

Meta-Leadership: A Framework for Building Leadership Effectiveness

A Working Paper

Authors

Dr. Leonard J. Marcus, Ph.D.
Dr. Barry C. Dorn, M.D., M.H.C.M.
Joseph Henderson, M.P.A.
Eric J. McNulty, M.A.

National Preparedness Leadership Initiative

*A Joint Program of the Division of Policy Translation and
Leadership Development, Harvard TH Chan School of Public Health
and the Center of Public Leadership, Harvard's Kennedy School of Government*

*This paper is distributed for informational and educational purposes only.
No citation, quotation, duplication, or distribution without the expressed
written permission of the authors. The authors wish to thank Jennifer Grimes
for her assistance reviewing this paper.*



National Preparedness Leadership Initiative
Harvard School of Public Health
<http://npli.sph.harvard.edu>
P.O. Box 381488, Cambridge, MA 02238-1488
617-496-0867

Meta-Leadership: A Framework for Building Leadership Effectiveness

Abstract

Large organizations and the work they accomplish are becoming less hierarchical and more reliant on complex and inter-dependent connections with other entities. Leading in such an environment requires expanded thinking and activity beyond one's formal bounds of authority. Meta-leadership is a theoretically robust and pragmatically useful evidence-based framework and practice method for generating widespread influence and cohesive action that expands the leader's domain of engagement, leverage, and efficacy.

Meta-Leadership: Introduction

Large organizations in the 21st century have emerged as global enterprises marked by de-layered management structures, diverse workforces, dynamic and ubiquitous information systems, complex supply chains, strategic alliances, and outsourced resources. These significantly expand the scope of responsibility and complexity of leadership. The speed and frequency of change are increasing. Opportunities to source and sell are global. So, too, are threats, be they market moves, competitor shifts, terrorist networks, or natural disasters. It is no longer simply a matter of leading within a well-defined hierarchy: It is now necessary to exercise leadership across a network of entities with “interactive, interdependent, and creative processes” (Prati, Douglas, Ferris, Ammeter, & Buckley, 2003) – both within and outside of one’s own agency or firm. Within the organization, flat or matrix structures have increased the complexity of accountability, control, and the exercise of power and influence, so adoption of nonhierarchical leadership models has risen in importance and demand (Meisel & Fearon, 1999). For the first time in the U.S., four generations are working at the same time (Hankin, 2005), each with different expectations and norms for leader and follower behavior and motivation (Hackman & Johnson, 2004). Simultaneously, work has moved from industrial to knowledge-based endeavors that require different organizational constructs and protocols. Confronted with these challenges, leaders cannot afford to lead in traditional ways

(Green, 2007). Beyond the four walls, the locus of function, be it production or action, often occurs at the nexus of relationships among a variety of parties that contribute to the function (Schilling, 2001). The transformation of the traditional organization requires the transformation of the traditional leader (Ashkenas, Ulrich, Jick, Kerr, 2002).

In this environment, one’s formal position is but one component of leadership capacity. A more accurate definition and measure of leadership is “people follow you.” To achieve this, leaders find themselves challenged to use influence as much as or more than formal authority; authority and accountability structures are more reciprocal and relational (Wagner, 2008). Organizational boundaries function as semi-permeable membranes rather than hard walls with the involvement of other internal and external entities. Such organizations are often complex, networked, emotional, and chaotic (Green, 2007).

The complexities of structures demanding non-stratified leadership are often obscured by the focus of traditional theories that presuppose that leadership is a top-down leader-subordinate construct, typical of hierarchical organizations (e.g. Weber, 1905; Lewin, Lippitt, & White, 1939; Likert, 1967; Tannenbaum & Schmidt, 1973; Burns, 1978; Bass, 1985). Ancona and Backman (2010) found that approximately 85% of the existing leadership literature assumed a hierarchical leadership structure. Yukl (2002) argued that many leadership theories dealt with a single level of processes because it is difficult to develop a multi-level theory. Multi-level reality, we

argue, is what many leaders face and thus constitutes the impetus for our work. Though the traditional boss-to-employee relationship has been formalized in clear roles, authority structure, rules, job descriptions, and responsibilities that prescribe performance and productivity expectations (Fernandez, 1991), many relationships critical to leadership success are not so structured (Hackman & Johnson, 2000). Theories of matrix organizations often look at cross-functional relationships within a single organization (Thomas & D'Annunzio, 2005). This research is valuable but insufficient for addressing the multiplicity of complex challenges that a leader faces today.

These theories also do not fully capture what occurs when leaders must catalyze action well above and beyond their formal lines of decision-making and control: for example, in leading the launch of a new global brand, a major merger or acquisition, or a crisis response that involves multiple jurisdictions and government coordination with the private and non-profit sectors. We argue that the best evidence of effective leadership in these situations is unified commitment among all stakeholders toward a common goal – which we call “connectivity.” To achieve this, leaders today must simultaneously lead down in the traditional sense, up to influence the people or organizations to which they are accountable, across to activate peer groups and others within their organization with whom there is no formal subordinate relationship, and beyond to entities outside of the leader’s organization or chain of command. We describe such broadly envisioned, integrated and overarching leadership as “meta-leadership”

(Marcus, Dorn, & Henderson, 2006; Marcus, Dorn, Ashkenazi, Henderson, & McNulty, 2012). Meta-leadership addresses leadership challenges that cross inter- and intra-organizational boundaries as well as those that are found within hierarchical structures. This paper explores how meta-leadership integrates a wide range of leadership scholarship and maps critical interdependencies when these theories and concepts are applied in complex situations and systems.

The Model of Meta-Leadership: Origins and Extensions

The meta-leadership model has been developed by observing and analyzing the actions of leaders in unprecedented crisis situations – post-Hurricane Katrina, during the early phases of the H1N1 outbreak and Deep Water Horizon oil spill, the Boston Marathon bombings response, and other incidents – as well as mergers, acquisitions, and restructurings primarily in the health care field. Field research was integrated with understanding from the scholarly literature referenced throughout this paper. We have presented meta-leadership in diverse executive educational settings: training more than 650 senior U.S. government, private, and non-profit sector leaders at Harvard University and tracking the impact of their work over a multi-year period; presenting the community-based “Meta-Leadership Summit for Preparedness” program that together engaged 5,000 government, private and non-profit sector leaders in 36 cities across

the United States (Sobelson et al, 2013); and working with corporations, as by instructing more than 300 executives in crisis meta-leadership, management, and communication methods at one global firm through a multi-year program. As the principles of meta-leadership have been developed and applied in a variety of situations, the observations are presented here as qualitative rather than quantitative analysis in accordance with recommendations for exploratory research through “progressive focusing” (Schutt, 2015; Benbasat, Goldstein, & Mead, 1987).

The people we observed most closely were most often working in large, complex organizations with thousands of employees, highly structured management systems, and multiple stakeholders. These were individuals from the public, private and non-profit sectors. The crisis situations brought the leadership challenges and accomplishments into high relief although they are equally applicable to complex challenges in non-crisis settings.

The majority of our work has been with large public sector agencies ideal for this analysis as they are perceived to exhibit many of the characteristics of traditional bureaucratic organizations – including confining silo-oriented behaviors – while also needing to demonstrate connectivity across and beyond organizational and sector boundaries to achieve their objectives. When one examines the criticism of the U.S. government after the attacks of 9/11, the attention is largely focused on the inability of the various intelligence and law enforcement agencies to coordinate their efforts (Kean et al., 2004). When

one looks at the response to Hurricane Katrina, the failure of federal, state, and local agencies to act cooperatively and collaboratively has a prominent role in the tragedy (Davis et al, 2006). These failures of rigidly hierarchical organization structures underscore the need for incorporation of more flexible, adaptive, and integrative styles.

It is reasonable to ask whether these situations are analogous to the challenges faced by leaders of organizations in other sectors and if the lessons learned are relevant. We believe that, in leadership terms, they are. Certainly public sector agencies lack market-based pressures and are subject to civil service requirements in personnel policy and compensation, and they have greater political oversight; however:

- The foundational elements of understanding individuals and accurately diagnosing a situation are not dependent upon organization type or style; neither are the channels of connectivity – up, down, across, and beyond;
- All organizations face their own highly fluid, emotionally charged situations – sometimes crises and other times opportunities – that involve stakeholders beyond their direct control. The difference between effective and non-effective leadership of the response can be measured in share price and sales volume in the for-profit sector and in reputation and engagement across all sectors;
- Public, private, and non-profit organizations have become less hierarchical and more

team-based and thus the need for leadership through influence has increased (Conger, 1998);

- Public and non-profit sector agency leaders are increasingly expected to attend to efficiency and financial concerns—i.e. behave “like a business.”

