team or network conductorship may be more appropriate. An example of this training is described by Graen et al. (2006) and suggested by Hackman and O'Connor (2004).

REFERENCES

Graen, G. B. (2007). Letter to the Editor. *Academy of Management Perspectives, 21,* 5–6.

Graen, G. B., & Graen, J. A. (Eds.). (2006). *LMX leadership: The series. Vol. 4. Sharing network leadership.* Greenwich, CT: Information Age Publishing.

Graen, G. B., & Graen, J. A. (Eds.). (2007). *LMX leadership: The series. Vol. 5. New multinational leadership sharing.* Greenwich, CT: Information Age Publishing.

Graen, G. B., Hui, C., & Taylor, E. A. (2006). Experience-based learning about LMX leadership and fairness in project teams: A dyadic directional approach. *Academy of Management Learning and Education, 5,* 448–460.

Hackman, J. R., & O'Connor, M. (2004). *What makes for a great analytic team? Individual vs. team approaches to intelligence analysis.* Washington, DC: Intelligence Science Board, Office of the Director of Central Intelligence.

Hackman, J. R., & Wageman, R. (2007). Asking the right questions about leadership. *American Psychologist, 62,* 43–47.

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Special Issue on Leadership Falls Behind

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A special issue of the *American Psychologist* (January 2007) was devoted to leadership. The six articles were written from an "industrial" perspective that places primary emphasis on positional leaders and their actions. Some readers of this series might conclude that the industrial model best explains leadership. It does not. The ecological perspective offers an alternative that deserves consideration.

Bennis (January 2007) began the series with the claim that the Enron scandal resulted from "bad leadership" and "bad leaders" (p. 2). Certainly bad and greedy leaders contributed, but the broader *ecological* context is also illuminating. Corporations are required to pursue profit for shareholders above all other reasons for doing business (Bakan, 2004). Downsizing, shifting jobs offshore, pollution, tax avoidance, mistreating employees, defective products, and lying are all part of the continuous stream of corporate misbehavior because these behaviors contribute to profit. The construct of "bad leadership" does not effectively address corporate misbehavior, because replacing leaders will not impact corporate behavior if the basic operating rules are not changed. The ecological perspective suggests looking at the larger context of organizational behavior.

Zaccaro (January 2007) suggested using sophisticated statistical techniques to identify the "extraordinary qualities" (pp. 6, 14) of effective leaders. This approach also exemplifies the industrial model: Identify the perfect organizational leader, insert him or her into the organization, and effective leadership will emerge. However, Zaccaro's use of the term *leadership processes* reflects an important premise of the ecological model. If we focused on *processes* rather than the actions of positional leaders, we might naturally arrive at a more collaborative view of leadership as suggested by Bennis (2007, p. 4). The task of a positional leader might shift from making decisions to ensuring that processes of collaboration were sufficient to bring an adequate amount of information to bear on organizational decisions and actions. This might require personality characteristics that have not yet been identified in the leadership literature.

According to Vroom and Yago (January 2007), the commonality shared by "virtually all" (p. 17) definitions of leadership is the process of influence extending from leaders to followers. However, they claimed that some positional leader actions such as "mergers and acquisitions, changes in organizational structure, and layoffs of personnel" (p. 18) have "little or nothing" to do with leadership. The ecological perspective takes the opposite position: To the extent that leadership processes exclude the input of interested others, the decisions are more likely to have bad outcomes. As such, any decision or action of an organization invokes leadership processes. An acquisition or merger is such a complex decision that it would seem to require the input of numerous organizational experts. How can an effective leader possibly make such a complex decision alone?

Vroom and Yago (2007) then offered the following definition of leadership: "We see leadership as a process of motivating people to work together collaboratively to accomplish great things" (p. 18). They added the caveat that other parties may not agree on what constitutes "great things." From this perspective, there is nothing but "good" leadership in the world because all positional leaders see themselves as accomplishing "great things" even though the remainder of the world may disagree. The idea that "good leadership" can occur in isolation from the surrounding ecological context is characteristic of the industrial model. In contrast, the ecological perspective demands that we step back and view leadership as a process that must be inclusive of its context. Failure to encourage input from the surrounding systems may lead to the accomplishment of "great things" that ultimately lead to failure. Vroom and Yago concluded that we need to discover the kinds of situations in which leadership makes a difference. An ecological perspective holds that it is important for researchers to identify processes that help organizations comprehend their situations so leadership *can* make a difference.

Avolio (January 2007) urged leadership theorists and researchers to develop "integrative" (p. 25) theories that consider characteristics of leaders, followers, and context. The ecological perspective could add immensely to this understanding of leadership in two ways. First, perhaps we could abandon the idea of followers entirely and consider the idea that the people who are typically labeled followers are really contributors to leadership processes. Second, the complexity of important organizational decisions demands that a wide sample of organizational members contribute expertise toward solving organizational problems. This idea is the essence of the ecological side of the equation.

The title of Sternberg's (January 2007) contribution suggests a willingness to abandon the industrial model because the term *systems* is a synonym for the ecological perspective. The WICS model is a nice summary of characteristics we would like to see in positional leaders (wisdom, creativity, and intelligence). However, Sternberg talked about both *leaders* and *leadership* without acknowledging that the distinction between them has profound implications. On the ecological side, the term *leadership* suggests a process to which all group or organization members might contribute and also that wisdom, creativity, and intelligence might be attributes of organizations and not merely of their positional leaders.

