedra, 2005). Extending this idea, we define team emotional tone as a similar emotional state experienced by a majority of team members in regard to a specific organizational object or event. Individuals' emotions converge into a collective whole to form a distinct emotional tone (Bartel and Saavedra, 2000; Barsade, 2002).

Team emotional tone represents a more precise concept than group affective tone because

it identifies the specific emotions (e.g., pride, fear) experienced in response to a specific event, the associated cognitive appraisal, and the likely effect on subsequent cognitive appraisal or behavior. Team-level emotions represent the main unit of analysis in our model because organizationally-aligned emotions and actions, which facilitate the success of radical change (Huy, 1999; Tushman and Romanelli, 1985), are unlikely to be present or even beneficial for the realization of strategic renewal. The latter is typically achieved by diverse teams developing, experimenting with, and promoting divergent strategic alternatives until a clear winner emerges, thanks to a combination of favorable external market conditions and skilful internal influence, ending with top management ratifying the "proven" strategy (Burgelman, 1994; Kanter, 1983).

Empirical research has demonstrated that emotions can be experienced at team level as distinct from individual-level phenomena (Smith, Seger, and Mackie, 2007). A team member can feel emotions on behalf of a team or fellow team members who experience a critical event even when not personally affected by it, particularly when they identify strongly with the team. The consensus within people's teams defines reality for them. For this reason, team-level emotions, as compared with individual-level emotions, are likely to be seen as true and objective. Just as belief consensus increases certainty and motivates action, shared team-level emotions influence team thinking and behavior in important ways (Barsade, 2002; Brief and Weiss, 2002; Mackie, Devos, and Smith, 2000).

Several mechanisms contribute to the emergence of emotional tones in teams. Faced with an important event, employees in a particular team will experience emotions similar to those of others if they make a similar cognitive appraisal of the reasons for change or the ensuing costs and benefits for their own teams (Schein, 1992). Team attraction, selection, and attrition mechanisms can produce strong team norms among team members (Schneider, 1987). Employees who

strongly identify with their team are likely to experience similar emotions when faced with events that enhance or threaten the team's identity or welfare (Dutton and Dukerich, 1991). Emotional contagion is another mechanism through which emotions spread from one team member to another, albeit often occurring unconsciously (Barsade, 2002).

Emotional tones can arise as a result of emergent team dynamics as described above, or as a result of influencing actions performed by formal or informal team leaders who emerge in various contexts (e.g., Klein et al., 2006; Zhou and George, 2003). Some team outsiders, such as top management or other teams, can also influence the focal team's emotions (e.g., Ashkanasy and Tse, 2000; Williams, 2007). Leaders manage team emotional responses by first empathizing and identifying with the collective emotional state of team members and understanding the situation causing it; then crafting a response to the situation, framing the situation in a new light, and communicating their response both verbally and through action to establish the conditions for other team members to interpret and generate their own emotional responses (Pescosolido, 2002; George and Zhou, 2007). Insofar as these responses are largely similar to one another, they shape the team's emotional tone.

TEAM EMOTIONAL TONES AND PROCESSES OF STRATEGIC RENEWAL

A team can experience multiple distinct emotional tones in a given time period. Research has shown that people can experience various positive and negative affective states that interact with each other to influence cognitive processing and behavior in a time period that is relevant for a specific task (e.g., Fong, 2006). George and Zhou (2007) found, for example, that creativity in organizations can be fostered when managers provide a supportive work context in which employees experience both positive and negative moods at different times during the course of a creative task. This occurs because positive moods signal an unproblematic state of affairs and

facilitate divergent thinking, whereas negative moods alert employees to a problematic state of affairs and encourage systematic detailed problem solving. The iteration between both modes of processing is beneficial for generating creative ideas and making them work. Moreover, people can experience diverse emotions as they appraise various dimensions of the same situation. Faced with a challenging task, for example, an employee may feel proud to be given such a task by an appreciative supervisor, yet at the same time feel anxious about whether he or she will eventually succeed in the task. People anticipate emotional outcomes and behave in ways that lead to desired emotional outcomes (Bagozzi, Baumgartner, and Pieters, 1998).

The above discussion implies that healthy emotion regulation through cognitive appraisal and reappraisal, and/or acting thoughtfully to deal with the emotion-causing event, can help to avoid the dysfunctional effects of impulsive, automatic behaviors (Gross, 1998). By the same token, teams that can regulate their collective emotional tones constructively are likely to be more successful at performing challenging strategic renewal tasks.

