# A PRACTICE VIEW OF STRATEGIC LEADERSHIP IN A HIGHLY RISKY AND AMBIGUOUS ENVIRONMENT: THE DARWIN EXPEDITION IN PATAGONIA

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# A Practice View of Strategic Leadership in a Highly Risky and Ambiguous Environment: The Darwin Expedition in Patagonia

Until now strategic leadership literature has not been seriously taking into account disruptive and fast moving environments in defining strategic leadership. Moreover, the strategic leadership literature has only been able to establish a list of generic roles that strategic leaders must play without examining in detail these roles. And finally, this literature is mainly based on quantitative data gathered retrospectively.

In order to fill these major gaps in the strategic leadership literature, the paper first provides a framework for studying the key social competences and skills of leaders in today's highly risky and ambiguous situations. Second, it proposes an innovative methodology in order to study strategic leadership in practice by following an international team of mountain climbers in their project of traversing the Cordillera Darwin, in Tierra del Fuego (Patagonia).

## **Literature on Strategic Leadership**

Over the years, leadership has been mainly studied in terms of supervisory leadership emphasizing the leader-follower relationship. As Crossan et al. (2008) noted, it is only in the last 20 years that strategic leadership has become a specific domain of research. According to Boal & Hooijberg (2000) and House & Aditya (1997), strategic leadership can be defined in multiple ways. However, it has always emphasized two dimensions: the capacity of top managers to make strategic decisions and to drive the organization towards success. In this paper, strategic leadership or the leadership of organizations – instead of "in" the organization – has to do with the capacity of leaders to ensure a viable future for the organization in developing appropriate interpretations and initiating relevant actions and changes.

Research on strategic leadership has traditionally emphasized the study of top management team according to three streams of theory: 1) the upper echelon theory (Hambrick & Mason, 1984); 2) the charismatic, transformational and visionary perspectives (Conger & Kanungo, 1987; Bass, 1985; Bennis & Nanus, 1985); 3) the cognitive complexity and social intelligence approach (Hunt, 1991; Hooijberg, Hunt, & Dodge, 1997).

Upper echelon theory is the most developed approach in the scholarly literature on strategic leadership. This theory primarily focuses on the influence of demographic characteristics of leaders and background characteristics of CEOs in order to explain strategic firm performance. In this stream of work, researchers are looking at how the heterogeneity, social traits and external ties of top management teams (Finkelstein and Hambrick, 1996; Hambrick, 2007) might predict their capacity to successfully lead the firm towards success. The upper echelon theory of leadership helps to anticipate the consequences for the firm of hiring one top manager instead of another (Cannella & Monroe, 1997; Priem et al., 1999).

In contrast to the upper-echelon theory, the charismatic, transformational and visionary perspective focuses on the symbolic aspects of strategic leadership roles by emphasizing the relationships between leaders and internal and external stakeholders (Conger, 1999; House & Aditya, 1997; Hunt & Conger, 1999; Yukl, 1999). These theories suggest that pre-existing capacities of leaders to create, infuse and communicate their values are essential to firm innovation and performance.

In the cognitive complexity and social intelligence approach, researchers affirm that effective strategic leadership hinges more on what leaders have in their head than on other factors. Cognitive complexity theory refers to the mental processes related to information analysis and suggests that cognitively complex individuals have more chance to better interpret what is going on in their environment (for reviews on the topic, see Stish, 1997; Streufert, 1997). Social intelligence perspective emphasizes the importance of interpersonal and social skills such as empathy, motivation and emotion in the capacity of leaders to initiate changes in turbulent environment (Gardner, 1985; Stenberg et al., 1995; Fiedler et al., 1995).

A critical examination of those three streams of research on strategic leadership suggests that there is a gap on two fronts. First, this literature generally does not sufficiently take into account how the environmental and organizational context matters in performing strategic leadership (Boal, 2000). And more than that, when authors consider the environment, the strategic requirements of today's dynamic environment are not relevantly been addressed (Crossan et al., 2008). Recently, environments have increasingly been described as highly risky and ambiguous (Foster & Kaplan, 2001) requiring new perspectives on strategic leadership that involve less charismatic traits and cognitive complexity of heroic leaders than sensemaking and improvisation in the day-to-day activities of men and women trying to shape their environment.

