

12-1-2005

Boots on the Ground: Use and Implications of War Metaphors in a Top Team

Jo L. Longnecker
The George Washington University

Follow this and additional works at: <https://scholarship.shu.edu/omj>



Part of the [Organizational Behavior and Theory Commons](#), and the [Organizational Communication Commons](#)

Recommended Citation

Longnecker, Jo L. (2005) "Boots on the Ground: Use and Implications of War Metaphors in a Top Team," *Organization Management Journal*: Vol. 2 : Iss. 3 , Article 5.
Available at: <https://scholarship.shu.edu/omj/vol2/iss3/5>

Boots on the Ground: Use and Implications of War Metaphors in a Top Team

[JO L. LONGNECKER](#)

The George Washington University

This paper describes the use and implications of war and military metaphors shared by a top management team working in the defense industry. The team used war metaphors pervasively to make meaning of the ambiguity and uncertainty in its environment. Five categories of war metaphors and action verbs were found. Findings from this study suggest the team used metaphors to structure and communicate abstract ideas and experiences, highlight or hide aspects of the work environment, unite team members, lead their organization, and maintain their warlike culture. Further findings demonstrate how the team constructed and maintained metaphors individually, intersubjectively, unreflectively, and in ongoing dialogue. The implications of this study provide insights into how a top management team used metaphor to define its perception of itself and its environment and in so doing, to manage its relationships within that environment.

Keywords: Intersubjectivity, Meaning Making, Metaphor, Top Team, War.

The purpose of this paper is to describe the pervasive use and the impact of the use of war metaphors by a top management team working in the defense industry. All members of the team deal with “war fighters” and produce systems solutions for warriors on a daily basis. The data show how the team’s dominant use of war metaphors impacts their (individual and collective) conceptualizations of reality, affects how they manage problems in their work environment, and colors their interactions with each other. From one perspective, the team’s use of war metaphors reveals the team’s apparent sense of an “us versus them” conception when dealing with their assignment and with those affecting the team from outside. In this study, the top team often seems to conceive of their business environment as a veritable war zone. They depict the team as “fighting an uphill battle,” “avoiding land mines,” “throwing hand grenades,” “executing orders,” “attacking a position,” “launching a campaign,” “killing actions” and “leaning forward in the trenches.” The language is competitive and combative regarding accomplishing goals and battling the bureaucracy for the resources to succeed.

However, the team’s conception of itself was more positive, with members variously describing themselves as “heroes” or “good guys,” whereas others were denominated the “enemy.” The war metaphors appear to mask the seemingly contradictory conception that the team’s environment was collegial or collaborative, in part perhaps because the war metaphors so dominated the more positive metaphorical depictions.

This research is significant, because it advances our knowledge of how a top management team uses metaphor to frame its environment in order to respond to external pressures and to manage its own internal operations. Data provide insight in two dimensions regarding how metaphors are created and how they get used. The study also furthers our understanding of the rich use of metaphor as a group-level phenomenon, a heretofore relatively unexplored level of analysis.

Leaders, including top management teams (at the upper echelons of an organization), often frame their understanding of reality through nonliteral figures of speech, using words and phrases, such as metaphors, to evoke meanings and ideas about uncertain or ambiguous situations. Metaphor is used as a means of “understanding and experiencing one kind of thing in terms of another” (Lakoff & Johnson, 1980, p. 5). Metaphors play a key role in managerial cognition evoking ‘vivid imagery’ (Ortony, 1975); producing ‘generative capacity’ (Schon, 1993); enabling new ‘ways of thinking and seeing’ (Morgan, 1986); and structuring abstract ‘perceptions, thoughts, and actions’ (Lakoff & Johnson, 1980) into more concrete, comprehensible ways of knowing. Drawing from a wide range of everyday experiences, top teams use metaphors for meaning making, to describe, understand, and interpret their environment in plausible ways (Weick, 1995).

Metaphors offer clues or hints of leaders’ preconceived within-frame conceptualizations about their environment; how they experience it, how they understand it, and how they relate that perception to other people. War metaphors are used to hide or highlight aspects of a concept, to unite the team by defining its boundaries and membership, to lead the organization, and to express a cultural orientation.

Discussion provides insights on how the team makes meaning through metaphor raising questions regarding the ongoing dialogue between two schools of thought on the nature of metaphor. Sociolinguists such as Oswick, Keenoy, Grant (2002, 2003) and social constructionists like Berger and Luckman (1967), Schutz (1967) and Weick (1995) propose that meaning is conceived and created through deliberate, conscious social interaction. The other school represented by psychocognitivists such as Lakoff and Johnson (1980, 1999) and Marshak (1993, 2003) emphasize the notion that metaphors are created through unreflective, out-of-awareness, unconscious framings of reality. This study suggests both points of view may be operative but in differing degrees.

Data for this study were collected over a three-month period entailing in-depth observations of the team’s ongoing dialogue, supported by individual and group interviews. All observations and interviews were audio taped and transcribed for the purposes of discourse analysis. As a result of these findings, the researcher elaborates several possible categories of metaphors associated with war and military life.

To date, most of the theoretical, empirical, and practical literature on metaphor has been conducted at the organizational (Morgan, 1986) or individual level of analysis (Schneider & Angelmar, 1993). A key differentiator for this study is the focus on the use of metaphor as a group-level phenomenon. The analysis of the team’s use of metaphors is derived from theoretical concepts related to psychology, sociology, cognitive linguistics, social psychology, and anthropology. In describing the team’s use of war metaphors, the researcher draws extensively from Lakoff and Johnson’s (1980) theory of conceptual metaphor and Weick’s (1979, 1995) theory of sensemaking.

In the next section, the extant literature on metaphor, meaning making, and top management teams is reviewed. Then, the researcher’s worldview and research methods of transcendental phenomenology (Moustakas, 1994) are explained. In the third main section, findings relating to the team’s use of five categories of war metaphors and military action verbs are elaborated. The

fourth section discusses why the team used war metaphors and how these were constructed and maintained. The final two sections conclude with discussion of the findings and implications of the top team's use of war metaphors and conclusions offering suggestions regarding directions for future research.

Review of the Literature

Metaphor

For most people, metaphor is familiar as a literary device used to embellish ordinary language through vivid imagery and symbolic flourish. This paper, however, moves beyond this basic definition of metaphor to explore the ways metaphor is used as a conceptual and organizational tool for communication and meaning making within a team.

Metaphor can be defined as the means by which we understand and experience one kind of thing in terms of another. Metaphors are prevalent in everyday life, not just in language, but in thought and action (Lakoff & Johnson, 1980). Morgan (1980) shares Lakoff and Johnson's perspective that our ordinary conceptual system is fundamentally metaphorical in nature. Metaphors give us a systematic way of conceptualizing the world while reducing equivocality.

The *Webster New World Dictionary* defines metaphor as "a part of speech containing an implied comparison, in which a word or phrase ordinarily used for one thing is applied to another" (p. 790). The term "metaphor" comes from the Greek word *metapherein*, meaning "to carry over or transfer" (*meta* = "beyond, between, over" + *pherein* = "to bring or to bear"). In Greek, a metaphor is something that moves other things between places. A moving van or baggage cart, for example, would literally be a "metaphor" in Greece. When applied to deeper levels of experience, what becomes "transferred" by a metaphor are relationships, placement of attention, feelings, beliefs, thoughts, values, presuppositions, and more.