Team emotional tone that helps competence modification

The competence modification process is characterized by front line managers initially noticing that existing routines are breaking down and no longer provide the desired level of performance (Floyd and Lane, 2000). These managers may be the first to experience disappointment with the current strategy because they are closer to markets and technologies than top managers. As underperformance persists, they begin to question the viability of their existing strategy and sense the need for change. They likely feel anxious as they ponder uncertainties related to their existing strategies and the future evolution of their product-market domain. Insofar as these managers share and discuss their concerns openly and widely with people in their teams, a significant number of team members may come to share similar cognitive appraisals and emotions.

Experiencing uncertainties can be intensely emotional for these teams, according to Bridges' (1986) model of organizational transition. "Endings" come first, then "neutral zones", and finally "new beginnings." In the endings phase, employees experience continued declining firm performance and dwindling resources, and sense the end of the existing strategy. Before starting to articulate a new strategy or competence (i.e. competence definition) that will usher in the "new beginning", they usually experience the emotional effects of the neutral zone, in which they "feel disconnected from people and things of the past and emotionally unconnected with the present" (1986: 249). This phase is often marked by a sense of disorientation (the past is no longer appropriate but the future direction is not yet clear), and even disintegration (everything seems to be collapsing). Left wondering what organizational elements remain valuable and those that need to be abandoned or modified, team members may feel highly anxious.

Yet being able to tolerate the anxiety that accompanies an uncertain situation for some period of time may in fact be beneficial for questioning strategic assumptions and thinking about which organizational competencies need to be discarded, maintained, or modified in relation to the various strategic directions under consideration. During the competence modification process, team members need adequate time to reflect on the past and develop new perspectives for the future (Bridges, 1986). They have to come to terms with issues such as what went wrong, the need to change now, and the modifications required. Leaders should include as many members as possible in the deliberation process and encourage open acknowledgement of mistakes and losses (Huy, 1999). Impatient managers who hasten the rest of the organization through this meditative mourning phase risk a backlash, as occurred at AT&T (Moses, 1987). Denying the emotional impact of the pain and bypassing the catharsis and mourning phase may give rise to an organization paralyzed by survivor sickness and devoid of creative energy (Noer, 1993).

The passage from the endings phase to reflecting creatively about new strategies and competencies is not, however, automatic. Some teams may be able to manage the emotional tension on their own; others may be less autonomous and require outside help. People's psychological resources are depleted when under intense stress and need to be replenished so that they can tolerate high uncertainty (Hobfoll, 1998).

One way to reduce extreme levels of dysfunctional stress is to create team emotional tones that involve appraisals of uncertainty reduction and enhanced coping ability (Edmondson, 1999; Huy). Several emotional states can be associated with these two appraisals, such as calmness in work interactions and "agentic" disappointment about not reaching the team's aspiration levels. We discuss each in turn.

Calmness in work interactions. Although expressions of emotion can be functional in work interactions insofar as they signal important issues requiring attention (Frijda, 1988), such signals may not be genuinely displayed, especially when there is status or power asymmetry between the interacting parties on major issues of disagreement (Argyris and Schoen, 1978). Disagreement may arise as front line managers notice the first serious symptoms of underperformance and start doubting the viability of the existing strategy. Displaying a narrow range of emotions (especially positive ones) in front of higher status colleagues is common in organizations, even when there is disagreement (Jackall, 1988). According to Argyris (2000), employees commonly suppress negative feelings to maintain positive collective morale. Such behavior is especially common in times of stress. Yet reluctance to express emotion-laden information can reduce the quality of the knowledge exchange between team members. Similarly, more knowledge sharing is likely to occur if team members feel psychologically safe.

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We construe calmness in work interactions as the affective dimension of psychological safety at work (Edmondson, 1999). It refers to "feeling able to show and employ one's self without fear of negative consequences to self-image, status, or career" (Kahn, 1990: 708), which in turn reduces uncertainty about harmful consequences for oneself. Employees are likely to feel calm when their work interactions reflect mutual respect for their own and others' contributions. Feeling calm allows them to explore novel or unpopular ideas, free from excessive worry about risks. People who are calm tend to be more effective learners because they are less defensive, and more open to sharing and discussing one another's mistakes (Argyris, 1990; Edmondson, 1999). All of these behaviors reflect high coping ability, that is, the appraisal that people have adequate ability to deal with the undesirable situation if required. Front line managers, for example, being closer to technologies and markets than top managers, can synthesize new information for top management and hence their participation in the formulation and implementation planning of a proposed change can reduce perceptions of uncertainty. Appraisals of coping ability and reduction of uncertainty are linked in this context.

