LEADERSHIP IN THE NET-CENTRIC ORGANIZATION

John Jackson, Richard Myers, & Thomas Cowper

In times of change, learners inherit the Earth, while the learned find themselves beautifully equipped to deal with a world that no longer exists.

Eric Hoffer

The only safe ship in a storm is leadership.

Faye Wattleton

Previously, the Futures Working Group has advanced the concept of Net-Centric Policing (NCP) (see the *Further Readings* list at the end of this chapter). Here, we return to the concept and attempt to reconcile its implications with conceptions of leadership. We see this task as vitally important. The long-term process of accelerating change has reached a pace that is pushing our organizations to adapt. The contemporary world has reached the end of hierarchies, an organizational form that achieved its maturity in the Industrial Age. Well into the transition to the Information Age, the world needs a new organizational paradigm that provides adaptability and flexibility. Hierarchies cannot keep up with an increasingly changing world much longer and a new, more robust model for coordination and administration is sorely needed. These are not new observations. Indeed, the call for flatter organizations emerged with Community Oriented Policing and has become the Holy Grail of modern policing. We see net-centric organization as the successor to hierarchies and the mechanism for achieving the longed-for flattening of our agencies.

We will proceed along a simple course. First, a short history of leadership is in order; along the way, we will examine the difference between management and leadership. Next, we will offer a short overview of net-centric organization. As a finale', we will describe the operation of leadership in the net-centric enterprise.

A Short History of Leadership

There is no singular definition of leadership that suffices in all its occasions. Indeed, leadership is an exceedingly difficult concept to define precisely. A host of famous thinkers have taken their shots, each subtly different from the others. Hordes of authors and consultants publish their own unique takes on leadership each year. This is perhaps to be expected; leadership is a dynamic concept rooted in context. Long ago, the context of leadership was simpler . . . and so was the concept. Leadership was from the front – the mightiest of the group. In some contexts, this model still suffices. Yet, in most contexts, leadership requires much more.

Throughout history, leadership has always been important. But, the set of skills and behaviors that constituted leadership have changed substantially over time. Barton Kunstler's analysis (2006) is particularly instructive. Early leaders – kings – possessed the same skills as their followers; they were just better at them – the mightiest of the mighty. They were the first in battle, leading the charge against the enemy. As feudal systems developed, kings became leaders among leaders, negotiating and balancing groups of powerful nobles in a network of liege-lord oath contracts. Bureaucratization followed suit. The emergence of multiple sources of power – merchant classes, labor, and bureaucrats – that rivaled the landed nobility added subsequent complexity. Out of this developmental stew, empires, nation-states, and parliaments emerged. During the Industrial Age, the modern corporation emerged and leadership entered the Managerial Phase, focused on shaping operations and processes to optimize outputs. With the Information Age, leadership has again transformed to the Orchestral Phase. Acting much as the conductor (or section chairs) in an orchestra, leaders are smart, visionary, and flexible. The Orchestral Phase is marked by emphases on peerrelationships, expertise, and short-term alliances centered on specific tasks. Kunstler's Orchestral Phase is congruent with our concept of net-centric leadership.

While Kunstler reveals how leadership has evolved as the context changed, John Clippinger offers a different perspective. Clippinger treats leadership as a trait of societies and as a biologically evolved capacity. Leadership can be learned, but some people – natural leaders – possess the requisite traits as part of their basic personality. Calling upon the

examples of the Greek Golden Age, Cicero, the Renaissance, and the founding period of the United States, Clippinger demonstrates how certain timeless characteristics are found in abundance during the great periods of growth. During these times, societies "succeeded by replacing or modifying authoritarian, rigid, hierarchical, hereditary, and theocratic networks" (Clippinger, 2007, p. 129). While exemplary physical characteristics contribute to one's leadership capacity, the most important leadership traits are character traits. Clippinger cites Lord Alfred Tennyson's *Ode on the Death of the Duke of Wellington*, noting sacrifice; decisiveness, courage, initiative, truth-telling and modesty defined the ideal leadership traits to Tennyson. These "are all virtues that make a social network trustworthy, effective and robust … it is transparent and authentic" (Clippinger, 2007, p. 134).