In their groundbreaking work, Lakoff and Johnson (1980) elucidate a theory of conceptual metaphor based on the cognitive sciences (cognitive linguistics) emphasizing metaphor and its role in cognition and ways of knowing. Lakoff and Johnson's theory describes metaphor as more than just a flourish of language or rhetoric. Linguistic metaphors can be reflexes of systematic conceptual metaphors. Since metaphors are conceptual, metaphorical uses of language are not reduced to isolated words or phrases, but instead involve productive and systematic use of wide ranges of semantically related vocabulary items taken from slices of our daily experience (real or culturally virtual), forming experientially based frames. Metaphors are also used to conceptualize and reason about abstract situations. Lakoff credits Reddy (1993) with pointing out that metaphor is not about language; it is about thought and conceptualizing one thing in terms of another.

Lakoff and Johnson (1999), propose that abstract reasoning occurs through out-of-awareness application of conceptual metaphors that are located in the cognitive unconscious and help "frame" reality. They report that "it is the rule of thumb among cognitive scientists that unconscious thought is 95 percent of all thought—and that may be a serious underestimate" (p. 13). Marshak (2003) reflects this view in his belief that conceptual metaphors are part of the unconscious, cog-

nitive processes used to make reason and sense of the world around us. In this regard, metaphors play a central role in the way we think and talk about the world. For Morgan, (1983, p. 602), metaphors “constitute taken-for-granted, unreflective, expressions of reality.” These researchers suggest that metaphor functions as a ‘hidden hand’ that shapes how we conceptualize all aspects of our experience. They acknowledge the conscious use of metaphor, but emphasize the notion that conceptual metaphors are created unreflectively, and unconsciously.

There is another group of researchers who highlight the more conscious, self-consciously imposed use of metaphors. Akin and Palmer (2000) note that “metaphors have the effect of both describing and constructing our organizational realities” (p. 69). In their theory of metaphor and analogical reasoning, Oswick, Keenoy, and Grant (2002; 2003) emphasize the “deliberate, pre-meditated deployment of metaphor” associated with imposing or exposing ways of knowing. They see metaphor as beneficial in conveying and reinforcing pre-existing knowledge of a conscious, socially constructed reality. In their analysis of metaphors in use, they point out that metaphors are consciously imposed framings of “possibilities of action in terms of taken-for-granted assumptions about how the world is” (p. 11). Their views are supported by the work of social constructionists such as Berger and Luckmann (1967) who attribute the concept of multiple realities to the makeup of the consciousness and how it deals with the “everyday” world; Schutz (1967) who advocates meaning is created through “intentional conscious experiences;” and Weick (1979, 1995) who contends that meaning making is produced socially through ongoing interactions.

While researchers agree that metaphors may help meaning making, there are situations where they might actually hinder it. This perspective is uncovered in Tinker’s (1986) work, as well as in Bourgeois and Pinder’s exchanges with Gareth Morgan (1982 and 1983) in *Administrative Science Quarterly*. Pinder and Bourgeois (1982) argue that metaphors are dispensable literary devices that should be constrained in the development and presentation of scientific theory. They believe metaphors are embellishments, can be misleading, and should be proved literally true in order to have any value. Morgan on the other hand, points to the importance of metaphors working to enhance and clarify patterns of insight and knowledge, and playing a creative role in scientific imagination.

Tinker (1986) builds on this dialogue and suggests that metaphors may also mystify and distort meaning making. Tinker advances the prospect of metaphors as reifications. Using biological and machine metaphors, he points to examples where metaphors are used to reify and ideologically bend meaning. He contends that certain metaphors “transport especially powerful biases, because of the way they camouflage the social underpinnings of the reality to which they refer” (p. 365).

Oswick, Keenoy, and Grant (2002) theorize that leaders use colorful, poetic language such as tropes to express the deeper meaning of ambiguous or uncertain phenomena. They suggest that metaphors (as well other tropes such as metonymy and synecdoche) promote a within-frame form of the thinking based upon resonance, compared to other tropes (such as irony, sarcasm, and paradox) that promote a form of beyond-frame thinking through dissonance. When viewed in this way, there is a preexisting, common, even implicit, understanding of the meaning of metaphors being used. This theorizing supports the notion of a top team, working for the defense

industry and embedded in a militaristic culture, using within-frame thinking in their use of war metaphors.

Metaphors can also serve to organize a whole system of concepts with respect to one another (Lakoff & Johnson, 1980) as opposed to structuring one concept in terms of another. Lakoff & Johnson call these orientational metaphors because they frame underlying categories of metaphor in terms of contextual experiences. Culturally oriented metaphors are grounded in our interactions along an objectivist-subjectivist continuum that involves whole systems of concepts (beliefs, values, and assumptions) to describe one kind of experience in terms of another. Multiple metaphors reflect natural kinds of experiences in our culture, such as love, time, ideas, understanding, arguments, labor, happiness, health, control, status, morality, and more. Cultural metaphors tend to evolve over time, “but many are imposed upon us by people in power—political leaders, religious leaders, business leaders, advertisers, the media, etc.” (Lakoff & Johnson, 1980, p. 160). The war metaphor is an example of a cultural metaphor.

Meaning Making

The concept of meaning making has been defined as “the meaning construction and reconstruction by the involved parties as they attempt to develop a meaningful framework for understanding” a given action (Gioia & Chittipeddi, 1991, p. 442). For the purposes of this discussion, the terms sensemaking and meaning making are used interchangeably. Sensemaking may be viewed as those meaning making activities that transform raw events into agreed upon facts or interpretations. The cognitive nature of sensemaking makes it relevant to individual and group-level interactions. The reality of everyday life is that it is shared with others, and constructed in part by the interpersonal level interactions between individuals and those around them (Berger & Luckmann, 1967). Meaning making is necessary to successful communication. For example, Weick illustrates how sensemaking efforts were seriously compromised among firefighters (1993) and airline pilots (1990) when there were significant breakdowns in social interactions among crews.

These interpersonal interactions often entail cycles of reciprocal activities between and among individuals, resulting in sensemaking and sensegiving processes (Gioia & Chittipeddi, 1991). Gioia and Chittipeddi’s model suggests that activities dominated by sensemaking and sensegiving result in understanding and influence. They defined the periods in which such activities occur as cognition and action cycles. Conversation is considered the primary mechanism of social meaning creation or sensemaking (Garfinkel, 1967). However, language in and of itself can produce equivocality (Garfinkel, 1967; Weick, 1979). Metaphors and storytelling become effective tools used in conversation for clarifying and supporting meaning making by reducing equivocality. Weick (1995) pointed out that given the separate and distinct meanings placed on words by each individual, conversation serves to both create equivocality, and to reduce it.