Moreover, an appraisal of coping ability can reduce the harmful effects of the fear of the unknown. Research on "threat-rigidity" (Staw, Sandelands, and Dutton, 1981) found that employees cope with perceived "threats" by such means as wishful thinking, passive resignation, or narrowed search when they expect loss and perceive a lack of control. In contrast, employees perceive "opportunities" in events with which they associate an expectation of gain and "feelings of control" (Jackson and Dutton, 1988: 384). Such feelings stem from a perceived autonomy in deciding whether and how to respond, having access to the means for resolving the threat, and a sense of of personal competence (coping ability) (Brockner et al., 2004).

⁴ Uncertainty refers to the psychological state of doubt about what an event signifies and portends, especially when an event is perceived as potentially harmful for people (Lazarus and Folkman, 1984)

In short, emotional states that involve appraisals of uncertainty reduction and coping ability (such as calmness in work interactions) increase group members' propensity to openly share viewpoints and feelings within and without different work teams about the root causes of underperformance, encourage early and candid discussion of the potential causes of underperformance, and identify firm competencies or strategic directions that need to be changed, thereby allowing top management to assess the degree of change that the firm needs. All of these behaviors may well increase the quality of the competence modification process.

Alongside emotions of positive valence such as comfort and calm, certain emotions of negative valence can also involve appraisals of reduced uncertainty and coping ability. For instance, to the extent that members feel that their teams' aspirations may not have been met but will be so with collective resources, they may experience what we call "agentic disappointment".

Agentic disappointment about achieving below the team's aspiration levels. The team's aspiration levels refer to collective ambitions that are personally meaningful and inspiring to a large number of team members, in contrast to goals that may be deemed coercive or uninspiring by a majority of team members. When teams appraise an outcome or progress toward goal achievement as failing to attain their aspiration levels, the resulting disappointment can actually stimulate learning and change (Ellsworth and Smith, 1988). Again, front line managers may be the first team leaders to experience disappointment with the current strategy because they are closer to markets and technologies than top managers.

Disappointment can induce employees to abandon existing goals or the pursuit of those same aspirations in the future so as to avoid risk (Frijda, 1994). It can also cause them to lower their expectations to avoid future disappointment. When people feel they have little control over a situation, feelings of powerlessness and inaction can result, whereas if they feel that they can

act to remedy the situation (adequate coping ability), they may mobilize and change to attain their aspiration levels and reduce feelings of uncertainty (Ortony et al., 1988). Partial empirical support for our argument can be found in Zhou and George's (2001) research, which found that employees who experienced high job dissatisfaction could still display high creativity if they received help from colleagues and perceived organizational support for creativity as high (adequate coping ability and reduced uncertainty).

Agentic disappointment facilitates competence modification because it makes employees less optimistic about future outcomes and thereby motivates them to work harder and be more alert to interim signals to adjust (Parrott, 1993); hence this negative emotion can facilitate the rejection of existing beliefs and a reframing of the problem (Kaufmann and Vosburg, 1997). Agentic disappointment also can promote learning in a stressful and ambiguous period marked by intensified information search, the elaborate diagnosis of conflicting information, and the consideration of various uncertain reparative actions (Bagozzi, Baumgartner, and Pieters, 1998). Agentic disappointment about achieving below aspiration levels can help leaders to mobilize their teams for competence modification as in a large organization members are likely to perceive greater personal control and action possibilities in relation to the team's goals than to corporate-wide objectives (Jackson and Dutton, 1988). Such agentic disappointment is adaptive in that it enables people to increase their efforts and fosters the humility to reflect and learn from feedback, helping to avoid poorly planned and costly actions.

Proposition 1: Team emotional tones characterized by appraisals of reduced uncertainty in work interactions and adequate coping ability (associated with emotional states such as calmness in work relations or agentic disappointment about underachieving team aspirations) increase the quality of the competence modification process.