Lest one think leadership traits are static, Clippinger notes leadership context has evolved. Thousands of years of warfare have bred social emotions into our brains. As Clippinger notes, "[r]isk taking and peer accountability have been proven to be evolutionarily stable strategies for building and sustaining reciprocal social relationships that ensure mutual security under maximum duress" (Clippinger, 2007, p. 134). These are primal manifestations of leadership activated during stress. What happens when society transitions from primal to group (networked) leadership? The answer is simple: leadership differentiates into specialized roles with distributed control. Leadership "requires specialization and flexibility as groups grow, shrink, or simply alter over time" (Clippinger, 2007, p. 135).

Many thinkers have pointed out the distinctions between leadership and management.¹ A search on Google of the phrase "manager vs leader" produces 70,800,000 results. It is well established that leadership and management invoke completely different, and often contradictory, skill-sets. Coupling that recognition with Kunstler's evolutionary framework places management in perspective. Leadership has always been prominent; however, management emerged as a field of study during the later 19th Century, documented most famously in Frederick Winslow Taylor's *Scientific Management* (1911).

When viewed chronologically, management is clearly an innovation of the Industrial Age. The Industrial Revolution enabled the emergence of large conglomerate firms, global empires and mass armies. In such an environment, managers became necessary in order to

administer the large organizations; in essence, managers were intermediaries between the small group of leaders and the large masses of followers. Hierarchies expanded to accommodate the ranks of managers; these structures served a vital purpose: regulating the flow of information – what to do, when, with whom –that was costly to obtain. Through the course of the Industrial Age, management was emphasized and leadership was marginalized.

As John Kotter has pointed out, the problem of the past couple of decades has been over-managed and under-led organizations (Kotter, 1996). As the world has transitioned from the Industrial Age to the Information Age, complexity has increased, demands on organizations have exploded, and information has moved from scarcity to abundance. While most of the private sector has responded with a transition – in Kunstler's framework – from the Managerial Phase to the Orchestral Phase, government (including policing) has remained anchored in the Industrial Age Managerial Phase. Net-Centric Policing represents a highly adaptable model with a focus on leadership.

Net-Centric Organization, Revisited

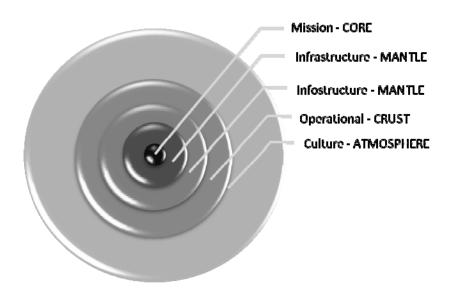
Net-centric organization represents a change in perspective, reframing the world through the lens of networks. The Futures Working Group's previous literature on Net-Centric Policing considers the police agency as a network in itself. Equally valid, a complete view of NCP treats the agency as part of other networks: policing, government, regional, national, societal, etc. Likewise, NCP recognizes that the members who make up police agencies are members of numerous networks – social, familial, religious, hobbyist, recreational, etc – of which the agency is but one. Further, NCP recognizes that crime occurs in the context of social networks: victims, witnesses, other criminal associates. Terrorists operate in networks and use the network approach to identify targets in order to maximize disruption.

NCP is a child of the Information Age; its speed and agility arises from a robustly interlinked network that enables the rapid exchange of information and an evolution of the organization's collective knowledge toward a state of shared awareness. The technologies of the Information Age – computer networks, email, text messages, social networking, wikis, blogs, RSS publishing, geotagging, and video blogging ("vlogging") – form the links that connect

the members of the organization. The technological network – the infrastructure – and the information and knowledge management – the "infostructure" – enable the capacity for information sharing. The leader endeavoring to transform an enterprise to net-centric would well follow a simple maxim: connect as many people in as many ways as possible.