Meta-leadership has its greatest impact in situations with high stakes and a high number of stakeholders. Scale, scope, and complexity are perspectives not generally addressed in theories primarily examining mission, motivation, or power structure such as transactional vs. transformational leaders (Burns, 1978; Bass, 1990).

The prefix “meta” is likened to its use in “meta-research,” which systematically identifies cross-cutting themes found in many different studies, or “meta-analysis,” which likewise combines and synthesizes findings about a range of questions in search of overarching thinking and conclusion. Meta-leadership connects what have otherwise been disparate areas of inquiry about leadership into a cohesive, interdependent framework. It is also likened to its use in “metamorphosis.” Not only must the leader catalyze change, viewing evolution as an active rather than a passive process, but must build and maintain a capacity for intentional leadership – able to remain proactive in the midst of circumstances that can otherwise be overwhelming.

Output vs. Input and Throughput

Much of the leadership literature looks at its topic as a set of characteristics or traits of individuals. This is a focus on *input* to build individual competencies. Another subset examines leadership as a process. It presents a discussion and an analysis of *throughput* described as behaviors, relationships, and incentives (Bolden, Hawkins, Gosling & Taylor, 2011). We argue that *output*, the “product” of leadership, is as important as input and throughput. Meta-leaders seek to achieve results that cannot be accomplished by one organization, unit, or department – typically their own – in isolation. The objective can be as diverse as streamlining the supply chain, coordinating the work of different entities during a crisis, integrating health care services, or entering an emerging market, each of which demand change or accommodation by stakeholders outside the leader’s direct line of authority. The responses to incidents we have studied—including Super Storm Sandy and the Ebola outbreak—have involved multiple public agencies at the federal, state, and local level as well as entities in the private and non-profit sectors. In situations such as these, poor leadership can lead to serious negative outcomes including loss of life. Output matters.

Broad, consequential objectives both appeal to and require participation by people who work in entirely different sectors, organizations, and/or levels of a hierarchical framework. By intentionally linking the efforts of these numerous actors and many otherwise disconnected organizational

units, the meta-leader, often operating without direct or explicit authority, leverages and integrates their activities to accomplish something – an output – that would not otherwise be achievable (Schein, 2004). There is value in both the output, the “impact value,” as well as in the experience of the process, the “collaborative value.” The tangible progress – impact – amplifies the experience and rewards of working together – collaboration – and vice versa making the results mutually reinforcing.

The Dimensions of Meta-Leadership: Design, Concept and Practice

Meta-leadership is not a new theory of leadership; it is a framework that helps organize, integrate, and make more useful relevant insights from the immense volume of leadership analysis, practice, and scholarship. The goal is to help leaders effectively navigate complex situations. Each dimension – Person, Situation and Connectivity – endeavors to encompass a body of research (see Table 1) and to meaningfully integrate the literature.

Dimension	One: The Person	Two: The Situation	Three: Connectivity
Leadership Scholarship	Psychometric analyses; personal discipline; self-awareness/emotional intelligence/resonant leadership authenticity; neuroscience.	Situational awareness; stakeholder theory; complexity theory; risk analysis; decision science.	Organizational leadership and management; leading up; followership; influence beyond authority/power dynamics; inter- and intra-organizational relations; game theory; network theory; boundary-spanning, systems theory.

Table 1: Connecting the Dimensions of Meta-Leadership to Other Leadership Theories

As we have observed adoption of meta-leadership across complex public and private organizational systems and networks, we note three important advantages. It provides: 1) a conceptual framework and common vocabulary that describes intentional networking and cohesion within, across and beyond formal organizational boundaries to connect the purposes and work of different stakeholders; 2) a purposeful strategy for action to advance coordinated planning and activity; and 3) a compelling mission and rallying cry for both leaders and followers that inspires, guides, and instructs, setting a higher standard and expectation for performance and impact. Meta-leadership guides thinking, decision making, and action to achieve significant, positive, and powerful outcomes.

By design, meta-leadership addresses the complexities of generating a unity of action when many different constituencies must be focused into a broadly adopted strategy, plan, or mission, even if their priorities and proclivities are conflicting (Marcus et al., 2006). In concept, it is a question of best aligning mission, strategy, tactics, and success metrics with the problem or opportunity: what personal and contextual factors affect what meta-leaders perceive, decide, and ultimately act upon (Northouse, 2004)? In practice, it is a puzzle of optimally engaging four facets of organizational connectivity – up, down, across, and beyond: Who are the many stakeholders that must be influenced and how can they best be leveraged to catalyze mutually-beneficial forward progress? What other entities should be engaged to create a greater probability of success?

These broad themes translate into the three dimensions of meta-leadership practice. The first, the Person, represents leadership capacity. The second, an accurate perception of the Situation, constitutes the leadership context. These two are foundational conditions: optimal action is not possible without them. The third, Connectivity, is the dimension of organizational or interpersonal capability: leading *down* in one's designated formal purview of authority; *up* to those to whom one is accountable; *across* to other departments, units, or teams within the organization; and *beyond* to the various entities outside of the organization. The meta-leader engages in all of the dimensions, variably leveraging each mode of thinking and action as called for by circumstances, and always having these different yet complementary perspectives in mind.

The intent of the meta-leadership framework and practice method is to draw these different perspectives into a pragmatic, unified model. The depiction of the dimensions below does not describe or reference all that has been said or could be said on each topic, but rather articulates key aspects and their fit into the overall structure.

Dimension One: The Person of the Meta-Leader

Meta-leaders begin with knowing themselves and the impact they have on others. A high degree of emotional intelligence (Burns, 1978; Salvoney & Mayer, 1990; Goleman, 1996), the ability to

process emotional information in order to better navigate the social environment, is one critical characteristic of the person of the meta-leader. People who direct large scale operations or complex initiatives are better able to engage others when they convey these attributes: self-awareness, self-regulation, motivation, empathy, and social skills. Self-awareness, in particular, has been shown to correlate with leadership effectiveness (Prati et al, 2003; Kerr, Garvin, Heaton, & Boyle, 2005; Tekleab, Sims, Yun, Tesluk, & Cox, 2008). Those with high self-awareness have an understanding of the impact that personality, experience, culture, emotional expression, and character have on others: this is the “who” of the construct (Kirkpatrick & Locke, 1991; Trompenaars, 1994). Self-discipline, drive, understanding, and a capacity to form meaningful and satisfying relationships are critical in the effort to cross the usual divides and boundaries of organizational, professional, and cultural association (Goleman, 2001).

Whenever one operates outside of one’s formal purview or across clearly drawn boundaries, perceptions of risk to professional status, in-group affiliation, and autonomy may increase. Thus meta-leaders must also understand how to build, manage, and maintain trust (Maister, Green, & Galford, 2000). This is particularly true when decisions and actions must be taken without complete information or certainty, such as when operating in a volatile market or an emerging crisis. When people are evaluating whether or not to trust, they weigh factors related to the decision-maker and the situation (Hurley, 2006). The meta-leader understands this dynamic and strives to

take the actions that will achieve the greatest commitment from a wide scope of stakeholders, including those outside the formal chain of command. Organizational cohesion in high stress situations has been found to be lacking when trust-based relationships are absent (Kolditz, 2007). In practice, as followers tend to mimic the attitude and behaviors of the leader, when the leader presents a model of composure, balance, and appropriate perspective, followers are calmed and readied for productive activity. Alternatively, agitation, self-centered competition, withdrawal or other polarizing behaviors by the leader will be reflected in group thinking and action detrimental to overall cohesion.

The second critical component is that meta-leaders are willing to filter large, complex problems through a wide range of possible solutions (Giuliani, 2002). They have abundant curiosity to imagine that which has not otherwise been discovered (Sternberg, 2006, 2007). They view situations as complex, adaptive systems where patterns of connection, dependence, and interdependence are better sources of understanding system behavior than is a focus on the individual components or actors. When attempting to exert leadership in such an environment, the leader seeks order beyond control, knowing that he or she cannot regulate all elements of the relevant systems and that attempts to do so are likely to distort and denigrate overall system function (Wheatley, 1999).