Team members may experience diverse emotional states at different stages during their engagement with a particular renewal process. It is possible for some members to feel disappointment about their team's underachievement, prompting them to contemplate active reparation, and to retain a sense of calm in their work interactions such that they feel unconstrained in exploring the reasons for underachievement with other colleagues.

Case illustration. At this point, we introduce the strategic renewal of Nissan that took place between 1999 and 2002 to help illustrate some of the ideas presented here. We draw upon information from Nissan executives' own accounts (e.g., Ghosn, 2003), a review of the business press coverage of Nissan during the period (e.g., Taylor, 2002), as well as a number of business school cases (e.g., Hughes, Barsoux, and Manzoni, 2003). Some caveats are in order. First, we do not seek to employ this account as empirical support for the proposed model. These descriptions represent at best plausible illustrations of how managerial actions that create enabling emotional tones can facilitate the renewal process in an organization. Although the Nissan case could be viewed as a fast turnaround, we treat it as strategic renewal because the change process followed an evolutionary, consultative, bottom-up approach in which the development of new competencies was emphasized rather than commanding fast structural changes. Second, while we have reinterpreted many managerial actions described in the case through an emotion lens (recognizing that an action can fulfill multiple goals, both task- and emotion-related), we acknowledge that the managerial actions described here are unlikely to have been consciously performed by Nissan managers with the exclusive aim of creating enabling emotional tones. Rather, we hope to show how interpreting Nissan actions through the lens of team emotional tone can help enrich scholarly thinking about the variety of managerial levers available to achieve strategic renewal beyond those provided by a traditional cognitive-power view of change management (e.g., Kotter, 1996).

In 1999, Nissan was a non-innovative, heavily indebted, near-bankrupt Japanese car manufacturer with about 150,000 employees. Renault, the French car maker, was the only company ready to invest \$5.4 billion in equity to rescue Nissan, to the derision of some analysts who commented that, "Two mules don't make a racehorse." Both companies were seen to come from countries with strongly nationalistic cultures, each firmly believing that its way was the right way to do things. Yet by 2002 Nissan had reinvented itself to become one of the most innovative and profitable car manufacturers in the world. How did this transformation come about?

We now describe examples of emotion-eliciting organizational actions that underpinned the strategic renewal of Nissan in alignment with our proposed conceptual model. We start by describing several specific emotional states that facilitated the competence modification process.

In Nissan's case, the new French executives created more calmness in work interactions by reassuring apprehensive Japanese employees that, despite what they might have heard about problematic mergers such as Daimler and Chrysler, Nissan would remain Japanese. This was an alliance of equals. Executives interacted informally and frequently with line workers at the work site, spending time upfront to explain new business concepts to employees, consulting union representatives before making decisions about plant closures, and providing generous compensation packages to departing employees (reduction of uncertainty). Front line managers also spent considerable time handling individual workers' voluntary retirements or imposed transfers to new locations (caring about personal and emotional needs). Executives did not hire external consultants to replace employees and promised that there would be no compulsory layoffs (only voluntary ones). Such actions likely elicited emotional states that involved appraisals of reduced uncertainty in work interactions.

Executives also fostered more calmness in work interactions by actively encouraging lower-level employees to challenge the highest hierarchical levels and rewarding those employees who had the courage to speak up, irrespective of age, gender or nationality. CEO Carlos Ghosn acted as a role model by frequently meeting and dialoguing with workers on the assembly lines to ask for advice, rather than simply interacting with senior engineers and managers. Such actions likely elicited employees' emotional states that were associated with appraisals of increased personal control and coping ability.

Firm leaders also created a collective emotional tone that elicited agentic disappointment among various teams. As they toured the company they pointed out that many plant managers knew exactly how long it took to build a car but had little idea of how much it cost, and that this competency gap could be closed quickly (adequate coping ability existed). They reminded the various teams that they were still capable of rivalling Honda and Toyota in terms of profitability and growth and praised their still-valuable competence in reliable engine design and process manufacturing (adequate coping ability or perceived control), while insisting that they needed to develop at least one of two new competencies – attractive styling and/or cost awareness – to build competitive advantage. Such clarity in what needed to be changed (or preserved) elicited emotional states that involved appraisals of reduced uncertainty in work interactions between executives and employees. In sum, these actions illustrate how management can elicit emotional experiences such as calmness in work interactions and agentic disappointment that involve appraisals of coping ability and reduced uncertainty.