To understand the dynamics of the net-centric organization (NCO), a metaphor is necessary – in this case, the planet Earth. The Earth has a core, a mantle, a crust and an atmosphere. Human beings live on the crust, where the solid surface of the Earth meets the atmosphere. Together, the Earth and the life living upon it form a system. In a planetary model of the net-centric organization, parts analogous to the Earth can be found. The NCO has a core: its purpose for existence, its mission. Around this core is the mantle of the organization: infrastructure and infostructure. The infrastructure – all the hardware that makes the organization function: the buildings, computer systems, phones, vehicles, equipment, etc – is the deeper and more fundamental layer. The infostructure – the data, information and collective knowledge – rests upon the foundation of the infrastructure. The atmosphere of the NCO is the culture, the values, norms and standards that guide the organization. It is upon the crust where the infostructure and the culture collide that the vast majority of the NCO's people live; it is the operational edge where the organization interacts with the outside world. Figure 1 outlines the planetary model of the NCO.

Figure 1
PLANET MODEL OF THE NET-CENTRIC ORGANIZATION



With a solid infrastructure and infostructure in place, management functions – control – are substantially incorporated into the network's technology. Business intelligence software helps bring performance information to commanders. Institutionalized rules and procedures give way to protocols, best practices, professional standards and culture. Analysts use their professional competence to transform data into valuable information and knowledge. Through search engines, the producers and consumers of information are brought together, without either requiring prior knowledge of the other. Line elements coordinate and cooperate spontaneously, agilely coming together to resolve shared problems and challenges, forming enduring *communities of practice*. The title of David Alberts and Richard Hayes book, *Power to the Edge*, neatly sums up the transformation embodied in net-centric. In the language of networks, the edge is the connection; the net-centric transition is a movement of power from individuals to the network.

Leadership in the Net-Centric Organization

Leadership is important in every organization. In a profession in which its members are charged with the protection of society and given great power – the capacity to lawfully take the life or freedom of a person – leadership is paramount. Failures of leadership in the police profession are the substance of crisis, scandal, and disgrace. In the hierarchical model, leadership and discipline are embodied in rank. The distances between chiefs and line officers permit the concealment of behaviors. Warning signals are lost in a forest of routine communication, filtered through layers of management. In the NCO, values and culture are used to align leaders in a common direction, permitting the network to detect deviations from accepted norms and make corrections before the behaviors condense into habit. It is our belief that NCP permits peer-discipline to operate. The challenge for police executives is to clearly define the operational mission and behavioral boundaries, to organize agencies around the proper set of values, and to shape the culture so that peer-discipline functions in a manner appropriate to a democracy.

In the net-centric organization, leadership is dispersed throughout the network. It takes many forms based on a person's position in the organization. Taken to the extreme, net-centric organization allows for completely flat organizations. NCP does not, however, require agencies to be completely flat. Nevertheless, NCP seeks to create an environment supportive of the development and exercise of leadership throughout all levels of the network, at all levels of its organizations. In effect, NCP seeks to create leadership networks. Such networks are "peer-to-peer" and operate with specialized roles, each with intrinsic social protocols that result in robustness and effectiveness in combination.

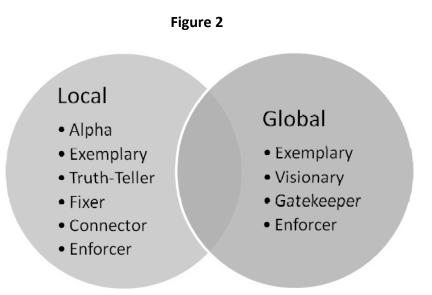
What does dispersed leadership look like? Scholar and author John Clippinger has studied the operation of leadership in networked organizations and identified eight key roles (Clippinger, 2007). The Alpha Leader embodies the standards and qualities that characterize the organization. They are the role models. Alphas often perform the most difficult tasks. They may be ceremonial, symbolic, charismatic, or elite. The **Exemplary Leader** is the natural leader. The rarest form, these leaders are able to "create a shared theory of mind for the group, a shared code of conduct and belief that gives the group its own identity, character, and purpose" (Clippinger, 2007, p. 137). The **Visionary** performs a critical but often unpopular function. On the positive side, the visionary imagines possible futures and creates new forms of interaction. They have broad peripheral vision, watch trends others ignore, and identify patterns most people do not see. The visionary challenges the status quo, which can be destabilizing when continuity and execution are critical. Visionaries live outside the mainstream and push boundaries. Visionary leaders can be transformational in the chief executive role. The Gatekeeper decides who is in or out. He or she upholds the membership rules that determine who is included, retained, promoted and excluded. The real assets of a network are its people and its culture and the gatekeeper "sustains the identity and character of the entire enterprise" (Clippinger, 2007, p. 139). The Truth-Teller keeps the organization honest. He or she identifies free riders, cheaters, half-truths and spin. The truth-teller trades on credibility. Speaking the truth may bring retribution; truth-tellers must be shielded from reprisal or they lose their effectiveness. Dysfunctional networks will seek to silence the truth-tellers, marginalizing them with potentially troublesome effects: marginalized truth-tellers may