That the meta-leader has an aptitude for using self- and situational insight for seeing the bigger

picture is particularly important in fast-changing, emotionally-charged situations such as a product recall, merger, trauma care or crisis response that may send parts of an enterprise into survival mode. In any stressful situation, the brain's response is activated by the amygdala (Cannon, 1929, q.v. Bracha, Ralston, Matsukawa, Williams, & Bracha, 2004), a section of the brain that triggers the primal survival responses of "freeze, flight, fight." These responses derive from ancient instincts that suppress all other thinking in favor of a narrow range of behaviors that maximize the chances of survival (Society for Neuroscience, 1998). We call these the brain's *survival circuits*. One cannot lead or make decisions effectively when the survival circuits are in control; they are the brain's Emergency Alert System (FCC, n.d.), interrupting regular cognitive programming to transmit urgent threat-avoidance instructions.

This reaction has been given many names including the "amygdala hijack" (Goleman, 1996) and the "dinosaur brain" (Bernstein & Rozen, 1989). The term we use for this amygdala-controlled state is *going to the emotional basement* (Ashkenazi, 2007). The challenge for the meta-leader is to understand that he is in the emotional "basement." and consciously move up to the middle level of the brain – the *routine circuits* of learned behaviors, a workroom with tools to continue the building metaphor. Then the meta-leader helps others up to the workroom as well – generally through ingrained routines and responses: the practiced procedures, protocols, or patterns of past experiences that trigger constructive activity and an aura of relative calm (Zander & Zander, 2000; Pillay, 2011). The final

ascent is up to strategic thinking in the neocortex or *executive circuits*. This is the laboratory where complex reasoning and problem-solving occurs. An example of this can be seen in a hospital when a patient suffers a cardiac arrest. After a brief moment of alarm when the amygdala is activated and adrenaline is pumping for clinicians, they go into a rote set of well-rehearsed actions. If those routine circuit activities do not resolve the problem, team members will draw on their expertise to develop other options for saving the patient – using the highest level of executive thinking. It takes great self-awareness, stamina, and discipline to control one's panicked responses in a stressful situation and intentionally elevate one's mental activity.

Beyond the physiology of the brain, many other factors are at play. Subconscious biases and heuristics shape how an individual perceives and evaluates other people and phenomena (Eagleman, 2011; Kahneman, 2011). They may create blind spots that cause misperception (Banaji & Greenwald, 2013). A wide outlook and curiosity provide the perspective to chart the possibilities and prompt this vital expansive thinking and action (Heifetz & Linsky, 2002).

Dimension Two: The Situation

The task of diagnosing and communicating the leadership context – what is happening – is among the most difficult yet most critical in any complex situation, time of change, or moment of crisis. Finding the most appropriate solution to a challenge depends first on precisely determining what is occurring (Bransford & Stein, 1993; Pretz, Naples, & Sternberg, 2003). This involves more than simply observing surface phenomena: it requires “tuning in to the organizational frequency to understand what is going on beneath the surface” (Goffee & Jones, 2006).

The difficulty is compounded because there is often a gap between objective reality and subjective assessment (e.g., Hazleton, Cupach, & Canary, 1987). This is why Dimension One, self-knowledge, is so important to Dimension Two. In practice, the meta-leader must grasp, work with, and narrow the likely reality-belief gap, aided by the collection of further information, the passage of time, and the perspective of hindsight. Such complex circumstances demand the capacities and skills for strategic “situational awareness” (e.g., O'Brien & O'Hare, 2007), the connectivity between the personal capacities and understandings embedded in meta-leadership Dimension One and the realities of the situation that are addressed in Dimension Two.

This gap is further magnified when many different stakeholders are involved, when a great deal of information is required to diagnose the problem, when the stakes and emotions are high, or when

the analysis and action are time-constrained. In other words, the greater the complexity, the more difficult it is to develop an evidence-based, clear, and actionable description of what is occurring and thus develop the most appropriate response. Getting as close as possible to objective reality and conveying it accurately to others is at the heart of Dimension Two.

Especially in stressful times of change, challenge, or crisis, there can be difficulties in information flow between organizational units, competition among hierarchies, and priorities that are in conflict. The meta-leader can be caught in the cross-fire. In a complex situation, the many stakeholders involved naturally each have their own analysis and interpretation of the “objective problem” in accord with their distinct interests, concerns, and purposes (Australian Public Service Commission, 2007). The meta-leader also understands that each stakeholder uses a distinct frame, or mental model (Senge, 1994), built of values, experience, objectives, and priorities. This filters what is seen and how risk is perceived. Success and failure may be measured differently by different stakeholders (Daly & Watkins, 2006) yet the leader must make decisions and take action. These unique frames tend to be hard to for others to see, are often perceived as complete by the framer but rarely are so, and are difficult to adjust (Clyman, 2003). The meta-leader looks for ways in which the differences can complement rather than contradict one another. The intent is to understand and to integrate the divergent perspectives into a more cohesive view that incorporates what is happening with the identified interests, potential contributions, and objections of

each stakeholder, and to characterize both gaps and overlaps in activity. To move stakeholders toward coherence and clarity, the meta-leader draws upon the capacities outlined in Dimension One, distinguishing which priorities are most important to the overall endeavor and calculating both the potential upsides and downsides of each option for the different stakeholders. These calculations are then used to chart a course forward. With this greater understanding, the meta-leader can begin to craft a compelling and mutually agreeable goal that fosters unity of purpose and effort.

The meta-leader recognizes that the size of the gap between perception and reality will shift and hopefully diminish over time. In practice, the anticipation of additional and more accurate information and the expectation that the situation will remain fluid for some time does not relieve the meta-leader of responsibility: it puts even more pressure upon a leader to assess when there is enough information and when there has been enough debate to move to action. This is an iterative process of divergence and convergence with concrete intermittent points of agreement (Roberto, 2005). Herein one finds both the tension and the paradox of Dimension Two: in a complex situation, a quick assessment that is close to the mark and moves the process forward is better than a slow though more accurate one that comes too late to make a difference, though there are risks associated with premature decision-making.

Even in this quick assessment, a degree of rigor will help avert missteps and oversights. A tool to enable leaders to hone their understanding and to

build on decisions already made and actions already taken is the POP-DOC Loop (see Figure One). It is modeled as a figure-eight Mobius strip to indicate that it is traversed continuously as a complex situation evolves. A Mobius strip has only one side yet it appears to have two; as a non-orientable surface it can be completely navigated without ever crossing an edge (Summons, n.d.). This property represents the integral nature of the six steps in the POP-DOC Loop as well as the necessary establishment of a leadership rhythm that alternates between thinking and action with continuity and emphasis on both in balance.

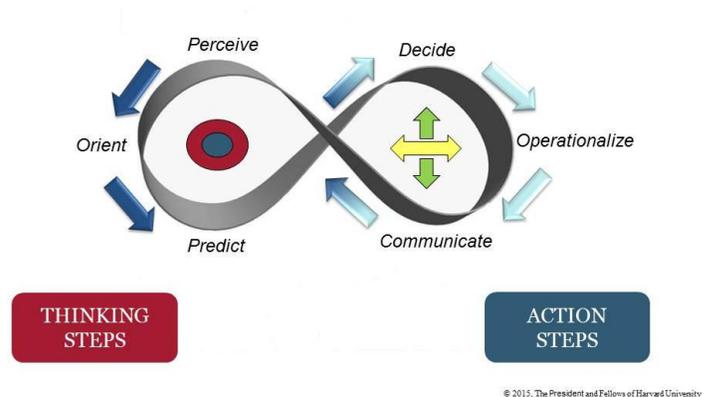


Figure Two: The POP-DOC Loop

Developed at the National Preparedness Leadership Initiative as an extension and expansion of Boyd's OODA Loop (Hammond, 2012), the six steps of the POP-DOC Loop correlate with distinct cognitive phases necessary for leaders to

understand a situation, make informed decisions, and take effective action. The steps are Perceive, opening one's mental aperture to gather as much

data as possible; Orient, narrowing the aperture as patterns appear and make it possible to separate relevant from irrelevant data; Predict, using the identified patterns to anticipate the trajectory of events and generate options; Decide, committing to a course of action; Operationalize, securing and deploying sufficient resources to carry out the decision; and Communicate, ensuring that all relevant stakeholders know what is happening, what they can expect, and what is expected of them, and then pulling in information useful in reassessing the situation and what can be done about it.