Team emotional tone that helps competence definition

Bottom-up competence definition is often required. Senior managers rarely make major commitments to developing future competencies as in a fast-changing competitive environment

it is difficult to predict with reasonable confidence which ones will be valuable (Brown and Eisenhardt, 1997). As a result, lower-level managers experiment with novel solutions to emerging problems. Being able to see the long-term implications of their experiments, they champion the most promising ones to top management. Given the latter's more complete understanding of the strategic context, they are able to evaluate the initiatives that emerge from across the organization, shaping the development of new competencies by ratifying those initiatives that best meet the challenges arising from the environment (Burgelman, 1994). As the set of competencies expands, top management redefines the official strategy to pursue new opportunities as they arise.

The competence definition process can be emotionally intense partly because of the affective nature of the creative process (Amabile et al., 2005). Major creative ideas can take several years to emerge. For better or worse, creators need to believe passionately in the potential worth of even the most ill-defined ideas in order to pursue them despite others' skepticism.

While noting that the selling of new ideas to other people in the organization can also be a highly emotional political process, here we focus our theorizing on the influence of emotion on creativity that underpins the emergence of innovative strategic proposals.

The search for new strategic solutions is often associated with highly engaged, autonomously driven persistence (Burgelman, 1983) to deal with uncharted knowledge territories and overcome successive organizational barriers that frustrate attempts at creative achievement (Feist, 1999). Drawing on the literature on emotion and curiosity (e.g., Litman, 2005; Silvia, 2008), we propose that competence definition can be facilitated by a team emotional tone that involves appraisals of novelty-complexity and coping ability characterized by emotional states such as interest and frustration.

Interest in a team's work. Researchers have identified interest as a distinct emotion

(Izard, 1991; Reeve, Nix, and Hamm, 2003). Generally, people first appraise an event's novelty in terms of incongruity and complexity. Thereafter, an appraisal of coping potential assesses people's ability to grasp the new event (Scherer, 2001). Events appraised as new and complex yet potentially understandable are experienced as interesting. Conversely, an appraisal of ability elicits little interest when events are appraised as low on complexity (Sylvia, 2005). Interest is characterized by pleasurable feelings associated with learning about unfamiliar subjects (e.g., feeling engaged, fascinated, alive, active), which in turn motivates exploratory behavior aimed at solving discrepancies in one's knowledge (Loewenstein, 1994).

Drawing on the literature linking psychological states to organizational creativity (Csikszentmihalyi, 1996; Quinn, 2005; Mainemelis, 2001; Amabile, Barsade, Mueller, and Staw, 2005), leaders can create a team emotional tone that prompts members to be interested in their work by performing various actions such as helping subordinates design tasks that provide optimal challenge (that is, people feel they have a reasonable chance of succeeding if they work hard), and are perceived as meaningful because they are compatible with employee's personal values and aspirations; designing tasks that establish clear goals, with frequent feedback from the task itself or from other influential members; promoting multiple experimentations and celebrating and learning from well-intentioned failures; and encouraging widespread enactment of playful behaviors and artifacts (Hargadon and Sutton, 1997; Woodman, Sawyer, and Griffin, 1993).

Frustration that desired results are not materializing fast enough. Research suggests that whether people experience interest or frustration may depend on their perception of the magnitude of the knowledge gap. When people feel distant from their desired knowledge, curiosity is less intense and elicits a pleasant emotion such as interest; when they feel closer to comprehending the knowledge their curiosity intensifies, eliciting feelings of deprivation and the

urge to relieve the latter, which characterize the emotional state of frustration (Litman, Hutchins, and Russon, 2005). This emotional tension inspires more ardent knowledge seeking.

In a strategic renewal context, frustration is experienced when people's efforts over time to explore a new strategy fail to produce results commensurate with their aspirations, even though they felt they could have overcome the challenge (Ortony, Clore, and Collins, 1988). Frustration is thus similar to the disappointment that we discussed earlier in terms of achieving below one's aspiration levels, but also involves an appraisal of unrequited effort expended over time. Frustration creates a strong desire to solve the problem because people perceive they indeed have adequate control over the situation (Smith and Ellsworth, 1985). Moreover, teams that feel frustrated that they are not progressing fast enough in finding solutions to important strategic problems may be motivated to redouble their efforts or to abandon the existing approach for another way of looking at the problem, which in turn can spur creativity (George and Zhou, 2002).