operate informally or extraneous to the network – think blogs. The **Fixer** gets things done that others cannot. They are pragmatic and task-oriented. These are the "scroungers" – the Radar O'Reilly's – of the world. The **Connector** participates in numerous social networks, serving as a bridge between dispersed groups. Connectors are critical in identifying and utilizing new resources. Connectors enable the benefits of diversity and contravene the silos than inevitably form in highly institutionalized networks. The **Enforcer** ensures organization members adhere to cultural norms and professional standards. In small networks, the roles of enforcer, gatekeeper and, sometimes, truth-teller will be combined in single person. In large networks, enforcers are often distributed. Enforcers can wield authoritative and coercive power, but first and most often will use moral, social or peer pressure. Like the truth-teller, the enforcer must be independent to be effective.

So, where do these roles fit in police agencies? Alpha leaders can appear anywhere, although they will be clearest at the officer level. They are the best officers and the legends in the department. Exemplary leaders can be found at all levels. They will be the attractors around which others naturally gather. Ideally, exemplary leaders will rise to prominence in the network; if isolated from the power, they have the capacity to lead their followers on paths diverging from the agency. The Visionaries are the innovators, and at times, disruptors. They may be part of the command, and on occasion, even be the Chief. Visionaries will often be found in staff assignments. Because of their disruptive capacity, it is important to identify visionaries among the ranks and channel their vital energy to appropriate projects. In most agencies, the Gatekeeper will be the top executive – the Chief, the Sheriff, the Director, and so on. Gatekeepers may also be found in support roles, in recruiting, training and internal affairs. Truth-tellers may be found at any level. They should be channeled into veracity functions – internal affairs, accounting, inspections, and auditing. They must be granted independence with one caveat: truth-tellers rely on credibility and must live, more than others, in a fishbowl. Reproach hampers their effectiveness and may permanently impede an individual's ability to function as a truth-teller. Fixers are go-to people, often found on staffs of organization managers. Connectors appear at all levels. They are particularly suited to working with people; they will develop extensive contacts. Connectors are valuable in unstructured work settings

and are ideal for assignments with substantial community engagement. In many ways, the connector is the quintessential community-oriented policing officer. The enforcer is a natural role for police officers; since that is part of the role they serve for society. Therefore, we expect enforcers to be abundant in police agencies at all levels. In a net-centric organization with a strong "theory of mind," peer networks will reinforce cultural norms and maintain compliance.

Another way of looking at leadership is along a local-global dimension. Local leadership occurs incidentally as operational circumstances arise. Local leadership is the province of line officers and supervisors. Leadership aimed at the organization as a whole can be considered global. Commanders operate globally, exerting leadership to shape the whole, principally in the culture and in the infrastructure. Local leadership is instantaneous and tactical; global leadership is protracted and strategic. The vastly greater proportion of leadership exercised in an organization should be local. Figure 2 synthesizes the local/global framework with Clippinger's roles.



Thus far, we have treated leadership from the perspective of the agency. As previously noted, NCP must also consider the agency as part of the greater network of society and the agency's members as part of other social networks. Yet, the principles of leadership work

across scales. In nearly every case, however, the agency or the members hold no special supervisory authority. In these networks, the police (agency or member) are at the operational edge. They are normally peers, or in the case of government networks, subject to other authorities. The police must work principally in the local leadership roles fostering collaboration or organizing peers through the attractiveness of their ideas as a ground-up visionary. While the police serve as enforcers at the incident level, cops should expand their proficiency in navigating networks at the scale of the whole (the city, the county, the state, the nation, etc). The ideal of the Beat Cop – the cop who knows his or her beat and knows the people who reside and do business there – is an age-old manifestation of the Connector role. The capacity of the police to address crime increasing rests upon its ability to work in networks – to tap resource networks, to build healthy community networks, and to disrupt criminal networks.