The POP-DOC Loop can and should be traversed multiple times as a situation unfolds. As more information emerges, the understanding of the situation grows and with it, options shift. As actions are taken, the situation changes, which requires fresh analysis. The left-hand loop represents the thinking steps and corresponds to Dimension One, the Person, and Dimension Two, the Situation. The right-hand loop represents the action steps and corresponds to Dimension Three, Connectivity. The POP-DOC Loop can be used to guide individual thinking or as a group exercise to elicit multiple perspectives, surface unspoken assumptions and, ultimately, enhance alignment.

Meta-leadership requires perspective and measured patience to work with ambiguity. If the situation were clear and every action had a certain and predictable cause and effect, the skills of the meta-leader likely would not be called into action. However, complex, multi-tiered relationships, high-consequence organizational predicaments,

and difficult inter-personal conflicts each, by their nature, do not come with clearly obvious computations for what is right and what is wrong (Slaikou, 1998). Not everyone faced with these ordeals is equally able to establish a calculated assessment and then rise to the challenge: these are among the distinct strategic and analytic capacities associated with the practice of meta-leadership. The POP-DOC Loop helps navigate these ambiguities by outlining a strategic process that functions with the resources of Dimension Three, Connectivity.

Dimension Three: Connectivity

A distinct feature of the meta-leadership framework is its integration of negotiation and conflict resolution theory and practice as is instrumental to the mindset and skillset for effective leadership (Marcus et al, 2006; Marcus, Dorn, & McNulty, 2011). The work of meta-leadership is in forging a strategic connectivity for coordinated effort among stakeholders, reaching past the usual bounds of isolated organizational thinking, functioning, competition, and conflict. This can only be achieved when the meta-leader can move stakeholders from individual self-interests to shared aligned interests. Certain negotiation and conflict resolution techniques such as the Walk in the Woods (Marcus, Dorn, & McNulty, 2012) are well-suited to this task. This method encourages stakeholders to view problems and solutions as a gestalt rather than through the narrow lens of parochial objectives.

The resulting connectivity is carefully orchestrated among distinct components of an endeavor that must be intentionally assembled, shaped, and linked. In such a connected system, each individual and organizational unit is aware of its role in the whole: those up and down the organizational chart as well as those across the spectrum of entities that are part of the larger enterprise. There are a number of critical questions: How do we define success and encourage it across the organizational spectrum? What are the critical relationships, dependencies, and interdependencies? How will information, resources, and assets flow? How will interests and incentives be optimally aligned? How will risk and rewards be distributed? It is up to the meta-leader to compose or catalyze a compelling, integrated picture and message that engages each actor and charts the impact they together will create (Dorn, Savoia, Testa, Stoto, & Marcus, 2007).

Establishing connectivity is not simply a matter of refining an organizational chart or drafting formal agreements. Instead, it is fundamentally a human process (Maslow, 1970) through which people sharing a common and compelling purpose blend their organizational allegiances with their commitment to a common goal that can only be achieved when different groups of people are working together. Individuals must recognize the benefits of establishing and nurturing mutually beneficial relationships with each other. This requires the meta-leader to build unity of mission, crafting a strategic view of who needs to be involved and what will motivate their participation. People moved by the vision and message of the

effective meta-leader are inspired and empowered to reach out beyond the confines of their particular roles. They create linkages with others that enable a potential that would not otherwise be present. They then embed those connections institutionally so they persevere beyond the tenure of the individuals involved. These people-to-people and organization-to-organization connections overcome the barriers and gaps imposed by strict silo thinking. Whereas organizational structures can mold and confine the behavior of people in roles and procedures, people, when meaningfully connected, find ways to accomplish the shared impact value that is achievable with their combined effort (Schuman, 2006). This does not necessarily imply that rules are broken. Rather, rules are seen more as levers to make positive outcomes possible. It describes the difference between succumbing to obstacles and seeking out opportunities.

Building connectivity does not require “tearing down the silos.” In fact, silos have important functions. Training, practice, professional advancement, and new knowledge and skills occur in the concentrated and specialized environment of the silo. Silo walls should function more as semi-permeable membranes than concrete walls so information and resources can flow to foster overall system function. It is a matter of reframing what constitutes the system, the relationships between the components, and the overall paradigm of system purpose (Meadows, 2008).

When connectivity is achieved, individuals and the entities in which they work are better able to

leverage one another. They can do more because they have a wider scope of resources at their disposal. Information is more readily available, expertise is more widely accessible, and tangible assets are more generously shared. Inter-entity competition as a primary motivator is reduced because success is less about prevailing in a turf battle and more about achieving the overriding goals of the shared enterprise (Dorn et al., 2007).

There are four distinct facets of meta-leadership connectivity defined by organizational relationships and power/authority dynamics: leading down to one's formal subordinates; leading up to the people to whom one is accountable; leading across to other intra-organizational entities; and leading beyond to inter-organizational entities.

Leading Down

The bulk of the leadership and management literature focuses on leading within one's immediate base of operations. The meta-leadership framework emphasizes aspects of that practice which complement the other facets of connectivity. Individuals who rise to be meta-leaders generally have their own organizational base of operations within which followers see them as in charge (Phillips & Loy, 2003). In that entity, the leader carries formal authority, has resources at his or her disposal, and functions within a set of rules and roles that define expectations and requirements. Those subordinates expect adherence to allegiances and loyalties, trusting that the leader will advocate on behalf of their best interests (Heifetz, 1999). In

bureaucratic terms, these accomplishments are often measured in expanding resources, authority, or autonomy for the entity and its members. In many bureaucratic settings, departments and divisions compete amongst one another, and followers expect their leaders to triumph on their behalf (Lee & Dale, 1998).

For the would-be meta-leader, the support of his or her constituents is essential to achieving influence within the larger system. Understanding how he or she is perceived (see Dimension One), demonstrating an ability to diagnose and explain the context in which the group is operating (see Dimension Two), and having a productive relationship with his or her boss (leading up) are all critical to garnering that support. The size of the meta-leader's follower base and the regard in which the followers hold the meta-leader are clear signals that can be read by other constituencies.

The meta-leader is a leader of leaders, and fosters leadership development throughout the system, though first at home among his or her constituents. Leadership, after all, does not reside within one person. In robust organizations, it is embedded among many people and at multiple levels of the hierarchy (Northouse, 2004). This requires a sense of leadership confidence and security: strong, smart, capable followers are not seen as a threat but rather as a vital asset (Sternberg, 2007). Such leaders seek followers strong enough to challenge them on occasion (Goffee & Jones, 2006). They are willing to hear truth-to-power. It is the meta-leader's devotion and commitment to subordinates that generates the same from those followers. Subordinates do

not follow the meta-leader merely because of a pay-based transactional relationship but rather because they believe in what the meta-leader stands for and is striving to accomplish.

To encourage team cohesion, the meta-leader works with subordinates to ensure clarity about what they strive to accomplish individually and together. Subordinates' work is acknowledged and appreciated so that they realize a return on investment for their time, energy, and ideas ranging from altruistic satisfaction of doing good or tangible rewards for their efforts, thereby also creating an investment in reciprocity (Cialdini, 2009). Roles and responsibilities are articulated and access is afforded to the information and resources necessary to accomplish objectives. Emotional intelligence is cultivated such that interpersonal relations function constructively. Attention is paid to creating a socially safe (Rock, 2009), trust-based environment that fosters teamwork, prudent risk taking, and empowered decision making. The relationships within the team are not an obstacle, but instead are geared to foster complex independent and inter-dependent problem solving. Team members experience a sense of meaning in their work together when the team is functioning well and producing value. Therefore, demonstrating more inclusive in-group behavior, they strive to make one another a success, recognizing the contributions of each team member in achieving the objectives of the whole.

What if the would-be meta-leader has not effectively engaged the commitment of his or her direct followers? It would be awkward and difficult

for him or her to establish credibility in the wider system if that quality is not established in the home base of operations (Romzek, 1990). Followers in fact serve as ambassadors, amplifying the efforts and influence of the meta-leader by creating their own linkages among counterparts in other organizations. Of course, much of leadership is modeling and social proof (Cialdini, 2009): thinking, behavior, and action that others not only follow, but mimic. Both strengths and weaknesses are imitated (Hermalin, 1998). Close-in colleagues and constituents best know their leader and often are the arbiters of an individual's meta-leadership effectiveness.