Proposition 2: Team emotional tones characterized by appraisals of novelty-complexity and adequate coping ability (associated with emotional states such as interest in a team's work or frustration that desired results are not materializing fast enough) increase the quality of the competence definition process.

Case illustration. One of the key reasons for the decline in sales of Nissan over the years was a lack of innovation in car models in terms of exterior design. Renewal leaders boosted the interest of employees engaged in creating new car styling in a number of ways. They created a stimulating new working environment by promoting cultural diversity among the car designers, recruiting Western designers to work alongside their Japanese counterparts, many of them colocated at Nissan Design America in San Diego, with the aim of eliciting interest in different ways of thinking and learning. Further creative stimulus came from allowing designers to work

on non-automotive products ranging from a 150-foot yacht to pre-school furniture and golf clubs.

These organizing actions elicited emotional states involving appraisals of novelty-complexity.

Designers were given relative freedom in how they spent their work time. Departing from their formerly segmented work procedures, they started to get involved in all phases of the life of the car, since engineering changes and marketing demands had a direct impact on design. Most designers embraced the additional challenge in exchange for the freedom to create all-new vehicles with original styling. These activities likely elicited emotional states involving appraisals of increased personal control and coping ability.

But there were signs that renewal leaders also sought to foster a sense of frustration about the slow speed of innovative change by conveying a sense of urgency in their daily interactions with employees. Leaders' displayed emotions could influence those of their followers (Sy, Côté, and Saavedra, 2005). For example, when some middle managers presented ideas for change, the new CEO challenged them to prove that their proposed solutions could not be bettered by outside consultants, giving them just three weeks to do so.

The global design team thus worked on a large number of creative projects in a two-year period. The results included a new Z-car, a full-size truck, a new sports utility vehicle, the new Altima, a new minivan, and the Murano cross-over vehicle—in total more than two dozen new or radically changed models that helped turn around Nissan's destiny.

Team emotional tone that helps competence deployment

The deployment of organizational competencies is characterized by firm leaders allocating important resources to a particular strategic direction (Burgelman, 1994), having decided which existing competencies and resources are needed to get there. During this process, employees are usually expected to conform to their leaders' directives and implement the selected strat-

egy. Noting that the main challenge for organizations is often not a problem of cognitive choice but of taking organized action, Brunsson (1982) suggests that taking action requires high emotional energy. Only a strong emotional commitment can inspire the intense efforts needed to complete the action and overcome difficulties encountered. The viability of a new strategic direction is often uncertain; the consequences of various strategic alternatives are difficult to evaluate fully; too much analysis may breed doubt and paralysis; hence emotional drive has to supersede cold rationality to enable aligned collective action.

An important change often requires a leap of faith into the unknown (Kanter, 1983), and an emotionally unifying purpose serves to minimize major differences among teams (Barnard, 1968). Having people who are committed to realizing a vision is more important for its success than a well thought-out strategy (Pascale, 1984) because concentration and passionate dedication are essential to distinctive competence and success (Miller, 1993).

Bagozzi, Baumgartner, and Pieters (1998) argue that appraising the consequences of achieving or not achieving desired goals can elicit emotions that supply the energy to pursue and attain them. That is, people "imagine the possible", generating alternative consequences to imagined success and failure. By imagining what would happen if they succeeded and if they failed to achieve a valued goal, the stage is set for emotions to arise from these appraisals. Moreover, to pursue their goals, people must feel that they can obtain the realistic means to achieve them, a feeling associated with appraisals of "agency" and coping ability (Green, Oades, and Grant, 2006). Hope and "agentic fear" represent emotions that involve appraisals of future goal achievement and coping ability (Smith and Ellsworth, 1985), as discussed below.

Hope that today's actions will improve the team's future. Hope arises when, in the face of uncertainty, people perceive agency ("We can do this") and goal-directed pathways ("We can

find alternative paths if our current way to achieve our goals is blocked.") (Snyder, Rand, and Sigmon, 2002). Thinking about goals triggers agentic and pathway thoughts that are essential for goal-directed behavior. Thus, the process of goal articulation can stimulate hope (Snyder et al., 1999). Feeling states associated with hope include positive affect and people being more energized, confident, and challenged by goals. Action tendencies include intentionality to act ("We will do this"), rather than merely the perceived ability to act ("We can do this") involved in self-efficacy. Hope is associated with proactive behavior, whereas a lack of hope is associated with unproductive ruminations about being stuck (Michael, 2000), or fantasies about "magically" escaping entrapments, both of which lead to passive avoidance and disengaged coping behavior (Snyder et al., 2002).