Top Management Teams

In many organizations today, the “executive role” has extended to a “top management team” of upper echelon managers who collectively take on the role of “providing strategic, operational and institutional leadership” (Nadler, 1998, p. 9). Katzenbach (1998) defines a team at the top as “the senior leadership group of an institution or organization; synonymous with all of the

leader's direct reports" (p. 217). A key differentiator in defining *today's* executive role is the set of people who collectively perform the right work, involve the right people, create the right context (environment), and develop the right processes (Schwandt & Gorman, 2002) to lead the organization.

Top management teams have an important impact on organizational outcomes because of the decisions they are empowered to make for the organization. As leaders of the organization, they are responsible for creating and maintaining the organizational culture, defining reality, influencing behavior, and leading change. Kotter (1999) suggests that a successful executive uses indirect influence exerted through symbolic methods using meetings, language, and stories to get messages across and influence organizational behavior. Smircich and Morgan (1982) report that leaders' actions and utterances frame and define reality of others. For Schein (1991), "one cannot separate the process of leadership from the process of building culture" (p. 171).

One way top management teams explicate their knowledge and experience is through metaphor. They use metaphor as a tool to elucidate their conceptualizations of reality for making decisions, guiding employee actions, and leading strategic change. For Morgan (1986), metaphors are useful tools for dealing with the complexity, ambiguity, and the paradoxical nature of organizational life. Marshak (1993) offers that leaders use metaphors in reasoning, choice, and action. He suggests that leaders may use metaphors as out-of-awareness framings that destroy old symbols and create new ones, to influence action, such as, "we have to strike hard and fast" and "we have to destroy our competitors" (2003, p. 9). Managers use metaphors to highlight certain perspectives while downplaying other interpretations (Tinker, 1986).

Methods

The Conceptual Framework

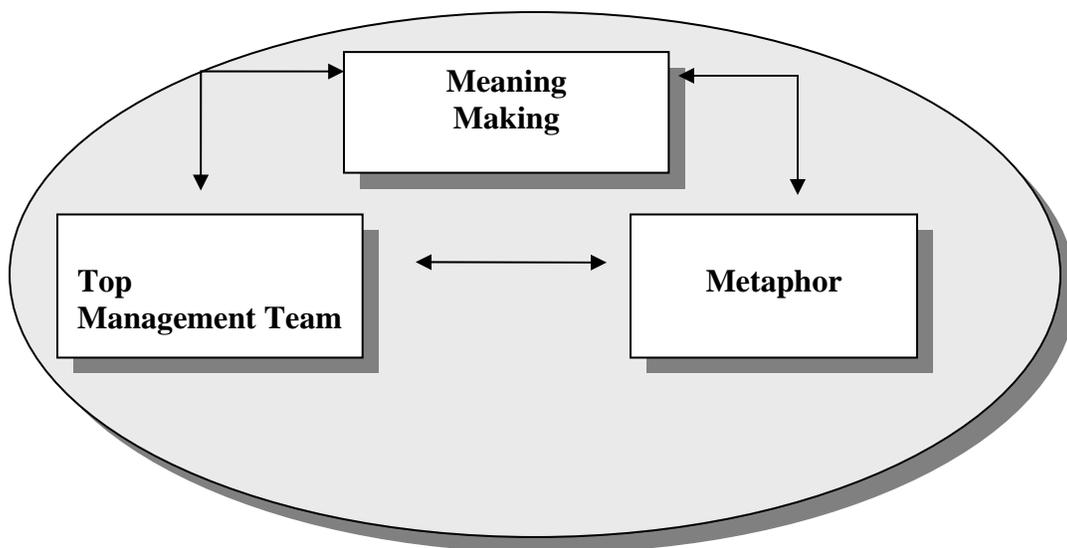
The conceptual framework presented in this paper provides an analysis of the key constructs of a top management team using metaphor to make meaning and the iterative relationships among these constructs. In essence, a top management team is continuously in the process of making meaning within the team and for others outside. The team collectively constructs their meaning of ambiguous cues and events in order to understand and explain the world around them. One way of making meaning is through metaphor. The team selects metaphor as a means of conveying complex or abstract thoughts into a more compact, comprehensive format. In turn, the metaphors selected and used by the top team help shape the meaning that is made of them. Figure 1 provides a diagrammatic depiction of this conceptual framework.

Given this conceptual framework, the following section describes how this exploratory study was conducted, first elaborating the researcher's interpretive worldview and explaining the choice of transcendental phenomenology as a research methodology, and then describing the approach to data collection and analysis methods.

Interpretive Worldview and Transcendental Phenomenology

This study originates from an interpretive worldview, which assumes that symbols are inherently ambiguous and that members of a culture create shared meaning intersubjectively (Schutz, 1967) through their ongoing interactions, which in turn become their reality (Berger and Luckmann, 1967; Schutz, 1967). The researcher subscribes to the ontological assumption that reality is a product of individual cognition and is socially constructed. Epistemologically, it is assumed that dialogue represents an intersubjective construction of individual cognition, reified as objective knowledge. Human beings are believed to possess free will. An ideographic approach that emphasizes subjective, personal experience of individuals in the creation of the social world is assumed. Finally, the researcher advances the idea of intersubjective reality, where objective and subjective meanings are constructed within a group. These assumptions inform the choices in this study.

Figure 1
The Conceptual Framework



The researcher used Moustakas' (1994) transcendental phenomenological research methods based on Husserl's (1931) philosophy of phenomenology. This methodology was chosen because it is a rigorous and systematic approach that seeks to explicate the phenomenon in terms of its constituents and possible meanings. This phenomenological tradition reveals vivid representations of an experience that includes qualities at many levels of experience. Transcendental phenomenology is a disciplined method for confirming evidence, where the researcher looks repeatedly at the phenomenon as it appears before him to derive possible meanings. This approach enriches and clarifies our knowledge and understanding of everyday situations, events, and relationships.

Transcendental phenomenology involves three fundamental concepts for describing and understanding the meaning of people's shared experiences: intentionality (interest in understanding consciousness), intuition (an intuitive and reflective process from which meaning emerges), and intersubjectivity (a dynamic and iterative process of unconcealing meaning between the Self and the Other). Three major processes that facilitate the derivation of knowledge in this approach include: 1) epoche or bracketing (setting aside of biases or pre-judgments), 2) reduction (removing irrelevant, repetitive, or overlapping statements, leaving only the invariant elements), and 3) imaginative variation (describing the essential structures of an experience that account for the "what"). This approach helps us understand and access the others' experience and the meaning they attach to it.

Data Collection and Analysis

Prior to data collection, the researcher attempted to bracket her assumptions and preconceived notions about the phenomenon under exploration. While this is never fully achieved, the researcher used Patton's (2002) reflexive questions screening for "culture, age, gender, class, social status, education, family, political praxis, language, and values" (p. 66). The researcher continued to record her thoughts and reactions during field work, and following observations, interviews, and review of transcripts, where intuition and imaginative variation came into play in data analysis.

This mode of data collection employed direct observation primarily followed by semi-structured qualitative interviews. Observations were conducted over a three-month period, in which the top team's dialogue during biweekly meetings and a two-day management retreat were audio taped and later transcribed. During this time, the researcher acted as an overt, non-participant observer. The investigation was conducted alone, but findings and interpretations were verified with the participants through member checks (Lincoln and Guba, 1985; Miles and Huberman, 1994) at various points in the data collection period. This process enabled reciprocal understanding of the team's use of metaphor in constructing its reality.