In this facet of connectivity, meta-leadership is closest to the literature on transformational leadership (e.g. Burns, 1978; Bass, 1990). Meta-leaders reframe the mission and envision an expanded self-interest that engages disparate constituencies. There is an emphasis on communication, innovative thinking, and trust building. However, meta-leaders may also challenge the established organizational values and norms, not something typically ascribed to transformational leaders (Northouse, 2004). As they redefine the in-group, they redefine relevant extant aspects of its structure and function.

The unity of purpose and reliability of achievement that the meta-leader inspires throughout his direct domain of responsibility is the foundation for work beyond the confines of official authority and power. The confidence, direction, and dependability fostered within one's immediate official structure serve as the exemplar for what is communicated to the larger system of influence

and action. That same momentum could serve to impress or intimidate the boss, a critical factor for the “leading up” facet of connectivity.

Leading Up

People who work in organizations most often have a boss. If they work in a matrixed organization, they have more than one boss. The chief executive officer of a corporation or executive director of a non-profit organization has a board of directors. Below the CEO are a series of senior and mid-level managers who report to him or her and who, in turn, serve as bosses to their staffs. A public sector agency is headed by a Director, Secretary, or Minister who, in turn, ultimately reports to the President, Prime Minister or other elected official.

Being able to effectively influence those to whom one is accountable is an important requirement for wider leadership within a system. Followership, like leadership, is a matter of both rank and behavior (Kellerman, 2008). It is a delicate balance. Meta-leaders do not let rank be a limiting factor in their work. At the same time, they are careful not to upstage their bosses except in the most extreme of circumstances. By carefully cultivating and managing a productive relationship with the boss, the meta-leader/subordinate may end up with as much or more power and influence than his or her superior (Kellerman, 2008).

In leading up, the meta-leader helps the boss focus on priority objectives and advances the organization toward key goals with personal costs or benefits as a secondary consideration (Useem,

2003). In so doing, the meta-leader crafts vertical connectivity and bi-directional feedback. Influence is shaped by informing and educating the boss. Of course, bosses vary in style and temperament, and the meta-leader appreciates that as with any relationship, this is one that must be carefully and strategically managed (Marcus et al., 2006). The effective meta-leader/subordinate manages assumptions, does not promise what cannot be delivered, and assures that the boss is rarely surprised. This last point is a sensitive matter. While bad news and valid criticism are hard to deliver, followers who tell the truth and leaders who listen to it are an unbeatable combination (Bennis, 1989). Meta-leaders also remember that the boss has a boss and work to ensure that they are providing the information and support necessary for his or her boss to lead up as well.

The most sensitive and precarious aspect of leading up is in telling truth to power. What if the boss is making a mistake, or is acting immorally or with emotional instability? The willingness to speak up and take the initiative is critical to leadership (Bennis, 1989). The meta-leader/subordinate can bring to the boss a valuable perspective, especially when he or she has closer proximity to the work, has greater subject matter expertise, or can better sense frontline problems along with solutions to address them. Strategic decision-making entails simultaneous activity at multiple levels of an organization. The meta-leader as follower can help ensure that the boss is connected and informed of both formal developments and the “offline” work that happens in small groups or in one-on-one conversations (Roberto, 2005). The

subordinate can also provide warning or assistance when the boss is in the emotional basement, discouraging comments or decisions that could later prove damaging. Caution comes in recognizing that subordinates often are less aware of considerations known only to the boss. When leading up goes wrong, it can easily reduce credibility or even lead to dismissal. The quality of the inter-personal relationship is crucial. While one might lead down to multitudes, leading up is focused on just one or a few people.

Leading up and leading down together constitute vertical connectivity in the system. The meta-leader – as both boss and subordinate – seeks to minimize distortion in information flow up and down the formal chain of command. The emphasis is on optimizing system design and function. This includes promoting adaptive capacity to address both sudden and slow-burning changes to the leadership and operational context.

Leading Across

In building a wide sphere of influence, the meta-leader grasps that just as vertical linkages are important, so, too, is horizontal connectivity. In the meta-leadership framework, *leading across* refers to relationships with other departments or units within the same authority framework, or intra-organizational engagements. Leading across effectively generates a common yet complex thread of interests and involvement among entities that look at a challenge from distinct yet complementary vantage points. It could, for example, include getting production, marketing

and quality control within one company to better connect and collaborate in order to speed time to market or increase customer satisfaction. In a hospital, leading across involves integrating the clinical work of different specialty and functional units. By aligning their assets and efforts, the meta-leader envisions and activates more than what any one organizational unit could see or do on its own.

This is both important and difficult. While an opportunity may be apparent to all, it may not be obvious that by collaborating, each organizational subunit can maximize their combined return. In fact, they might very well see themselves as being in competition with one another, vying for budget, authority, space or recognition. This is the classic and often lamented intra-organizational “silo mentality,” typified by turf battles among those involved (Hughes, Ginnett, & Curphy, 2006). Within the comfortable and familiar confines of distinct organizational units, success is often measured, rewards are achieved, careers are advanced, and objectives are sought in line with the distinct interests and well-being of the different silos and their constituents. There is a natural tendency for people to ask “what’s in it for me?” The potential for creating cross-cutting benefit is curtailed when silos that could be working together see themselves merely as competitors (Schuman, 2006).

The first challenge for the meta-leader is defining what working together looks like along with its benefits – and why it is urgent to act now (Kotter, 1996). To be effective, the meta-leader must instruct, influence and engage the many different

entities that are to be linked into the shared effort. Though they all operate within the same command-and-control structure, merely ordering people to work together does not instill the motivation necessary to work beyond the confines of unchecked selfish interest. Certainly, a boss can direct subunits to better cooperate: it is within the authority of the hierarchical structure to so command subordinates. However, there are limits to the effectiveness of commanded cooperation. In a better scenario, the people representing each entity are encouraged and moved by the powerful advantages of acting in concert and by the enlarged possibilities generated by working together. Likewise, they must be assured that individual units will “stay in their lanes,” avoiding the tendency to wade into one another’s lines of responsibility or authority, a move that would raise the competitive ire of others and ruin opportunities for collaboration. The meta-leader focuses attention on the shared opportunity while at the same time tempering those forces of suspicion and jealousy that constrain their achievement (Marcus et al., 2006).

To do this, the meta-leader must identify and understand the individual intrinsic motives of these different stakeholders. Aligning their disparate yet complementary spheres of activity into a unified plan and operation requires the development of linkages in both thinking and action. Each entity must be recognized for its unique profile of interests, experiences, and contributions to the shared enterprise. While it is common for people to focus upon the differences and conflicts among them, the meta-leader turns the attention to points of agreement: shared

values, aspirations, objectives, and circumstances. With a new appreciation for their points of commonality, stakeholders are able to creatively envisage what they could accomplish together – an end state that is desirable and compelling for all, building new equations of common ground and achievement. Often, this requires strange bedfellows to work together, enemies to be invited to a common table, and people to appreciate a new or different set of values, objectives, and incentives. The intrinsic motives of each individual are thereby harnessed to achieve what is accepted as the greater good (Marcus et al, 2011). The meta-leader knows action and early triumphs are a critical factor in demonstrating the value added of working together (Kotter, 1996).

Push-back and resistance are to be expected in fashioning a new alignment of strategy and action (Bornstein, 2007). Bureaucratic entities characteristically reward internally focused leadership that simply builds the budget, authority, and autonomy of their own endeavors (Thompson, 1965). The introduction of collaboration may require some traditionally competitive constituencies to turn away from well-entrenched attitudes about and behaviors toward one another (Goldsmith & Eggers, 2004). If such push-back and resistance is anticipated and planned for, it is far less likely to undermine the shared purposes (Yukl, 2002): Meta-leaders can compensate by crafting an alternate reward structure through which stakeholders are acknowledged and encouraged for their work in building shared solutions.

Cohesion cannot begin in the moment of decision and action: it must be embedded into the thinking and activity of units and people, a purpose and mission upheld by the meta-leader (Daft, 2005). It is akin to carefully crafting interlocking gears: when it is time to move, the cogs link in a way that ensures movement and not stasis. For this reason, designing and building cross-system action linkages must be a strategic and intentional effort by which both the process and outcome of the effort attest to the benefits of working toward common purposes. As stakeholders experience the demonstrable advantages of leveraging the expertise and capacity of others, and as they recognize the added influence gained when their contributions are likewise leveraged by others, impact and collaborative value both rise. Even so, the meta-leader understands that to keep the shared endeavor on track, these linkages must be carefully monitored and adjusted so they survive expected bumps and remain current with new developments, demands, and challenges.