The energetic collective action that competence deployment requires can be stimulated by hope. Team members tend to feel more able and are bolder when they act collectively than when they act alone (Barsade and Gibson, 1998). Because hope is a buffer against apathy and depression and strengthens their capacity to persist in adversity, it helps team members support one another in executing and maintaining a chosen course of action. Hope also fosters team-work: hopeful people are more likely to engage with others than those who experience hopelessness, they have an enhanced ability to see things from the perspective of others, are interested in others' goals, and enjoy their interactions with others (Snyder et al., 2002). These constructive interactions elicit shared understanding and cooperation from other teams in the firm that together enhance the quality of the competence deployment process.

Examples of leadership actions that elicit hope for a better future include establishing meaningful change goals and devoting adequate resources to attain these goals, such as investing in the development of new products or markets that may improve the teams' prospects; investing

in employee training to show that their teams remain valued in the organization; creating small wins to rekindle the teams' self-confidence, and performing uplifting rituals such as rousing speeches and award ceremonies (Ashkanasy, and Tse, 2000).

Agentic fear. Emotional states of negative valence that are associated with appraisals of not achieving valued goals and high coping ability can also help the collective deployment process. We call this state "agentic fear." Fear is a future-directed emotion which helps people respond to threats by focusing their resources on the threat to avert danger, and supplying the extra energy to act if required (LeDoux, 1995). The future usually appears less important to employees because people tend to be more preoccupied with the short term (Ben-Ze'ev, 2000), especially in organizations beset with multiple priorities and distractions. Hence, teams may shift their attention too quickly between different competence deployment projects and risk achieving none. Well-directed conscious fear can play an adaptive anticipatory function in that it may amplify the effects of future threats and make them more salient in the current imagination. The intense and unpleasant experience of anticipatory fear focuses teams' attention on the future by imagining possible actions that could prevent an undesirable outcome if they do not achieve their goals.

As a result, when teams which experience fear of not achieving valued goals related to competence deployment simultaneously feel that they have the means to control and remove the source of fear if they choose to act on it (coping ability), far from paralyzing the team, "agentic fear" can become an energizing force. For example, fear of competition or loss can motivate employees to work harder to reduce the odds of an undesirable outcome. Indeed, some chief executives such as Andy Grove at Intel believe that collective paranoia may help prevent organizational complacency and decline (Grove, 1996; Singh, House, and Tucker, 1986).

Organization leaders can perform a number of actions to remind their employees that

even seemingly successful companies are vulnerable, that most competitive advantages are temporary, and that they must continuously strive to improve firm competencies to avoid organizational complacency and decline. These actions may include providing credible evidence of declining performance in areas such as revenue, debt load, customer satisfaction, or innovative capability; organizing open debates to assess and challenge the veracity and criticality of potential sources of firm decline by such means as doomsday scenario planning; exploring the causes of the non-sustainability of competitive advantage; allowing employees sufficient time to debate and reflect on the purported threats; and creating internal competition such as mandating some business units to "destroy" existing ones. Such actions can make employees aware that credible and important future threats lurk below the surface of present success. Conscious anticipatory fears elicited by future threats can, in turn, help to develop a sense of shared fate and unity of action to facilitate competence deployment.

Proposition 3: Team emotional tones characterized by appraisals of future achievement of valued goals and coping ability (associated with emotional states such as hope of achieving a better future and agentic fear) increase the quality of the competence deployment process.

Case illustration. In the strategic renewal of Nissan, newly arrived executives recognized the importance of creating hope among depressed employees. As CEO Ghosn noted, "The biggest challenge when the company has been depressed for a long time is self-confidence. [We have] to help people believe that they are capable of doing a great job" (coping ability). Leaders explained clearly how current actions, although painful, would help improve the company's future and the employees' long-term welfare (future achievement of valued goals). Although there was massive cost cutting, the top team kept reminding employees that this was a product-led rather than a cost-cutting recovery, and that cost savings would be mainly reinvested in the devel-

opment of new products to generate more revenues. The top team boosted the R&D budget from 3.7% to 5% of sales, increased the R&D staff by 500, announced the building of a new \$930 million assembly plant in Mississippi to increase sales in the strategically important US market, invested \$790 million with Renault to develop a long-term viable fuel-cell car, and hired 1,000 new engineers. These organizational actions elicited emotional states characterized by appraisals of the future achievement of valued goals and boosted collective coping ability.