Secondly, the researcher conducted one set of interviews with individual team members. Individual interviews lasted between 30 and 60 minutes based on Seidman's (1998) qualitative interviewing techniques. Data were collected in one comprehensive interview with each individual member. This interviewing technique was chosen because data were more forthcoming through observations than interviews. Semi-structured questions were used to explore metaphors individuals could recall during team dialogue. The participants' responses from these interviews were used to develop insights on the team's use of metaphors. Interviews were used to collect the team's demographical data (age, education, job experiences, etc).

Third, a group interview that lasted about two hours allowed the researcher to listen to the team clarify their shared understanding of key war metaphors reflected back to them from the data collection. After the data were collected and initially analyzed, the researcher returned to the team for a collective-level interview (about two hours in length) to clarify the team's shared meaning associated with key metaphors described in findings. Note taking and audio taping were used during all team observations and interviews to produce consistent, sufficient, and relevant data for analysis. Note taking afforded the researcher the opportunity to put aside her thoughts and

feelings during the observation, and to track the use of various war metaphors in context. Transcripts were saved in a Word document, then stored in *Atlas.ti*, a qualitative software package used for retrieval and analysis purposes. More than 1100 pages of transcripts based on observations and interviews were converted to text and reviewed for this study.

Later, a composite of the team's war metaphors was created to form a synthesis of their experiences and the meaning they attach to it via metaphor. Participants' input guided the focus on major patterns identified by *volume* (many participants used the same expressions) and by *significance* (the theme was viewed as very important by the participants and everyone understood its meaning). The researcher established an interpretation of the data with the research participants to ensure accuracy and authenticity. For example, 16 codes (patterns or themes) initially relating to the team's use of metaphor were identified. These codes were reviewed and verified with the coresearchers. An outside reviewer examined the data for substantive significance and another reviewer verified the researcher's codes. Where the outside reviewer, researcher, and those being studied agreed, the study achieved consensual validation of the substantive significance. This process attempted to produce a dependable, credible, and replicable depiction of the phenomenon under investigation.

Findings

This section describes the team's pervasive use of war metaphors that suggest the team's shared sense of *work as war*. Examples were excerpted from the team's dialogue over a three-month period. Included here is a description of the research participants' demographical data, background, and work environment, as well as rich and vivid examples of five categories of war metaphors and militaristic action verbs used.

This study explored a top management team of six individuals: five men, one woman. The team under investigation led a technical organization of nearly 65 employees employed in defense-related work. Their business *is* the business of war. Although only one team member had served in the military, the team's existing work with the Department of Defense meant they worked with warriors in warlike situations. The nature of their work included being involved in defense-related exercises such as simulations, testing, and experimentation. The team members' professional backgrounds indicate years of formal education and experience in highly technical positions. All but one had an advanced degree in hard sciences such as electrical, aerospace, mechanical, nuclear, and systems engineering. They managed different departments associated with defense systems and technologies. One manager oversaw the financial management of the organization. The managers' job responsibilities were largely interdependent sharing responsibility for achieving strategic organizational goals.

The findings reveal abundant use of war metaphors during the team's ongoing dialogue that highlight a probable sense of war associated with combat, competition, and fight for survival. Examples point to contextual situations where participants appeared to use war metaphors to make sense of their world. War metaphors illustrated setting goals: "Realistically, it's probably a role we would shoot for next year;" identifying causes: "Let me throw one more hand grenade on the table;" qualifying efforts: "Continue with successful execution of that role;" performing actions: "I would like each of us to have one or two concrete actions at a strategic level that we're

going to execute;" evaluating: "We're fighting an uphill battle on staff years;" and relating to others: "We're a force to be reckoned with."

Common military action verbs were used metaphorically, seemingly to make sense of dynamic, uncertain situations. Team members described a variety of challenges surrounding staffing and delivery, developing strategy, dealing with problems, and implementing actions. Metaphorical expressions they used were: "aim," "attack," "bite the bullet," "call a halt," "chart a course of action," "capture," "declare victory," "defend," "deploy," "engage," "execute," "exploit," "intercept," "kill," "launch a campaign," "lead the charge," "lean forward," "leverage," "map," "monitor," "prosecute," "rattle-off," "stand-up," "strike," "take an action," "take a shot," "target," "terminate," and "war-gaming."

The top team used war and military metaphors corresponding to at least five key themes relevant to its environment: 1) assessing the work environment, situation, or product, 2) managing administrative matters, 3) building credibility and expertise, 4) being accountable or responsible, and 5) describing professional roles (ways of being). These are revealed in the following five subsections.

Examples show the team's efforts to define reality associated with evaluating their business environment in the context of a management conflict, a business opportunity, goal discussions between leaders, and when making mistakes. Five examples are provided: 1) "We had the battle royal between Oakton and Rob on whether or not we even move the project in." 2) "So this was kind of our best shot and then we also modified it while we were at the off-site. 3) "That's all I had on the kind of tactical stuff. I think we've wrapped up. Anything else? Let's declare victory and go." 4) "Oh I'm sorry. Sorry. No, no. I'm thinking of—I've connected, I, I misfired. Never mind." 5) "Well you know it's a two-edged sword because I'm not sure anybody at the ...really wants anybody from [defense agency] or the [industry groups] involved."

The team "declared success" or "declared victory" when something went well, as military leaders do when they win a battle or war. They used the phrase "bite the bullet" when they had to make a sacrifice (as in staffing or allocation discussions), and described paradoxical situations as a "double-edged" or "two-edged sword" that both slays an enemy and cuts the warrior at the same time. They spoke of "misfires" when they made mistakes and described a difficult situation as "fighting an uphill battle." They referred to challenges as "targets of opportunity." War metaphors were especially prevalent when speaking of challenges and barriers that presented themselves outside the team boundaries, such as overlapping work, competition for resources (especially staffing), and survival amidst unpredictable, unexplainable forces.

Everyday business matters involving a sense of competition were often discussed in terms of war metaphors. Participants would suggest that the team "attack a position," "chart a course of action" a naval term similar to an army term, "map a course of action," create "war plans," and "develop and implement a strategy." In addressing organizational matters, team members described being subject to "rules of engagement" as in military governance or authority, shown here: "Earlier rules of engagement had been to wait until the National Team fired stuff across the transom—like capabilities specs." This metaphorical expression could be associated with naval warfare, where cannons were fired across the transom (the ship's stern) aimed to destroy a pur-

suant enemy. Some of the war metaphors the team used in discussing and solving administrative matters and in making decisions are shown: 1) "I was aiming that question at you (indicating) because I thought that was going to be too ... specific." 2) "So I think we need to take as an action that we're going to flush this out and get ourselves comfortable with it." 3) "But I think what I'd like to do is call a halt now to Goal 4 and 5." 4) "And the next one: Execute an external campaign. I'm not sure that we've captured that anywhere. I think it's something important and I don't know how. It's hard to capture what it is we're talking about." 5) Matt: "Right. The version of this is rather than develop and implement the strategy it's to really execute the role as- Joe: Continue with successful execution of that role. Matt: I want to say, 'execute' since we haven't even gotten it signed yet. We need to execute the role of Technical Integrator."