Leading Beyond

By leveraging external expertise and capacity the meta-leader recruits a wide spectrum of entities into an extended inter-organizational network (Ashkenas et al., 2002). Generating connectivity could be limited to proximate organizations or could be more broadly defined to incorporate constituencies, such as customer groups and the public at large.

Leading beyond – to individuals and inter-organizational entities – shares many characteristics with leading across to intra-

organizational constituencies. In both activities, the meta-leader integrates different objectives, assesses and aligns motivations, and calibrates risk and reward sharing. However, they are different because there is no unified power/authority dynamic in leading beyond. While intra-organizational departments ultimately share an overarching governance structure, report to a common chief executive, and are measured by the same or similar metrics, these are not in place when leading beyond. Therefore, influence in the absence of authority is particularly important in successfully leading beyond.

What activities benefit from effective leading beyond? The response to a complex catastrophic event, whether a terror attack, natural disaster, or major industrial accident, requires many different government jurisdictions, the private business sector, the non-profit sector and the general public to respond with coordinated action. Meta-leaders encourage collective leadership (Pearce & Conger, 2003) with unity of mission, generosity of spirit, coordination of action, ego and blame control among stakeholders and the foundation of trust upon which collaborative action thrives. Successfully bringing a new product to market often requires different organizations with design, manufacturing or promotional responsibilities to coordinate and align their activities. The provision of health care involves organizations that provide clinical, fiduciary, regulatory and administrative functions to manage their inter-organizational exchanges and ensure that care is properly provided and financed. When different types of organizations interact with one another, such as government and private sector, leading beyond is

particularly complex. Each sector can seem foreign to the others in its processes, vocabulary, decision-making protocols, and even conception of the objective to be achieved.

Legal contracts or formal doctrine may govern certain aspects of inter-organizational relationships. These formally constructed arrangements can both allow for and constrain action and collaboration. Human factors combine with legal considerations and the meta-leader is sensitive to this balance as shared purpose and action are forged. A contract alone does not generate enthusiasm, motivation or creative problem solving. It is up to the meta-leader to foster a solution-oriented direction and interest-based negotiation (Marcus et al, 2011, 2012), overcoming obstacles to productive connectivity while adhering to legal requirements.

This is a complex process when the stakes are high, as measured in money, legal liability or intellectual property. This is particularly true when the priorities, metrics or consequences are valued differently by the involved stakeholders. “Who gets the credit?” or “Who takes the blame” are both loaded questions. The process demands careful diplomacy and diligent negotiation at each step of decision-making. The meta-leader focuses on “getting to yes” (Fisher, Ury, & Patton, 1991).

Inter-organizational connectivity can vary by how closely operations are intertwined and how competitive the entities may otherwise be with one another. When collaboration requires sharing proprietary knowledge or technologies, opening systems or processes, or contributing brand name

credibility, each stakeholder is likely to be cautious in how much is shared and integrated. Catalyzing unity requires the meta-leader to intentionally identify leverage points that can transform potential discord into opportunity. With a cohesive, multi-faceted conception of the problem or opportunity, it is more likely that a wider variety of stakeholders will be motivated to generously contribute to the achievement of the overriding solution. This analysis sometimes requires identification of complex cross-cutting benefits that arise uniquely from the collaboration itself. In leading beyond, the meta-leader convincingly makes the case that the combined objectives are best achieved through connectivity of effort and then guides the process to successfully achieve it.

On Being a Meta-Leader

There are many who occupy positions of formal authority who may think themselves leaders when in fact their influence is marginal or their position even resented (Bennis, 2003). These people beg the question of just what leadership is and how it differs from management or command-and-control power (Zaleznik, 2004). Similarly, it is tempting to anoint oneself a meta-leader, a distinction that can only be conferred on a person by his or her followers.

What is the difference between the traditional and the meta-view of leadership? Industrial age conceptions of leadership often refer to the acts taken within one’s recognized or expected span of authority in one’s formal role. For example, the

chief executive officer of a business is expected to demonstrate leadership in the way the company is operated, in setting the vision and the strategic direction of the enterprise, and in achieving its performance objectives. That same CEO would be considered engaging in meta-leadership when she, for example, engages related organizations to create joint ventures, strategic alliances, industry coalitions, or other connections that allow each entity to accomplish more than if each were operating in isolation. It is a matter of taking a wider, system-level view of both opportunities and challenges. Instead of a narrow focus on leading those people over whom one sits in a hierarchy, the emphasis is on those broader constituencies of followers essential to success no matter where they reside or to whom they report. Leadership effectiveness is defined as “people follow you” of their own volition.

Meta-leaders galvanize others through their capacity to articulate and achieve these linkages and outcomes, appealing to more than just personal gain or parochial organizational interests. Meta-leaders convincingly define a higher purpose – making the case that by acting across and beyond the confines of their own organizational entities, the component participants will accomplish more and function with less friction, thereby deriving the collective benefits of the combined enterprise. When effectively presented, the meta-leader’s vision and the process charted are so compelling that others follow (Nanus, 1992): Meta-leaders exercise transformational leadership (Burns, 1978; Bass, 1990). They must also, however, demonstrate effectiveness with constituencies beyond those

who would traditionally be described as their “followers.” They work with (and sometimes within) organizations that are traditionally bureaucratic, such as regulatory and government agencies, or structures such as collective bargaining agreements that prescribe a transactional relationship. Transformational leadership theory alone does not capture the capacity and capability needed to exert such transcendent leadership. As they are able to identify the gaps between what could or must be done and the will and capacity to do it, meta-leaders coalesce the knowledge, organizational workings, and context to attain an otherwise unfeasible cohesion of effort (Kotter, 1996). They navigate multiple environments and constraints in order to achieve the over-arching objective.

Meta-leaders combine two aspects of the leadership equation to create a broad expanse of influence. The first is traditional hierarchical leadership, their primary source of recognition and authority (Jaques, Clement, Rigby, & Jacobs, 1985). The second aspect of this equation is akin to social movement leadership (Barker, Johnson, & Lavalette, 2001), which is what religious leaders, political figures, and humanitarian advocates exercise to inspire and engage people when they do not have the power of a pay check, promotion, or sanction to persuade followership. It is that blend of commitment to a purpose, charisma, talent to motivate, and appreciation for the fine art of timing that is at the heart of the informal side of leadership performance. While the exercise of formal leadership incorporates a measure of these qualities, meta-leaders must do both as they influence and rally others – without

direct authority to command participation – to a shared, broader purpose.

The meta-leader rallies a wide set of constituencies to a shared and mutually beneficial question: “How can I make you a success?” This is how a meta-leader leads down to subordinates, up to a boss, across to others within the same

organizational framework, and beyond to external people and entities. Such expansive influence requires a far-reaching understanding for what success means in the minds of many and crafting a set of activities that are widely motivating and productive. While one can be hired into a leadership role, one must earn the mantle of meta-leader.

Conclusion

Organizational forms evolve to better meet the needs of their constituencies. So, too, must leadership styles and methods. For the first three-quarters of the 20th century, command-and-control dominated both management and leadership, in part because much of the managerial class shared the experience of military service. The advances of the industrial age rested upon the regimented productivity of hierarchical organizations and processes. It was a familiar model with centuries-old roots. With the growth of information technology and globalization, however, firms have become flatter, work has become more team-centered, and multiple organizations have been linked in new and novel value chains.

The command-and-control model does not uniformly fit into this emerging environment. Leadership within organizations is more distributed. Relationships are now highly collaborative, are often guided by general principles as much as contractual requirements, and require commitment to an enlarged self-interest. Meta-leadership is a framework and practice method well-suited to situations that are built on trust and influence more than formal authority. Layers of management are being compressed, self-organizing teams are becoming more prominent, and employees are being challenged to find new solutions rather than simply executing orders from above.

The meta-leadership framework described here emerged out of observation and analysis of leaders in high-stakes, high-pressure situations involving tense emotions and highly fluid circumstances. In such instances, collaboration across networks and leading by influence are critical to success. of the model is therefore informed by the triumphs and failures of leadership at the time: the difficulties in getting organizations and people to work together when that connectivity of action was the best hope for mounting an effective response; and the inspiration and results when communities, businesses, and public agencies joined forces to accomplish what otherwise would have been inconceivable. Finally, it draws on the expanding understanding of neuroscience and brain function to both diagnose the root causes of behaviors under stressful conditions and to suggest pragmatic countermeasures leaders can take to rise to the demands of the situation.