Hackman and Wageman (January 2007) reframed questions raised by the authors of the special issue. We would like to

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answer these questions from an ecological perspective. Their first question was "Under what conditions does leadership matter?" (p. 43). We propose that leadership always matters but that leaders do not. Hackman and Wageman stated that the "debate between leader-centric and structural or situational explanations of collective performance has never been resolved, and probably cannot be" (p. 43). If this is the case, then why not present the debate as one to be continually resolved by the leadership processes of any organization? This idea is a central feature of the ecological approach that we have proposed (Wielkiewicz & Stelzner, 2005).

Hackman and Wageman's (2007) second question was "How do leaders' personal attributes interact with situational properties to shape outcomes?" (p. 44). The answer depends on which side of the industrial–ecological continuum the positional leader favors. An industrial (i.e., privileged) perspective of leadership might lead to some of the most negative outcomes, whereas integrating an ecological perspective with the industrial perspective is more likely to lead to positive outcomes. Hackman and Wageman's third question concerned whether good and poor leadership are qualitatively different phenomena. To the extent that leadership processes are *inclusive,* as suggested by an ecological perspective, the likelihood of bad decisions decreases. In contrast, positional leaders who operate from an industrial perspective and center leadership processes on themselves are more likely to make bad decisions because they exclude vital information and perspectives.

Hackman and Wageman's (2007) fourth question was "How can leadership models be reframed so they treat all system members as both leaders and followers?" (p. 45). This is the most intriguing idea advanced in this special issue. One answer comes from the ecological model of leadership processes we have elaborated (Wielkiewicz & Stelzner, 2005). We have suggested that the main task of a leader is to optimize the tension between an industrial perspective of leadership and an ecological perspective of leadership. When this is done effectively, leaders and followers regularly exchange roles at various stages of leadership processes because expertise to solve problems and make decisions is scattered throughout an organization. It is not, and can never be, the exclusive realm of a positional leader.

Finally, Hackman and Wageman (2007) asked, "How can leaders be helped to learn?" (p. 46). One answer is to place less theoretical emphasis on the industrial model of leadership, which focuses mainly on the actions and decisions of positional leaders. The industrial approach emphasizes power and privilege over effective decisions. Instead, an industrial perspective must be balanced with consideration of the ecological side of the equation. Ultimately, neither the industrial model nor the ecological model alone is useful. Each leads to unhelpful leadership paradoxes. Leadership processes need to have a balance between the two perspectives. However, it is time to end the dominance of the industrial perspective.

REFERENCES

Avolio, B. J. (2007). Promoting more integrative strategies for leadership theory-building. *American Psychologist, 62,* 25–33.

Bakan, J. (2004). *The corporation: The pathological pursuit of profit and power.* New York: Free Press.

Bennis, W. (2007). The challenges of leadership in the modern world: Introduction to the special issue. *American Psychologist, 62,* 2–5.

Hackman, J. R., & Wageman, R. (2007). Asking the right questions about leadership: Discussion and conclusions. *American Psychologist, 62,* 43–47.

Sternberg, R. J. (2007). A systems model of leadership: WICS. *American Psychologist, 62,* 34–42.

Vroom, V. H., & Yago, A. G. (2007). The role of the situation in leadership. *American Psychologist, 62,* 17–24.

Wielkiewicz, R. M., & Stelzner, S. P. (2005). An ecological perspective on leadership theory, research, and practice. *Review of General Psychology, 9,* 326–341.

Zaccaro, S. J. (2007). Trait-based perspectives of leadership. *American Psychologist, 62,* 6–16.

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How Leaders Really Emerge

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In the *American Psychologist* special issue on leadership (January 2007), Hackman and Wageman (January 2007) offered several research questions that should be productive for furthering leadership research. This comment summarizes some recent progress on one of those questions, "Not what are the traits of leaders, *but how do leaders' personal attributes interact with situational properties to shape outcomes?*" (p. 44). New insights on this question are afforded by nonlinear dynamical systems theory, which offers a distinctly different perspective on problem formulation and methodology. Zaccaro (January 2007) raised a similar issue specific to leadership emergence, noting a theoretical tension between situational determinants and leaders' characteristics, with the conclusion that "persons who emerge as leaders in one situation also emerge as leaders in qualitatively different situations" (p. 10).

To begin, it is important to remember what the leader is leading. An organization is a complex adaptive system (Dooley, 1997), which exhibits many nonlinear processes, notably that organizational behaviors and situations emerge, or self-organize, apparently out of nowhere. Kozlowski and Ilgen (2006) captured a similar point in their extensive review of group dynamics research: "[T]eams are complex dynamic systems that exist in a context, develop as members interact over time, and evolve and adapt as situational demands unfold" (p. 78). Knowledge of the dynamic process facilitates the search for precursor events and the identification of their proper roles. The density of empirical studies that investigate propositions concerning emergence and nonlinearity (in a literal sense) is very thin to date, however, the work is provocative nonetheless, in my opinion.

So how do leaders really emerge? More than leaders emerge from leaderless groups. Rather, a whole social structure emerges that consists of primary leaders, secondary leaders, and nonleaders. Primary leaders are observed to apply a wide range of social skills to a situation. Secondary leaders play roles that are more specific. The exact nature of both types of leaders depends on whether the group's primary task is creative problem solving, production, or a coordination-intensive activity (Guastello, 2002, in press; Guastello & Bond, 2007; Guastello, Craven, Zygowicz, & Bock, 2005) or some other type of activity.

The distribution of primary leaders, secondary leaders, and nonleaders over a large enough sampling of groups (see Figure 1) is the result of a (deterministic) mathematical model known as the swallowtail catastrophe. Like the simpler but more familiar cusp model, it describes discontinuous changes of events. The model has three control parameters. *Asymmetry* distinguishes either type of leader from nonleaders. *Bifurcation* determines whether the potential leader will become a primary or secondary leader decisively. *Bias* distinguishes between the primary and secondary leaders. The three control parameters work together to describe

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