Phrases employing war metaphors were used in reference to discussions of credibility and expertise. "They are very much needed to help us be the best we can be." "We have achieved one modicum of leadership and we have done Boots on the Ground." "My guess is that will not lead anywhere productive and we're still going to be fighting an uphill battle on staff years of Navy ceiling." "We have to leverage our component level and expertise to broaden our influence."

The team's dialogue appeared to focus attention on building trustworthiness, reliability, and integrity in the eyes of their customers. "Be the best we can be" was the former Army recruiting motto, and the team used it in describing themselves as reliable and capable. The metaphor "Boots on the Ground," another Army term, conveyed the team's physical presence where needed, much like soldiers in the battlefield, "armed" with technical expertise to do the job, where needed, on the ground.

Metaphorical expressions described suggested that the team may have conceptualized accountability and responsibility. They used the metaphorical phrase "lean forward in the trenches," (in the sense of taking responsibility and being proactive like a soldier in a trench). Examples include: "I think you could probably give yourself some credit and say that you'll have it done by the 28th of February. Might as well lean forward in the trenches on that one." "We've decided to lean forward a bit and authorize some over expenditures." "It better not happen under your watch," articulated an expression of caution signifying a level of responsibility a soldier watching and guarding against attack might shoulder in making sure nothing goes wrong. The team used the phrase "the rule of unintended consequences" to refer to risks or unexpected problems getting out of control as, for example: "We've fixed one problem and then the rule of unintended consequences took over; we ought to be careful how we say it."

Team members relied on war metaphors that suggest they saw themselves as warriors dealing with uncertainty and ambiguity. The team described itself as being a dominant, powerful, "force to be reckoned with," "war fighters," reliable, and valued as in the "go to guy or gal," "heroes," as "soldiers" with "boots on the ground" (having a responsible role and recognized expertise), and operating as a "lone ranger" when acting alone and not working as part of a team. When confronting adversity or threats, the team described its effort at self-preservation as keeping the team out of "harm's way" when fending off "the enemy" or "the bad guys."

Discussion

Why were war metaphors used and how were they constructed and maintained? There are a number of reasons for employing war metaphors, including: structuring and communicating shared experiences to make them easier to understand, hiding or highlighting aspects of a concept, leading the organization, uniting the team (setting boundaries of membership), and maintaining a cultural orientation toward war and military life. As the following discussion details, metaphors were observed to be constructed and maintained by the team at the individual and group level through ongoing, social interaction.

Structuring and Communicating Shared Experiences

Team members appeared to frame much of their abstract experiences using war metaphors. They used metaphors as a kind of “shorthand” (their word) for communicating complexity, uncertainty, and ambiguity in their environment. Lakoff and Johnson (1980) point out that metaphors structure our reasoning, our experience, and our everyday language” (p.47) such that we understand one domain of experience in terms of another. They explain:

We define our reality in terms of metaphors and then proceed to act on the basis of the metaphors. We draw inferences, set goals, make commitments, and execute plans, all on the basis of how we in part structure our experience, consciously and unconsciously, by means of metaphor (Lakoff and Johnson, 1980:158).

Team members reported that using metaphors helped them communicate their ideas faster, in fewer words than describing a particularly complex concept in concrete, literal terms. These metaphorical examples provide rich evidence for theorists who propose that enormously complex situations are routinely communicated through metaphor as a way of understanding one thing in terms of another (Lakoff and Johnson, 1980; 1999; Marshak, 1993, 2001; Morgan, 1988; Oswick, et al., 2002). The war metaphors generated in this study may support Ortony and Fainzilber’s assertion that metaphors are tools that constitute a compact way of knowing and communicating; they are necessary for expressing that which is difficult or impossible to express in literal language; and they help capture the rich, vividness of phenomenal experiences.

Highlight or Hiding Aspects of a Concept

One significant finding of this study suggests that the team used war metaphors to promote the notion of combat and competition in their environment at the expense of collaboration and collegiality. The team appeared to use the war metaphor as a means of emphasizing combat, competition, conflict, and threat to life. At the same time, the war metaphor obscured notions of the environment that could be seen as collegial, collaborative, nurturing, peaceful, or fun.

The use of war metaphors highlights a view of the team as combative “soldiers” “executing war plans” working in “war rooms,” “in the battlefield,” “leaning forward in the trenches,” “fighting the bad guys.” This important finding may further the work of Oswick, Keenoy and Grant (2002) who emphasize how metaphors promote a within-frame form of thinking based upon resonance. Team members appeared to share the mindset of work as war, and those outside the team were

“enemies,” masking the fact the team at the same time shared a collegial, collaborative mindset toward one another in warding off their adversaries. They described themselves as “good guys” and “heroes” who “work in collaborative test beds” take “heroic actions” and “build win-win partnerships.”

Applying Oswick et al.’s theory of resonance to this example, we see that the top team’s use of the war metaphor appears to deliberately impose shared ways of knowing, emphasizing notions of the world as war—competitive and combative, while relegating the collegial and collaborative within-team experience. The top team’s use of war metaphors aptly conveys a partial, ideologically distorted view of the environment. This discovery links to Tinker (1986), Bourgeois & Pinder (1982) Morgan, Bourgeois, & Pinder (1983) and Morgan’s (1982; 1983) argument suggesting that metaphors can “reify and ideologically distort meaning.” Tinker (1986) points out that managers use metaphors to impose a preconceived, biased view portraying, for example, “the status quo as harmonious rather than coercive and repressive, orderly rather than unstable, natural rather than man-made, and immutable rather than mutable” (p. 572). Based on the evidence we have seen, this top management team appears to reify the warlike aspects of its business environment obscuring alternative realities of peace, harmony, or collaboration.

Leading the Organization

The top team appeared to use war metaphors as a means of concretizing knowledge and experiences to guide actions for the team and its followers, and to frame and define reality for themselves and others. Akin and Palmer (2000) reinforce this notion suggesting that “metaphors have the effect of both describing and constructing our organizational realities” (p. 69). More specifically, war metaphors appear to be useful tools for both describing and constructing the team’s sense of strategic purpose, identity, and structure, as noted in examples, “we fight the good fight,” “we are a force to be reckoned with,” “we have boots on the ground,” we pursue “targets of opportunity,” and “we lead the division forward.” Kouzes and Posner (1995) found that executives and top managers who communicate shared values help employees know what’s expected of them, better enabling them to handle conflicting demands. Additionally, Morgan (1986) observes that effective managers have become skilled at “reading” complex and ambiguous organizational situations through the use of metaphors. Essentially, the top team probably uses metaphors to filter out what is unimportant and focus attention on what is important from their perspective.

Uniting the Team

Another interesting finding shows that the war metaphor is an essential part of the team’s language and perhaps functions as a means of unifying team members against perceived rivals or threats. This is observed in the way team members refer to themselves as “heroes,” “war fighters,” “soldiers at the frontline,” who “defend [themselves] against attacks from a real enemy” while those outside the team are described as “enemies” or “the bad guys.” These findings resonate with Rindova, Becerra and Contardo’s (2004) research on competitive activities and market consequences surrounding “the cola wars” that suggests firms develop an “enemy mindset” among stakeholders marshaling attention and emotional involvement against a formidable adversary.