While the application of the meta-leadership model in business and non-profit settings may not be so dramatic, it is no less important. The correlation with the need for fast action, collaboration across organizational boundaries and among divergent stakeholders, and the focus on achieving positive outcomes, all speak to the value of the meta-leadership model for guiding both daily leadership and crisis leadership.

In this complex web, extraordinary leaders emerge, able to generate greater value by balancing the expectations, needs, and contributions of all of the players in the extended enterprise. For those meta-leaders who excel in their strength of character, their keen analytic skills and the ability to lead, follow, and engage a wide range of people extends their influence well beyond their formal authority. They forge both impact and collaboration that would not have otherwise been achieved. These meta-leaders – who certainly predate this model that seeks to describe them – deserve further study so that their important work and contributions can be better appreciated and understood, better supported, and taught to others.

Dr. Leonard Marcus is the founding Co-director of the National Preparedness Leadership Initiative (NPLI), a joint program of the Harvard School of Public Health and Harvard's Kennedy School of Government. Dr. Barry Dorn is the Associate Director of the NPLI. Joseph Henderson, M.P.A. is a senior executive with the Centers for Disease Control and Prevention. Eric J. McNulty, M.A. is the Director of Research at the NPLI. For more information on the NPLI, visit <http://www.hsph.harvard.edu/npli>

References

- Ancona, D. and Backman, E. (2010). It's not all about you. *Harvard Business Review* (online), April 26, 2010. Retrieved May 5, 2010 from <http://blogs.hbr.org/imagining-the-future-of-leadership/2010/04/its-not-all-about-me-its-all-a.html>
- Ashkenas R, Ulrich D, Jick T, & Kerr, S. (2002). *The boundaryless organization: breaking the chains of organizational structure*. San Francisco: Josey-Bass.
- Ashkenazi, I. (2007, March 9). Psychology and actions of the crisis leader. Presentation at the National Preparedness Leadership Initiative, Harvard University, Cambridge, MA.
- Australian Public Service Commission. (2007). Tackling wicked problems: A public policy perspective [Electronic Version]. Retrieved November 5, 2008 from <http://www.apsc.gov.au/publications07/wickedproblems8.htm>.
- Banaji, M. & Greenwald, A. (2013). *Blindspot: Hidden biases of good people*. New York: Delacorte/Random House.
- Barker, C., Johnson, A., & Lavalette, M. (2001). *Leadership and social movements*. Manchester, UK: Manchester University Press.
- Bass, B.M. (1985). *Leadership and performance beyond expectation*. New York: Free Press.
- Bass, B.M. (1990). From transactional to transformational leadership: Learning to share the vision. *Organizational Dynamics*, (Winter): 19 - 31.
- Benbasat, I., Goldstein, D.K., & Mead, M. (1987). The case research strategy in studies of information systems. *MIS Quarterly*, 11(3), 369-386.
- Bennis, W. (1989). The dilemma at the top; followers make good leaders good. *The New York Times*, December 31.
- Bennis, W. (2003). *On becoming a leader*. New York: Perseus Publishing.
- Bennis W. & Nanus, B. (1985). *Leaders: The strategies for taking charge*. New York: Harper & Row.
- Bernstein, A., & Rozen, S. (1989). *Dinosaur brains: Dealing with all those impossible people at work*. New York: John Wiley & Sons.
- Bolden, R., Hawkins, B., Gosling, J., & Taylor, S. (2011). *Exploring Leadership: Individual, Organizational, and Societal Perspectives*. London: Oxford University Press.
- Bornstein, D. (2007). *How to change the world*. New York: Oxford University Press.
- Bracha, H. S., Ralston, T. C., Matsukawa, J. M., Williams, A. E., & Bracha, A. S. (2004). Does "fight or flight" need updating? *Psychosomatics*, 45, 448-449.
- Bransford, J. D., & Stein, B. S. (1993). *The ideal problem solver: A guide for improving thinking, learning, and creativity*. New York: W. H. Freeman.
- Burns, J. M. (1979). *Leadership*. New York: Perennial.

- Cannon, W. B. (1929). *Bodily changes in pain, hunger, fear, and rage: an account of recent research into the functions of emotional excitement* (2nd edition ed.). New York: Appleton-Century-Crofts.
- Cialdini, R.B. (2009). *Influence: The Psychology of Persuasion*. New York, NY: Harper Collins.
- Clyman, D. (2003) Decision Traps presentation retrieved on December 2, 2008 from <http://www.darden.edu/varoom/documents/DecisionTrapsTalk-NOVA-v1-200304-Handout-3.pdf>
- Conger, J. (1998). The necessary art of persuasion. *Harvard Business Review*. May, 1998
- Daft, R. L. (2005). *The leadership experience*. Mason, OH: South-Western.
- Daly, P. H., & Watkins, M. (2006). Advice and dissent: viewpoint into the fishbowl. Retrieved April 1 2009, from <http://www.govexec.com/features/0806-01/0806-01advp1.htm>
- Davis, T., Rogers, H., Shays, C., Bonilla, H., Buyer, S., Myrick, S., Thornberry, M., Granger, K., Pickering, C., Shuster, B., Miller, J. (2006). A failure of initiative: Final report of the select bipartisan committee to investigate the preparation for and response to Hurricane Katrina. Retrieved May 26, 2009 from <http://www.gpoaccess.gov/katrinareport/fullreport.pdf>
- Dorn, B. C., Savoia, E., Testa, M. A., Stoto, M. A., & Marcus, L. J. (2007). Development of a survey instrument to measure connectivity to evaluate national public health preparedness and response performance. *Public Health Reports*, 122(3), 329-338.
- Eagleman, D. (2011). *Incognito: The secret lives of the brain*. New York: Pantheon/Random House.
- FCC (n.d.). Emergency Alert System. Federal Communications Commission website. Retrieved March 26, 2015 from <http://www.fcc.gov/encyclopedia/emergency-alert-system-eas>
- Fernandez, R. M. (1991). Structural bases of leadership in intraorganizational networks. *Social Psychology Quarterly*, 54(1), 36-53.
- Fisher, R., Ury, W., & Patton, B. (1991). *Getting to yes: Negotiating agreement without giving in*, 2nd ed. New York: Penguin Books.
- Goldsmith, S. & Eggers, W.D. (2004). *Governing by network: The new shape of the public sector*. Washington, DC: Brookings Institution Press.
- Goleman, D. (1996). *Emotional intelligence: why it can matter more than IQ*. London: Bloomsbury.
- Goleman, D. (2001). *The emotionally intelligent workplace: How to select for, measure, and improve emotional intelligence in individuals, groups, and organizations*. San Francisco: Jossey-Bass.
- Goffee, R. & Jones, G (2006). *Why should anyone be led by you: What it takes to be an authentic leader*. Boston. Harvard Business School Press
- Giuliani R. (2002). *Leadership*. New York: Hyperion.
- Green, D. D. (2007). Leading a postmodern workforce. *Academy of Strategic Management Journal*, 6, 15-26.
- Hackman, M. & Johnson, C. (2000). *Leadership: A communication perspective*. Long Grove, IL: Waveland Press.