The second gap in the strategic leadership literature is about the fact that this literature emphasizes the roles of strategic leaders without generally according attention to the

practices through which those roles are put into action. In fact, this literature generally provides a list of generic roles that leaders accomplish such as "creating and communicating a vision of the future"; "developing key competencies and capabilities"; "developing organizational structures, processes, and controls"; "managing multiple constituencies" (see Table 1, some examples to be completed). However, we know almost nothing about the way those roles are put into practice, about the ways top management teams look at what they do and go about their task.

In the new competitive landscape, we need to get inside the black box that stands between executive characteristics (demographic, symbolic or cognitive) and strategic outcomes. In this highly risky and ambiguous environment, we need to know about how upper echelons engage themselves in exploiting and maintaining core competences, how CEOs determine the firms' visions and diffuse their values, and how top managers with high cognitive complexity achieve their goals in problem sensing and learning.

Authors	Generic Strategic Leaders' Roles
Ireland & Hitt (2005)	Determining the firm's purpose and vision
, , ,	Exploiting and maintaining core competences
	Developing human capital
	Sustaining an effective organizational culture
	Emphasizing ethical practices
	Establishing balanced organizational controls
Boal & Hooijberg (2000)	Making strategic decisions
	Creating and communicating a vision of the future
	Developing key competencies and capabilities
	Developing organizational structures, processes, and controls
	Managing multiple constituencies
	Selecting and developing the next generation of leaders
	Sustaining an effective organizational culture
	and Infusing ethical value systems into the organization's
	culture
Quinn (1988)	Eight competing leadership roles simultaneously:
	innovator, broker, facilitator, mentor, coordinator, monitor,
	producer, and director
Hart & Quinn (1993)	Vision setter
Time & Quinn (1993)	Motivator
	Analyzer
	Taskmaster
House & Aditya (1997)	Making strategic decisions concerning the products and
	services of organizations and markets
	Selection of key executives
	Allocation of resources to major organizational components
	Formulation of organizational goals and strategy
	Providing direction for the organization with respect to the

organization's domain
Conceptualizing and installing organizational designs and major infrastructures, such as compensation, information, and control systems
Representing the organization to critical constituencies such as representatives of financial institutions, government agencies, customer interest groups, and labor
Negotiating with such constituencies for legitimacy and resources

In fact, we think that strategic leadership is the result of a myriad of practices and activities that should be qualitatively captured in real time. For all these reasons, we propose to explore new ways of researching strategic leadership by developing a practice view of strategic leadership and using an innovative research design.

# **Strategic Leadership in Practice**

In the last decades, major new economic trends have transformed the business environment of many enterprises shaping a new competitive landscape that has not been previously experienced (Eisenhardt & Bourgeois, 1988; Nadler & Tushman, 1999). Among others, the market globalization made possible by the Internet technological revolution has deeply altered the nature of competition and strategy. In fact, this environment is more and more characterized by instability, crisis and discontinuity, which drastically contribute to increase the level of risk in strategic decision making (Porter, 2001). Moreover, the current economic environment is characterized by a high level of ambiguity in industry boundaries and between organizational frontiers (Ireland & Hitt, 2005). Such high level of ambiguity necessitates being able to face divergent goals such as complexity and contingency. In this context, the role of strategic leaders consists in supporting the development of practical capacities of interpretation and action in order to absorb the pressures of the external environment (Crossan et al., 2008).

This fast moving and uncertain environment has major implications for research in strategic leadership that necessitates adopting a practice view. First, the capacity to react to every unexpected signal from the environment depends on the ways top managers are able to adapt existing practices and synthesize new ones in order to shape the present by making sense of the past (Crossan et al., 2008). Here, managers' knowledge, experience, learning and cognitive capacities are central to the rapid development of effective interpretations about what is going on in the environment (Hodgkinson & Clarke, 2007). Second, the capacity to frame a direction in a context in which organizational frontiers are more and more flexible and in which organizations address divergent goals necessitates a review of the way strategic leadership is exercised throughout management teams (Doyle, 2001). In fact, strategic leadership can no longer be considered as something a heroic CEO does by himself. In this sense, strategic leadership should be envisaged as a relational characteristic emerging over time from actions and interactions among all stakeholders inside and outside the organization (Denis et al., 2007).