Additionally, the pervasive occurrence of war metaphors supports Schein's (1992) work on leadership and culture noting that creating a common language and conceptual categories enables a group to interpret its environment and adapt to it. He believes that teams have, in effect, their own language, and by inference their own metaphors that bind them together as a group. Similarly, Levi-Strauss (1967) found that language represents the shared meaning within a particular group, tribe, or society. The war metaphors likely led team members to experience work as competitive and combative, reflective of beliefs and values associated with war and military life where (in their words) they are heroic warriors, "noble, self-sacrificing, and fighting the good fight."

Maintaining Culture

The war metaphor appears to be rooted in military culture conveying the team's conceptualizations of reality as a veritable "war zone." Findings reflect the team's apparent taken for granted, invisible beliefs in military values such as, "self-sacrifice; discipline; obedience to legitimate authority; and loyalty to nation, unit, and comrades" delineated in *American Military Culture in the 21st Century* (1999). Given the team works for the Department of Defense, their use of war metaphors appears to strengthen their beliefs in military life. War metaphors suggest the team's collective experiences regarding competitors as "the enemy" and competition for contracts, staffing, and resources as "a fight," "a battle," "an uphill battle," or the "battle royal." They viewed the dynamic environment as a "moving target," "executing strategy," going "up the chain of command," "calling for sacrifices," and "disciplining ourselves." These metaphors framed the team's conception of its efforts as "noble," "fighting the good fight," with "boots on the ground." This finding may support Lakoff and Johnson's (1980) notion of culturally oriented metaphors grounded in the team's whole system of conceptualizations, beliefs, and values associated with war. The prolific use of war metaphors reflects the team's conceptualization of reality coherent with its apparent fundamental beliefs in war and military culture.

How Metaphors Were Constructed and Maintained

This section describes how the team constructed and maintained the war metaphor aligned with theories of the social construction of reality. Discussion covers how meaning is created at the individual level subjectively, synthesized intersubjectively at a group level, and reified as objective knowledge during ongoing interaction. Discussion concludes by describing the team's unreflective use of metaphor and their subsequent conscious recognition of that use.

At various times, individual team members appear to use metaphor for making meaning of their subjective experiences. They are seen either introducing a new metaphor into the conversation or using a metaphor previously used by another team member. This was observed for example, when one team member introduced the metaphor, "throw a hand grenade on the table" as a means of suggesting the topic he was about to initiate into the conversation was potentially explosive. In the course of that conversation, other members of the team picked up and integrated this particular metaphor into their conversation, and used it again later in subsequent conversations. Team members later referred to this phenomenon of adoption and repetition in individual and group interviews.

In addition to an individual's construction and maintenance of the war metaphor, the team as a whole appeared to construct meaning intersubjectively (Schutz, 1967). The team reported having a shared understanding of various metaphors explaining, for example, "We all know what we mean when we use 'boots on the ground.'" By interviewing individual team members, the team collectively, and observing the team's use of metaphor, the researcher observed metaphorical construction which appeared to progress mutually from the self-subjective "I" to the intersubjective "we." This finding suggests implicit understanding of others' subjective experiences entailing cycles of reciprocal activities between and among individuals and the team (Weick, 1995). This example proposes that the individual's subjective experience is transcended in team dialogue toward a mutually shared objective reality. This also strengthens Schutz's concept of intersubjectivity as a conscious act between the self and the other.

Additionally, this finding is consistent with prior research, building on Weick's (1995) notion of intersubjective meaning where "individual thoughts, feelings, and intentions are merged or synthesized into conversations during which the self gets transformed from 'I' into 'we' (e.g. Linell and Markova, 1993)" (p. 70). Weick advises that intersubjectivity is the focus of sense-making as different views of the meaning emerge into a new fusion. Finally, the team's collective meaning appears to illustrate Berger and Luckmann's (1967) view that we share an "attitude of commonsense consciousness...because it refers to a world that is common to many men...in the normal, self-evident routines of everyday life" (p. 23).

The team's use of metaphor depended on ongoing social interaction, either face-to-face or via video-teleconferencing (VTC) during biweekly meetings, a two-day management retreat, and informal interactions. Team members met regularly which gave them the opportunity to scan the environment, and make sense of day-to-day experiences that might affect them. In observing the team member's use of metaphor in dialogue, the researcher found the participants took turns explaining, justifying, legitimizing, and imposing their views of reality onto others. Their conversation appeared in a linear sequence, with speakers alternating among members of the group, and metaphors being introduced by one individual, then picked up and used by others. Conversational overlappings occurred, and there were lapses where one speaker didn't take his turn and the other speaker continued. The end of one turn at talking resulted in the beginning of the next person's turn. The team's creation and continuance of metaphors are suggestive of ordinary elements of conversation involving participants, parts, stages, linear sequence, causation, and purpose.

The top team appeared to conceptualize its environment as war, using metaphors such as "boots on the ground," "lean forward in the trenches," "execute the role," and various military action verbs such as "attack, execute, deploy, intercept, kill, prosecute, target, and terminate." However, team members largely appeared not to have been consciously aware of this action. In individual interviews, team members could recall only about five percent of the total body of metaphors used. Half the team could not recall their use of metaphors during team interactions. The other half recalled only a handful of metaphors when hundreds were used. This indicates an apparent lack of awareness on their part regarding the use of metaphor. In this sense, team members appear to be unreflective, and not fully aware of the possible images or implications of what they

are saying. When the researcher brought this to their attention, the team recognized their use of metaphor and confirmed their shared understanding of what they meant.

This team's out-of-awareness framings are consistent with Lakoff and Johnson's (1980, 1999) psychocognitive theory of conceptual metaphor. They suggest that abstract reasoning is situated in the cognitive unconscious, and occurs through out-of-awareness framings of reality. Sharing this view, Marshak (2003) argues that managers may use metaphors as an out-of-awareness framing that offers clues or indicators of their preconscious, implicit conceptualizations. He suggests, for example, that if a manager refers to a marketing campaign as war, it is reasonable to conjecture that the manager is operating from a conceptual metaphor that "marketing is war."

Social constructionists and psychocognitivists approach the issue of how metaphor is generated and used quite differently. The former view metaphor as socially constructed and conscious, while the latter advocate that metaphor is an out-of-awareness, unconscious framing. The evidence in this study suggests that both the sociolinguists and psychocognitivists' points of view can be seen to a greater or lesser extent within this team. While the team's use of the war metaphor appears to have been largely out-of-awareness, when the team's pervasive use of metaphor was called to their attention, they fully appreciated that they were using metaphorical speech to communicate, and they affirmed that they shared a common understanding of what they meant. This recognition is consistent with Oswick, Keenoy and Grant's (2002, 2003) notion that conceptual metaphors are socially constructed, negotiated, and mediated through time. It also reflects Oswick et al.'s view that conceptual metaphors are "subliminal constructions of managerial talk" (p. 11). They argue that it's hard to know where the 'conscious' ends and the 'out-of-awareness' or 'unconscious' begins.