- Hammond, G. (2012). On the making of history: John Boyd and American security. The Hammond Memorial Lecture, United States Air Force Academy. Retrieved on March 27, 2015 from <http://www.usafa.edu/df/dfh/docs/Harmon54.pdf>
- Hankin, H. (2005). Can we recognize our future employees? *Workspan*, 48(9), 12 - 13.
- Hazleton, V., Cupach, W. R., & Canary, D. J. (1987). Situation perception: Interaction between competence and messages. *Journal of Language and Social Psychology*, 6(1), 57-63.
- Heifetz, R. (1999). *Leadership without easy answers*. Cambridge: Belknap.
- Heifetz, R., & Linsky, M. (2002). *Leadership on the line: Staying alive through the danger of leading*. Boston: Harvard Business School Press.
- Hermalin, B. E. (1998). Toward an economic theory of leadership: Leading by example. *The American Economic Review*, 88(5), 1188-1206.
- Hughes, R. L., Ginnett, R. C., & Curphy, G. J. (2006). *Leadership: Enhancing the lessons of experience*. New York: McGraw-Hill.
- Hurley, R. F. (2006, September). The decision to trust. *Harvard Business Review*, 55 - 62.
- Jaques, E., Clement, S., Rigby, C., & Jacobs, T. O. (1985). *Senior leadership performance requirements at the executive level*. Alexandria, VA: Army Research Institute.
- Kahneman, D. (2011). *Thinking, fast and slow*. New York: Farrar, Straus, Giroux.
- Kean, T., Hamilton, L., Ben-Veniste, R., Kerrey, B., Fielding, F.F., Lehman, J.F., Gorelick, J.S., Roemer, T.J., Gorton, S., Thompson, J.R. (2004). *The 9/11 Commission report*. New York: W.W. Norton & Company.
- Kellerman, B. (2008) *Followership: How followers are creating change and changing leaders*. Boston: Harvard Business Press.
- Kerr, R., Garvin, J., Heaton, N., & Boyle, E. (2005). Emotional intelligence and leadership effectiveness. *Leadership & Organization Development Journal*
- Kirkpatrick, S. A., & Locke, E. A. (1991). Leadership: Do traits matter? *The Executive*, 5, 48-60.
- Kolditz, T.A. (2007). *In extremis leadership: Leading as if your life depended on it*. San Francisco: John Wiley & Sons.
- Kotter J. (1996). *Leading change*. Boston: Harvard Business School Press.
- Kotter, J. (1999). *What leaders really do*. Cambridge: Harvard Business School Press.
- Lee, R. G., & Dale, B. G. (1998). Business process management: A review and evaluation. *Business Process Management Journal*, 4(3), 214-225.
- Lewin, K., Lippit, R., & White, R.K. (1939). Patterns of aggressive behavior in experimentally created social climates. *Journal of Social Psychology*, 10, 271-301.
- Likert, R. (1967). *The human organization: Its management and value*, New York: McGraw-Hill
- Maister, D., Green, C., & Galford, R. (2000). *The trusted advisor*. New York: The Free Press

- Marcus, L., Dorn, B., Ashkenazi, I., Henderson, J., & McNulty, E. (2012). Crisis preparedness and crisis response: The meta-leadership model and method. In D. Kamien (Ed), *The McGraw-Hill Homeland Security Handbook*. New York: McGraw-Hill.
- Marcus, L. J., Dorn, B. C., & Henderson, J. M. (2006). Meta-leadership and national emergency preparedness: a model to build government connectivity. *Biosecurity and Bioterrorism: Biodefense Strategy, Practice, and Science*, 4(2), 128-134.
- Marcus, L.J., Dorn, B.C. & McNulty, E.J. (2012). The Walk in the Woods: A step-by-step method for facilitating interest-based negotiation, 28(3): 337-349.
- Marcus, L. J., Dorn, B. C., & McNulty, E.J. (2011). *Renegotiating health care: Resolving conflict to build collaboration*. San Francisco: Jossey-Bass.
- Maslow, A. (1970). *Motivation and personality*. New York: Harper and Row.
- Meadows, D. (2008). *Thinking in systems: A primer*. White River Junction, Vermont: Chelsea Green Publishing.
- Meisel, S.I. & Fearon, D.S. (1999). The new leadership construct: What happens when a flat organization builds a tall tower? *Journal of Management Education*, 23(2), 180-189.
- Nanus B. (1992). *Visionary leadership: Creating a compelling sense of direction for your organization*. San Francisco: Jossey-Bass.
- Northouse, P. G. (2004). *Leadership: Theory and practice*. Thousand Oaks: Sage.
- O'Brien, K. S. & O'Hare, D. (2007). Situational awareness ability and cognitive skills training in a complex real-world task. *Ergonomics*, 50(7), 1064-1091.
- Pearce, C. & Conger, J. (2003). *Shared leadership: Reframing the hows and whys of leadership*. Thousand Oaks, CA: Sage Publications.
- Phillips D.T. & Loy J.M. (2003). *Character in action: The U.S. Coast Guard on leadership*. Annapolis, MD: The Naval Press.
- Pillay, S. (2011). *Your brain and business: The neuroscience of great leaders*. Upper Saddle River, NJ: FT Press.
- Prati, L., Douglas, C., Ferris, G., Ammeter, A., & Buckley, M. (2003). Emotional intelligence leadership effectiveness, and team outcomes. *The International Journal of Organizational Analysis*, 11(1): 21-40.
- Pretz, J. E., Naples, A. J., & Sternberg, R. J. (2003). Recognizing, defining, and representing problems. In J. E. Davidson & R. J. Sternberg (Eds.), *The Psychology of Problem Solving* (pp. 3-30). New York: Cambridge University Press.
- Roberto, M, (2005). *Why great leaders don't take yes for an answer*. New York: Pearson
- Rock, D. (2009, August 27). *Managing with the Brain in Mind*. Strategy+Business. Retrieved on November 9, 2015 from <http://www.strategy-business.com/article/09306>
- Romzek, B. S. (1990). Employee Investment and Commitment: The Ties That Bind. *Public Administration Review*, 50(3), 374-382.

- Salvoney, P. & Mayer, J. (1990). Emotional intelligence. *Imagination, Cognition, & Personality*, 9(3): 189-211.
- Schein E.H. (2004). *Organizational culture and leadership*. San Francisco: Jossey-Bass.
- Schilling, M. (2001). The use of modular organization forms: An industry-level analysis. *Academy of Management Journal*, December 2001, 44(6): 1149 - 1168.
- Schuman, S. (2006). *Creating a culture of collaboration: The international association of facilitators handbook*. San Francisco: Jossey-Bass.
- Schutt, R.K. (2015). *Investigating the social world: The process and practice of research* (8th ed.). Los Angeles, CA: SAGE Publications, Inc.
- Senge PM. (1994). *The fifth discipline: The art and practice of the learning organization*. New York: Doubleday.
- Slaikeu KA, Hasson RH. (1998). *Controlling the costs of conflict: How to design a system for your organization*. San Francisco: Jossey-Bass.
- Sobelson, R., Young, C. Neslund, V., Dorn, B., Marcus, L., McNulty, E. (2013). "The Meta-Leadership Summit for Preparedness Initiative: An Innovative Model to Advance Public Health Preparedness and Response." *Bio Security and Bio Terrorism: Biodefense Strategy, Practice, and Science*. 11(4).
- Society for Neuroscience. (1998). Fear and the amygdala [Electronic Version]. *Brain Briefings*. Retrieved November 2, 2007 from http://www.sfn.org/index.cfm?pagename=brainBriefings_fearAndTheAmygdala.
- Sternberg, R. J. (2006). The nature of creativity. *Creativity Research Journal*, 18(1), 87-98.
- Sternberg, R. J. (2007). A systems model of leadership: WICS. *American Psychologist*, 62(1), 34-42.
- Summonds, D. (n.d.) What is the Mobius strip? PhysLink.com. Retrieved on November 9, 2015 from <http://www.physlink.com/Education/AskExperts/ae401.cfm>
- Thomas, S. & D'Annunzio, L.S. (2005, March). Challenges and strategies of matrix organizations: Top-level and mid-level managers' perspectives. *Human Resource Planning*, retrieved from <http://www.allbusiness.com/public-administration/administration-human/394122-1.html>
- Tannenbaum, A.S. & Schmidt, W.H. (1973, May/June). How to choose a leadership pattern. *Harvard Business Review*.
- Tekleab, A.G., Sims, Jr., H.P., Yun, S., Teluk, P.E., Cox, J., Are we on the same page? Effects of self-awareness of empowering and transformational leadership. *Journal of Leadership & Organizational Studies*. February, 14(3), p. 185-202.
- Thompson, V. A. (1965). Bureaucracy and innovation. *Administrative Science Quarterly*, 10(1), 1-20.
- Trompenaars, F. (1994). *Riding the waves of culture*. New York: Irwin.
- Useem, M. (2003, November 13). Leading your boss. *The Economic Times*. Retrieved from http://leadership.wharton.upenn.edu/l_change/up_lead/ET_Nov_13_03.shtml
- Wagner, T. (2008). *The global achievement gap*. New York, Basic Books.

- Weber, M. (1905). *The protestant ethic and the spirit of capitalism: and other writings*. New York: Penguin Group.
- Wheatley, M. (1999). *Leadership and the new science*. San Francisco: Berrett-Koehler Publishers, Inc.
- Yukl, G. (2002). *Leadership in organizations*. Upper Saddle River, NJ: Prentice-Hall.
- Zaleznik A. (2004, January). Managers and leaders: Are they different? *Harvard Business Review*. (Originally published in May 1977).
- Zander, R. S., & Zander, B. (2000). *The art of possibility*. Boston: Harvard Business School Press.