Therefore, strategic leadership in a highly risky and ambiguous environment depends on the capacity of top management to shift a course of action based on new information and to address changing circumstances and divergent goals. In order to do so, they need to be able to mobilize knowledge in action and behave as socially competent social performers in order to influence others. Following the practice turn in strategy (Johnson, Melin & Whittington, 2003; Jarzabkowski et al., 2007; ), we need to look at how strategic leaders put into action their roles by focusing on the day-to-day activities, routines and conversations – in fact, their mundane activities would say Alvesson & Sveningsson (2003) – in order to better understand how they contribute to transform the ways of interpreting what is happening and how they contribute to reinforce or disentangle the pattern of interactions between multiple stakeholders.

Mobilizing knowledge successfully implies being able to see and understand the larger picture emanating from local and discontinuous events in order to shape the context (Paroutis & Pettigrew, 2007). Having a broader vision of how things are working, effective leaders have to pattern the attention of the stakeholders through subtle dialogues, stories and meaningful micro-acts concerning the changes in the environment, the definition of success, the interpretations of political changes and so on (Boil & Schultz, 2007). Strategic leaders also need to routinely use appropriate tools and words aiming to co-construct meaningful explanations of change and crisis. For example, Jarzabkowski (2003) showed that through their daily strategic practices (e.g. planning, income generation, etc.) the TMT of the three universities studied distributed shared interpretations predisposing continuity or stimulating change (Jarzabkowski & Wilson, 2002).

As competent social performers, effective strategic leaders in high ambiguity situations should be able to artfully engage themselves in transforming the pattern of interactions that rely on the environmental networks they are part of. In this sense, they need to know how to navigate the contradictions between different interactional rules and how to manoeuvre among multiple *foci* of decision making. Part of such knowledge is tacit knowledge gained through social capital and experience in their industry. In this sense, strategic leaders need to possess a great understanding of the social characteristics of internal and external actors with whom they are interacting (Samra-Fredericks, 2003).

High risk and ambiguous situations might be seen as chaotic events, extreme or crisis situations. Therefore, mobilizing knowledge and performing social skills need to be intensely engaged in by strategic leaders. This intensity is carried out through emotions via the human body. Here appropriate emotions need to be rationally bounded and politically expressed through the materiality of the body. The following figure gives an overview of the theoretical framework that we intend to develop and document in this paper. To this effect, the next section proposes a methodological frame in order to examine situated practices of strategic leaders operating in high risk and ambiguous contexts.

Figure 1: Strategic leadership in practice

# The Darwin Expedition as research field

Studying a top management team in highly risky and ambiguous situations is not an easy task. Of course, some studies exist that have examined dangerous and critical situations in order to develop a deep understanding of the way people and organizations deal with extreme situations (the Mann Gulch Disaster: Weick, 1993, Weick & Roberts, 1993; Challenger and Columbia space shuttle accidents: D. Vaughan, 1997, Laroche & Saussois, 2003; Edmondson et al., 2005; the Everest expedition in 1996: Roberto, 2002; Kaies, 2004; 2006; Tempest et al., 2007). However, these studies mainly looked at disastrous and fatal situations in which failure occurred, using data collected retrospectively (first hands accounts, books, popular press reports, public hearings and so on) in order to build plausible theoretical explanations.

Moreover, having access to strategic leaders facing difficulty constitutes a big challenge for academics. This is probably why most studies on leadership whatever the streams of research they belong to suffer from being mainly developed from retrospective devices using a quantitative data set, thus being centered on the measurability of individual capacity through specific variables and factors (Boal & Hooijberg, 2000). The real time studies on strategic leadership are very often conducted in experimental settings and laboratories (Larson et al., 1998; Hambrick, 2007).

To advance the research on strategic leadership in highly risky and ambiguous situation through a practice perspective, it is imperative to examine leaders dealing in real time with such conditions. So, we have chosen to be innovative by conducting an inductive inquiry (Glaser & Strauss, 1967) in the context of a mountain climbing expedition. As Goffman (1961) would say, a climbing expedition is a total experience. This choice was motivated by the following reasons:

1) Given the climbing difficulties and the unpredictable climatic conditions, a climbing team is constantly facing changing circumstances and should simultaneously be

very flexible (Roberto, 2002). Every decision might put them in a situation of experiencing risk that could be critical (e.g. hypothermia, injuries, and so on). When the region is relatively unexplored, the unknown climbing difficulties give rise to multiple options concerning itineraries, goals, technical choices, and risks evaluation thus accentuating the ambiguousness of the decision making. Continuously facing new information, team members who all have their own profiles as mountain climbing specialists, will have to address divergent goals in order to allow them to achieve the ultimate goal.