Implications for Groups

This study offers several important insights into the use and impact of the use of war metaphors by a top management team working in the defense industry. The data illustrate how the team's overriding use of war metaphors impacts their collective conceptualizations of reality, affects how they handle problems in their work environment, and informs their interactions with each other.

First, one significant implication of this study offers new insights into why the team uses the war metaphor to highlight or hide an aspect of an abstract concept such as work. The team's use of war metaphors largely highlighted their conception of reality in terms of combat and competition and downplayed collaboration and collegiality with entities outside the team, promoting an 'us versus them' attitude. They saw those outside the group as the "enemy" or "the bad guys." At the same time, and in contrast, they saw themselves as "heroes" and "good guys." Thus, team members appeared to see themselves as being on the "same side," while non-team members were seen as 'the enemy.' This implies that in an organizational setting, the war metaphor served to reinforce intra-team cohesion, while amplifying inter-team conflict.

A second implication, and a corollary to the first, is that to be a member of this top management team, one might have to be able to use war metaphors the way other members do. Metaphors are part of a group's commonly-held language, and this team's conception of their reality as war

served to unite the team and delineate its boundaries of membership. Correspondingly, consultants working with this team might also experience frustration and reduced effectiveness if they weren't able to quickly adopt and use the war metaphors. It might be that the use of war metaphors may be so second nature and part of the team's established "literal language" that they wouldn't recognize the expressions as metaphors at all, but simply common language. This suggests that the extent to which new members and consultants are able to use war metaphors might significantly impact their effectiveness with the team.

A third implication of this study is revealed in how the team pooled their multiple perspectives and used war metaphors as constructive tools to make sense of their reality and lead their organization. This means, as leaders, they used war metaphors to influence, manipulate, and direct the thoughts and actions of their followers. In framing their organizational reality as war, the top team engenders a warrior mentality (i.e. "we're a force to be reckoned with") and sets in motion a variety of defensive or offensive actions (such as "target opportunities" and "chart a course of action") to survive adversity and advance their organizational goals (i.e. "declare victory and move on"). The war metaphor helps the team structure their abstract, intangible experiences and communicate them in a way that is more meaningful and understandable for themselves and others.

The fourth implication of this study is that the war metaphor functions as an effective linguistic tool allowing the team to uphold, maintain, and preserve their cultural orientation toward war and military life. The team's ubiquitous use of war metaphors implies their shared experience of work as war, highlighting unspoken beliefs and values in legitimate authority, loyalty, discipline, and sacrifice battling noble causes. Pervasive examples reveal the team's taken for granted, invisible shared values and beliefs that are consistent with those of the military services and agencies. This is not surprising given the team's work is exclusively associated with the defense industry.

A fifth implication of this study speaks to how metaphors are socially constructed and maintained at the group level. The team readily used and understood war metaphors at both conscious and unconscious levels of awareness. While individual team members had little or no recall of the team's use of metaphor, as a collective, they were able to talk about the nuances, shades, and gradations of shared meaning of several war metaphors once these were brought to their awareness. This suggests that team members were first unknowingly unaware of their use of metaphor at the time of that use and of its impact on themselves and others in defining their reality. After they became aware of their metaphorical expressions, they consciously acknowledged the use and implication of their metaphors in making meaning.

Conclusions

By exploring a top management team's use of war metaphors and what that use means, this study brings us closer to understanding what a top management team may be experiencing in its environment. Building on this study and existing research, several opportunities for future research are identified.

Findings from this study might lead us to hypothesize that executive teams will generate metaphors aligned with their professional occupation and industry to describe the uncertainty and ambiguity in their environment. In studying hospital doctors and nurses, for example, researchers might discover a root metaphor associated with notions of mortality and survival. It would be interesting to see what metaphors are used in emergency rooms or intensive care units where life and death situations are prevalent.

Second, it might be helpful to examine what metaphors top teams use in other, similarly high-pressure, dynamic environments such as health care, biotechnology, transportation, and national security. Future research might explore whether or not top teams in industries other than the defense industry use metaphors of war when conceptualizing their reality. For example, are there top teams in specific fields for whom the use of war metaphors would be inapposite, such that they use instead distinct, non-war metaphors that reflect a significant affinity for the nature of a given business and its sociocultural environment? Do industry and profession-specific metaphors coexist and intermingle with war metaphors in ongoing, recursive conversations among organizational leaders?

Third, this study has revealed how a top management team constructed and maintained metaphor first in unconscious (out-of-awareness, unreflective) ways, but subsequently became consciously aware of the implications of that use. This finding is not widely shared and, has in fact been the subject of recent debate (see *Academy of Management Review*, 2003, 28 (1) where Marshak and Oswick, Keenoy and Grant argue these points in theoretical as opposed to actual situations. Further empirical studies are needed to explore more deeply the actors' degree of awareness in creating and using metaphor.

Fourth, opportunities for examining factors such as power and influence, tolerance for ambiguity and uncertainty, and the effects of corporate and occupational culture on a top management team's metaphors will increase our understanding of executives' conceptualizations of these experiences. In addition, while not emphasized in this paper, a potential new area of research might focus on the team leader's use of metaphor as a means of controlling and constraining the participation of less powerful team members. Described by Isaacs (1999) as "conversational violence," future studies might explore the association between the leader's need for power and control, reflected in metaphor, and the need to impose a point of view, at the expense of mutual respect, team performance, and effectiveness.

I am deeply grateful to Tom Keenoy, Cliff Oswick, Bob Marshak, Martha Beaychamps and the two anonymous reviewers for their thoughtful comments and guidance in the development of these ideas in earlier versions of this manuscript. I would also like to thank my husband Bob Strieter and my dissertation committee Andrea Casey (Chair), Dave Schwandt and Clyde Crosswell for their intellectual contributions and guidance throughout the dissertation process leading up to this article.

REFERENCES

- Akin, G. & Palmer, I. (2000). Putting metaphors to work for change in organizations. *Organizational Dynamics*: 67-77.
- Berger, P.L. & Luckmann, T. (1967). *The social construction of reality*. New York: Doubleday Anchor.