Conclusion

Few people today debate the existence of accelerating change. Its presence has become palpable, a constant pressure upon our current hierarchical structures. In the face of cheap, abundant information, the filtering mechanisms of the hierarchies have lost their value and serve principally to obscure, obstruct and delay. In the contemporary age, the performance failures that plague us can be reduced to informational problems: someone with the power to do something did not know what was happening, what needed to happen, who was doing it, where it was being done, or why it was being done. Yet, the typical response to performance failures is one of management: create another rule or another position to "manage" the parts. And so, the hierarchy grows incrementally, doing what it is supposed to do: filter information. The hierarchy feeds back to increase the likelihood of future failings.

The policing profession emerged in the Industrial Age; naturally, it evolved in conjunction with the hierarchical, managerial institutions that were substantial innovations of that age. Since its emergence in the 1950s, the Information Age has only peripherally made impacts on the policing profession. We have adopted some of its tools but the Information Age has only marginally impacted the fundamental shape of the contemporary police organization.

While private sector organizations began integrating fundamental structural changes in the 1970s, 80s, and 90s, only now, in the Information Age's maturity, does it seem that government agencies may follow suit. Now within sight of a new age, it is imperative that police leadership adopt organizational forms with the agility to keep pace with rapidly changing environments.

Further, police officers must learn to work with communities and peer agencies to address crime problems. Building and reinforcing peer networks through trust and reciprocity are core competencies of the Information Age officer. Networks are a natural part of human nature; they form spontaneously among groups of people. The only requirement for the formation of a network is a group of people willing to collaborate in an effort to do the right thing. In fact, networks form within hierarchies. For at least 30 years, police management books have acknowledged the existence of informal communication networks in our organizations. Very often, the real, day-to-day work of the agency gets done through these networks. Net-Centric Policing nurtures, leverages and expands these networks to enable broad collaboration and rapid response to problems emerging in the environment. Moving from Industrial Age hierarchies to Information Age networks will require leadership.

Endnote

1. For an outstanding comparison of roles, see Warren Bennis' "Roles of Leadership" in *Visionary Leadership* by Burt Nanus, 1992.

Further Reading

For further reading on net-centric organizations, see the writings of the Futures Working Group and the Department of Defense's Command and Control Research Project (www.dodccrp.org).

- Alberts, D.S. & Hayes, R.E. (2003). *Power to the edge*. Washington, DC: Command and Control Research Program.
- Atkinson, S.R. & Moffat, J. (2005). *The agile organization*. Washington, DC: Command and Control Research Program.
- Cowper, T. J. (2005). Network centric policing: Alternative or augmentation to the Neighborhood-Driven Policing (NDP) model?" In C.J. Jensen & B.H. Levin (Eds.),

- Neighborhood Driven Policing: Volume 1 of the proceedings of the Futures Working Group. Washington, DC: Federal Bureau of Investigation.
- Myers, R. & Cowper, T. (2007). Net-centric crisis response. In J.A. Schafer & B.H. Levin (Eds.), Policing and mass casualty events: Volume 3 of the proceedings of the Futures Working Group. Washington, DC: Federal Bureau of Investigation.
- Myers, R.W. (2007). From pyramids to network: Police structure and leadership in 2020. In J.A. Schafer (Ed.), *Policing 2020: The future of crime, community and policing.* Washington, DC: Federal Bureau of Investigation.
- Olligschlager, A. (2007). Beyond hierarchies: Toward a universal crisis network. In J.A. Schafer & B.H. Levin (Eds.), *Policing and mass casualty events: Volume 3 of the proceedings of the Futures Working Group.* Washington, DC: Federal Bureau of Investigation.

References

- Clippinger, J. H. (2007). Toward a literacy of natural leadership. In J. H. Clippinger, *A crowd of one: The future of individual identity* (pp. 125-144). New York: PublicAffairs.
- Kotter, J. (1996). Leading change. Boston: Harvard Business School Press.
- Kunstler, B. (2006). Leadership in the era of singularity. In Timothy C. Mack (Ed.), *Creating global strategies for humanity's future* (p. 388). Bethesda: World Future Society.