- 2) Not only has strategic leadership been understudied in real time but also it has been understudied in the context of team, task forces and short-term projects (Kaes, 2004). In such expeditions, leadership is central to the success of the project and it needs to be shared among participants.
- 3) It has been largely recognized in the literature that climbing mountains is not unlike running a business (Bonington, 1996). In fact, building a successful climbing team involves using management skills that are essential to any organizations. From such experience, we can learn lessons that are applicable to all practitioners who are leading complex initiatives and making high-stakes decisions.
- 4) Finally, the advancement of research in the SAP perspective needs to develop unusual and innovative fieldwork and techniques of data collection (Huff et al., to be published).

# The Darwin Expedition

One member of our team had the chance to be in close contact with organizers of the Darwin Expedition. The aim of this expedition is to traverse the Cordillera Darwin<sup>1</sup>, in Tierra del Fuego (Patagonia), one of the least unexplored regions of the world, located just near Cape Horn. There are no precise maps, no GPS data, Mount Darwin is not precisely situated, difficulties in terms of alpinism are unknown, and climate conditions are particularly hostile. It will be the first world Cordillera Darwin traverse if it succeeds. The expedition is planned for autumn 2009, the year of Darwin's birthday bicentenary.

The chief leader is a mountain guide who has extensive high mountain and expedition experience<sup>2</sup>. He has constituted the international climbing team (France, Chili, Spain), mindful of the fact that the team would have to be entirely autonomous, including in emergency situations. He has selected seven highly qualified mountain guides for their appropriate experience, leadership skills and qualification in mountain first aid (one guide is also a medical doctor), and other experienced climbers, a historian and *video/photographers*.

<sup>1</sup> In memoriam of Charles Darwin's participation in the expedition of captain FitzRoy's Beagle ship in this region in 1833.

<sup>&</sup>lt;sup>2</sup> In the Alps, and also in the Andes and Himalaya, where he achieved more than twenty summits such as Everest and Makalu, and world first itineraries).

The expedition comprises two phases: a preparation phase (autumn 2008 to summer 2009) and the expedition (autumn 2009). The preparation phase is devoted to the organization of the expedition. Given the fact that the main protagonists are now spending their time in distant mountains and they belong to different countries, most of the expedition is organized through emails. This process is complemented by periodic meetings when it is possible. During the expedition per se, an itinerant base camp on a boat will be available for the climbers and people around them (note that there will be some other researchers around the team).

#### **Data collection**

During the preparation phase, we will have the opportunity to collect rich and detailed data. All members of our research team are included in the expedition mailing list. Two of us have already attended two meetings and met three times with the chief leader in the last two months (October and November 2008). Some research team members will also be able to attend the expedition preparation meetings in France and it will be possible to interview people involved (from January to June).

During the expedition, detailed data will be collected using a wide range of methods, from direct participant observation to informal and semi-structured interviews and also video recording. During the expedition, we will stay mainly on the boat that will be serving as an itinerant "base camp" for the climbers. It will be a good opportunity to directly observe numerous situations and conversations, and to have face-to face interaction and interviews with team members, before and during the traverse, as they will regularly return to the boat for food and equipment – and rest. Also, depending on the weather and geological conditions, we will participate in some key moments (landing, food supplying, and some portion of reconnaissance itineraries). During the traverse, we will follow -in real time- members' interactions through VHF radio links and onboard cameras.

In the base camp, our team research will assure a full-time presence of a minimum of two researchers, in order to have systematic cross perspectives on the context and to increase reliability and validity of data collection and analysis (Lièvre & Rix, 2008). In our research team, two researchers have some experience in mountain climbing and two have not. So, each tandem will comprise an experienced climber and a non-experienced one in order to allow us to keep a "distant familiarity" (Mathieu, 1986). Also, each researcher will focus on a specific point of observation. While one will gather data about how leaders mobilize knowledge in action in order to make sense of their environment, the other researcher will focus on data concerning how leaders used their social competence in the patterning of their interactions and activities.