- Bourgeois, V. & Pinder, C. (1982). Contrasting philosophical perspectives in administrative science: A reply to Morgan. *Administrative Science Quarterly*, 28, 608-613.
- Center for Strategic and International Studies. (1999). *American Military Culture in the 21st Century*. Retrieved from <http://www.csis.org/polmil/#natsec>.
- Garfinkel, H. (1967). *Studies in ethnomethodology*. Englewood Cliffs, NJ: Prentice-Hall.
- Gioia, D. & Chittipeddi, K. (1991). Sensemaking and sensegiving in strategic change initiation. *Strategic management Journal*, 12, 433-448.
- Husserl, E. (1931). *Ideas*. (W.R. Boyce Gibson, Trans.). London: George Allen & Unwin.
- Isaacs, W. (1999). *Dialogue and the art of thinking together*. New York: Doubleday.
- Katzenbach, J.R. (1998). *Teams at the top: Unleashing the potential of both teams and individual leaders*. Boston, MA: Harvard Business School Press.
- Kotter, J. P. (1999). What effective general managers really do? *Harvard Business Review*, 145-159.
- Kouzes, J.M. & Posner, B. (1995). *The leadership challenge: How to keep getting extraordinary things done in organizations* (2nd ed.). San Francisco: Jossey-Bass.
- Lakoff, G. (1993). Contemporary theory of metaphor. In Ortony (Ed.), *Metaphor and Thought*, 202-251. Cambridge: Cambridge University Press.
- Lakoff, G. & Johnson, M. (1980). *Metaphors we live by*. Chicago, IL: University of Chicago Press.
- Lakoff, G. & Johnson, M. (1999). *Philosophy in the flesh: The embodied mind and its challenge to Western thought*. Chicago, IL: University of Chicago Press.
- Levi-Strauss, C. (1967). *Language and the analysis of social laws: In structural anthropology*. Garden City, NY: Doubleday Anchor.
- Lincoln, Y.S. & Guba, E.G. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage.
- Linell, P. & Markova, I. (1993). Acts in discourse: From monological speech acts to dialogical interactions. *Journal for the Theory of Social Behaviour*, 23.
- Marshak, R. J. (1993). Managing the metaphors of change. *Organizational Dynamics*, 22, 44-56.
- Marshak, R.J. (2003). Metaphor and analogical reasoning in organization theory: Further extensions. *Academy of Management Review*, 28 (1), 9-10.
- Miles, M. & Huberman, A. (1994). *Qualitative data analysis: A sourcebook of new methods*. Thousand Oaks, CA: Sage.
- Morgan, G. (1980). Paradigms, metaphors and puzzle solving in organization theory. *Administrative Science Quarterly*, (25), 605 – 622.
- Morgan, G. (1982). Cybernetics and organization theory: Epistemology or technique? *Human Relations*, 35, 521-538.
- Morgan, G. (1983). More on metaphor: Why we cannot control tropes in administrative science. *Administrative Science Quarterly*, 28, 601-607.
- Morgan, G. (1986). *Images of organization*. Beverly Hills, CA: Sage.
- Morgan, G. (1988). Accounting as reality construction: Towards a new epistemology for accounting practice. *Accounting, Organizations and Society* 13 (5), 477-485.
- Morgan, G., Bourgeois, V., & Pinder, C. (1983). More on Metaphor; Why We Cannot Control Tropes in Administrative Science/Contrasting Philosophical Perspectives in Administrative Science: A Reply to Morgan. *Administrative Science Quarterly* (28), 4, 601-614.
- Moustakas, C. (1994). *Phenomenological research methods*. Thousand Oaks, CA: Sage.

- Nadler, D.A. (1998). Leading executive teams. In D.A. Nadler and J.L. Spencer and Associates (Eds.), *Executive Teams*, 3-20. San Francisco, CA: Jossey-Bass.
- Nadler, D.A. (1998). Executive team effectiveness: Teamwork at the top. In D. A. Nadler and J. L. Spencer and Associates (Eds.), *Executive Teams*, 21-39. San Francisco, CA: Jossey-Bass.
- Ortony, A. (1975). Why metaphors are necessary and not just nice. *Educational Theory*, 25, 45-53.
- Ortony, A. & Fainsilber, L. *The role of metaphors in descriptions of emotions*. (181-84). Retrieved June 10, 2005 from <http://acl.ldc.upenn.edu/T/T87/T87-1037.pdf>.
- Oswick, C., Keenoy, T. Grant, D. (2002). Metaphor and analogical reasoning in organization theory: Beyond orthodoxy. *Academy of Management Review*, 27 (2), 294-303.
- Oswick, C., Keenoy, T., & Grant, D. (2003). More on metaphor: Revisiting analogical reasoning in organization theory. *Academy of Management Review*, 28 (1), 10-12.
- Oxford English Dictionary (2003). Retrieved from <http://www.gwu.edu/aladin.oed>
- Patton, M.Q. (2002). *Qualitative evaluation and research methods*. (3rd ed.). Newbury Park, CA: Sage.
- Pinder, C. & Bourgeois, V. (1982). Controlling tropes in administrative science. *Administrative Science Quarterly*, 27 641-52.
- Reddy, M. (1993). The conduit metaphor. In A. Ortony (Ed.), *Metaphor and Thought*. Cambridge: Cambridge University Press.
- Rindova, V., Bercera, M. & Contardo, I. (2004). Enacting competitive wars: Competitive activity, language games and market consequences. *Academy of Management Review*. 29 (4), 670-686.
- Schein, E.H. (1991). What is culture? In P. Frost, L. Moore, M. Louis, C. Lundberg, and J. Martin (Eds.). *Reframing organizational culture*. Newbury Park, CA: Sage.
- Schein, E.H. (1992). *Organizational culture and leadership*. (2nd ed.). San Francisco, CA: Jossey-Bass.
- Schneider, S.C. & Angelmar, R. (1993). Cognition in organizational analysis: Who's Minding the store? *Organizational Studies*. 14 (3), 347-374.
- Schon, D. (1993). Generative metaphor: A perspective on problem setting in social policy. In A. Ortonoy (Ed.), *Metaphor and thought* (2nd ed.), 135-161. Cambridge: Cambridge University Press.
- Schutz, A. (1967). *The phenomenology of the social world*. Northwestern University Press.
- Schwandt, D.R. & Gorman, M.D. (2002). *Foresight and foreseeing: A social action explanation of complex collective knowing in an executive team*. Paper presented at the International Conference at the University of Strathclyde, Graduate School of Business, Glasgow, UK.
- Seidman, I. (1998). *Interviewing as qualitative research: A guide for researchers in education and the social sciences* (2nd ed.). New York, NY: Teacher's College Press.
- Smircich, L. & Morgan, G. (1982). Leadership: The management of meaning. *Journal of Applied Behavioral Science*, 18 (3), 257-273.
- Tinker, T. (1986). Metaphor or reification: Are radical humanists really libertarian anarchists? *Journal of Management Studies*, 23, 363-384.
- Weick, K. E. (1979). *The social psychology of organizing*. (2nd ed.). New York: McGraw-Hill.

Weick, K. E. (1990). The vulnerable system: Analysis of the Tenerife air disaster. *The Journal of Management*, (16), 571-593.

Weick, K. E. (1993). The collapse of sensemaking in organizations: The Mann-Gulch disaster. *Administrative Science Quarterly*, 38, 628-652.

Weick, K. E. (1995). *Sensemaking in organizations*. Thousand Oaks, CA: Sage Publication

Weick, K. E. & Roberts, K.H. (1993). Collective mind in organizations: Heedful interrelating on flight decks. *Administrative Science Quarterly*, 38, 357-381.

Jo Longnecker is currently Principal Organizational Effectiveness Consultant at the MITRE Corporation where she works with executive teams. She earned her Ed.D. from The George Washington University, The Executive Leadership Program in Human Resource Development. She has published in Sustaining Distance Training: Integrating Learning Technologies into the Fabric of the Enterprise. Her current research interests include tropes - chiefly war metaphors, top management teams, and the experience of time in groups. Email: jlongnec@mitre.org and fortunata@erols.com