Firm leaders also provided a realistic view of the critical state of the company. In meetings with various unions and teams of employees, they repeated the bleak but credible facts and figures: that Nissan's sales had fallen by 800,000 cars over the previous seven years, the equivalent of Mercedes' total sales worldwide; that the debt level was so high that additional borrowing would be difficult, and that this might be the last rescue attempt (prospect of not achieving future valued goals). The CEO reiterated that "Establishing the plan represents at most 5% of the challenges; 95% lies in execution," and stressed action, speed, results, and close follow-up. Over 400 Japanese middle managers cooperated actively in nine cross-functional teams to convince their initially skeptical peers, and persisted in their deployment of new competencies, including cost control and external styling (high coping ability and agentic fear associated with appraisals of potential failure in achieving valued goals). The ultimate success of the competence deployment process was in large part due to the collective firm-specific knowledge and the dedication of various cross-functional teams of Japanese middle managers.

Given that diverse teams with different roles and interests typically exist in an organization (Cyert and March, 1992), they are likely to be engaged in different processes related to strategic renewal at any single moment in time (Burgelman, 1994; Floyd and Lane, 2000). The three processes of strategic renewal can thus be iterative and can overlap one another, although each

will be facilitated by a distinct team emotional tone. Teams can therefore experience different kinds of enabling emotional tones. Figure 1 depicts strategic renewal as a continual iteration between the three organizational processes of competence modification, definition, and deployment, and summarizes their proposed relations.

Insert Figure 1 about here

CONCLUSION AND FUTURE RESEARCH

We began this paper by noting that few firm competencies can provide sustainable competitive advantage, and that firms attempt to maintain superior performance by engaging in periodic if not continuous renewal of at least part of their competencies to adapt to rapidly changing competitive contexts or to create new product-market domains. We described how pursuing strategic renewal can be both cognitively and emotionally challenging for managers. Drawing on recent research on emotion and the behavioral theory of the firm, we believe we have addressed an important gap in the strategy literature, in particular the dynamic capability literature, by proposing a model that describes how distinct team emotional tones can facilitate various organizational processes related to strategic renewal (see Figure 1).

Our model contributes to the dynamic capability literature in that the three processes of competence modification, definition, and deployment can be related to the search, selection, and deployment processes that are central to this literature. More generally, it contributes to the strategic renewal and dynamic capability literatures by articulating how cognition and emotion interact at the collective level to enable the firm to integrate, build and reconfigure internal and external competencies in response to rapidly changing environments (Teece, Pisano, & Shuen, 1997). Other scholars have linked this renewal ability to the firm's competitive advantage, that is, the extent to which the firm can realize beneficial change more reliably, rapidly, and at less cost than

its competitors (Zott, 2003).

Our model also enriches the collective emotion literature (e.g., Barsade, 2002; E.R. Smith et al., 2007) and emotional capability literature (e.g., Huy, 2002, Reus and Liu, 2004) by proposing the concept of team emotional tones and how these influence organizational processes that are central to strategic renewal, as distinct from those related to radical change (Huy, 1999). We contribute to the strategic renewal literature by proposing that successful firm renewal does not depend on cognitive or structural aspects alone, but also on the presence of enabling team emotional tones that influence subsequent collective cognition and action.

Firms who aspire to build this emotional capability will need to be patient and invest in the long-term, firm-wide development of leaders' emotional competencies at various levels of the organization, as well as fostering acceptance of emotion management actions among followers. Acceptance will vary, depending on the different cultural context and personal needs of team members (Sanchez-Burks and Huy, 2008). The effective creation of team emotional tones may be one of the most implicit, idiosyncratic, and difficult-to-imitate dynamic capabilities, albeit one which potentially provides the firm with a relatively sustained competitive advantage.

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Figure 1

Interaction between Cognition and Emotion on Processes of Strategic Renewal