### Conclusion

This paper constitutes the first stage on an innovative research project aiming to develop a practice view of strategic leadership. It will serve to develop our framework and methodology. We hope to end the final version of the paper by presenting some preliminary empirical results on the organizing phase of the expedition and by raising the challenges about exercising strategic leadership in a highly risky and ambiguous environment. The paper will conclude on the advantages and limitations of studying strategic leadership *in vivo* through a one-shot and perilous event.

# Bibliography

- Alvesson, M. & Sveningsson, S. (2003). "Managers doing leadership: The extraordinarization of the mundane". *Human Relations*, 56 (12): 1435-1459.
- Bass, B. M. (1985). *Leadership and Performance beyond Expectations*. New-York: Free Press.
- Bennis, W., Nanus, B.(1985) *Leaders: Strategies for Taking Charge*. New-York: Harper & Row.
- Boal, K. B., Hooijberg, R. (2000). "Strategic leadership research: Moving on". *The Leadership Quarterly*, 11: 515–549.
- Boil, K.B., Schultz, P.L. (2007). "Storytelling, time, and evolution: The role of strategic leadership in complex adaptive systems".
- Bonington, C. (1996). "Moving Mountains". *The British Journal of Administrative Management*. Nov/dec. 12-15.
- Brown, S., Eisenhardt, K. (1998). *Competing on the edge: Strategy as structured chaos*, Harvard Business School Press, Boston.
- Cannella, A. A., Jr., & Monroe, M. (1997). "Contrasting perspectives on strategic leaders: Towards a more realistic view of top managers". *Journal of Management*, 23 (3): 223–237.
- Conger. J. A. (1999). "Charismatic and transformational leadership in organizations: An insider's perspective on these developing streams of research". *Leadership Quarterly*, 10: 145-180.
- Conger, J. A., & Kanungo, R. N. (1987). "Toward a behavioral theory of charismatic leadership in organizational settings". *Academy of Management Review*, 12: 637-647.
- Crossan, M., Dusya, V., Nanjad, L. (2008). "Transcendant Leadership: Strategic Leadership in Dynamic Environments". *The Leadership Quarterly*, 19: 569-581.
- Denis, J.-L., Langley, A., Rouleau, L. (2007). "Strategizing in pluralistic contexts: rethinking theoretical frames". *Human Relations*, 60 (1): 179-215.

- Doyle, M. (2001). "Dispersing change agency in high velocity change organisations: Issues and implications". Leadership & Organization Development Journal, 22 (7?8): 321-330.
- Edmondson, A., M. Roberto, R. Bohmer, E. Ferlins, L. Feldman (2005). "The recovery window: Organizational learning following ambiguous threats." In M. Farjoun and W. Starbuck (eds) Organization at the Limit: NASA and the Columbia Disaster. London: Blackwell.
- Fiedler, F. E. (1995). "Cognitive resources and leadership performance". Applied Psychology-An International Review, 44: 5-28.
- Finkelstein, S., Hambrick, D. C. (1996). Strategic leadership: Top executives and their effects on organizations. St. Paul, MN: West Publishing Company.
- Foster, R., & Kaplan, S. (2001). *Creative destruction*. New York: Doubleday.
- Gardner, W. L., & Avolio, B. J. (1998). The charismatic relationship: A dramaturgical perspective. Academy of Management Review, 23, 32-58.
- Glaser B, Strauss, A. (1967). The Discovery of Grounded Theory, Strategies for Qualitative Research, Chicago, IL: Adline.
- Goffman, E. (1961). Asylums. New York, Doubleday.
- Hart, S. L. & Quinn, R. E. (1993). «Roles executives play: CEOs, behavioral complexity, and firm performance". Human Relations, 46(5): 543-574.
- Hambrick, D.C. (2007). "Upper echelons theory An update". Academy of Management Review, 2007, 32 (2): 334-343.
- Hambrick, D. C., Mason, P. (1984). "Upper echelons: The organization as a reflection of its top managers". Academy of Management Review, 9: 193–206.
- Hodgkinson & Clarke, (2007). "Exploring the cognitive significance of strategizing: a dual-process framework and a research agenda." Human Relations, 60 (1): 243-255.
- Hooijberg, R., Hunt, J. G., & Dodge, G. E. (1997). "Leadership complexity and development of the leaderplex model". Journal of Management, 23:375-408.
- House, R. J., Aditya, R. N. (1997). "The social scientific study of leadership: Quo vadis?" *Journal of Management*, 2(23): 409–473
- Hunt, J. G. (1991). Leadership: A new synthesis. Newbury Park, CA: Sage.

- Hunt, J. G., & Conger, J. A. (1999). "From where we sit: An assessment of transformational and charismatic leadership research". Leadership Quarterly, 10: 335-343.
- Huff, A.S., Never, A.-K., Möslein . "New methods to support new insights into strategizing". Cambridge Strategy-as-Practice Handbook, Cambridge University Press (accepted, to be published). Ireland, R. D., & Hitt, M. A. (2005). "Achieving and maintaining strategic competitiveness in the 21st century: The role of strategic leadership". Academy of Management Executive, 19: 63–77.
- Johnson, G., Melin, L. & Whittington, R. (2003). "Micro strategy and strategizing: Towards an activity-based view?" *Journal of Management Studies*, 40(1): 3–22.
- Jarzabkowski, P., Balogun, J., Seidl, D. (2007). "Strategizing: The Challenges of a Practice Perspective". Human Relations, 60 (1): 5-27.
- Jarzabkowski, P. (2003). "Strategic practices: an activity theory perspective on continuity and change". Journal of Management Studies, 40 (1): 23-56.
- Jarzabkowski, P. & Wilson, D.C. (2002). "Top teams and strategy in a UK university". Journal of Management Studies, 39(3): 357–83.
- Laroche H., J. M. Saussois (2003). « Challenger », Cahier pédagogique ESCP, n°90-03
- Larson J., P. Foster-Fishman, T. Franz (1998). "Leadership style and the discussion of share and unshared information in decision-making groups". Personnality and Social Psychology Bulletin, 24(5): 482-495.
- Kaes, D.C. (2004). "The 1996 Mount Everest climbing disaster: The breakdown of learning in teams". Human Relations, 57 (10): 1263-1284.
- Lièvre, P., Rix, G. (2008). « Vers un observatoire de l'organisant : le cas des expéditions polaires, AIMS,
- Matheu M., 1986, « La familiarité distante. Quel regard poser sur la gestion dans notre société ? », Annales des Mines, Gérer et Comprendre, mars, (81-94).
- Nadler, D. A., Tushman, M. L. (1999). "The organization of the future: Strategic imperatives and core competencies for the 21st century". Organizational Dynamics, 28: 45-60.
- Paroutis, S., Pettigrew, A. (2007). Strategizing in the multi-business firm: Strategy teams at multiple levels and over time." Human Relations, 60 (1): 99-135.
- Porter, M. (2001). "Strategy and the internet". Harvard Business Review, 79: 62–78.

- Priem, R. L., Lyon, D. W., Dess, G. G. (1999). "Limitations of demographic proxies in top management team heterogeneity research". *Journal of Management*, 6: 935–953.
- Quinn, R. E. (1988). Beyond rational management. San Francisco, CA: Jossey-Bass.
- Roberto, M. (2002). "Lessons from Everest: The interaction of cognitive bias, psychological safety and system complexity", *California Management Review* 45(1): 136-158.
- Samra-Fredericks, D. (2003). "Strategizing as lived experience and strategists' everyday efforts to shape strategic direction". *Journal of Management Studies*, 40(1): 141-174.
- Sternberg, R. J., Wagner, R. K., Williams, W., & Horvath, J. (1995). "Testing common sense". *American Psychologist*, 50(11): 912-927.
- Stish, U. (1997). "Behavioral complexity: A review". *Journal of Applied Social Psychology*, 27(3): 2047-2067.
- Streufert, S. (1997). "Complexity: An integration of theories". *Journal of Applied Social Psychology*, 27(3): 2068-2095.
- Tempest, S., Starkey, K., Ennew, C. (2007). "In the Death Zone: A study of limits in the 1996 Mount Everest disaster". *Human Relations*, 60 (7): 1039-1064.
- Vaughan, D. (1997). *The Challenger launch Decision, Chicago*, The University of Chicago Press, 1997
- Weick, K.E. (1993) The collapse of sensemaking in organizations: The Mann Gulch disaster." *Administrative Science Quarterly*, 38(4):628-652
- Weick, K.E., Roberts, K.H. (1993). "Collective Mind in Organizations Heedful Interrelating on Flight Decks", Administrative Science Quarterly, Vol. 38
- Yukl, G. (1999). "An evaluation of conceptual weaknesses in transformational and charismatic leadership theories". *Leadership Quarterly*, 10: 285-306.