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Special Issue: Leadership



Than'si'deh (Sun Bird) Margarete Bagshaw



| Special Issue: Leadership | | |
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> **On the cover:** Than'si'deh (Sun Bird), 2005, by Margarete Bagshaw. Oil on canvas, 48 inches by 60 inches. Courtesy of Ventana Fine Art, Santa Fe, New Mexico (www.ventanafineart.com). See p. 62 for more about Bagshaw and her art.

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Foreword to the Special Issue on Leadership

Robert J. Sternberg Tufts University

he United States became a great nation because of the leadership skills of the Founding Fathers. Whether it will remain a great nation will depend, in large part, on the leadership skills of those in power today. Historically, great nations have risen and later fallen in large part as a result of the success or failure of their leadership. Organizations, ranging from companies to schools to nonprofits, also have risen and fallen in concert with the quality of the leadership that guided them.

Despite its importance to the United States and the world, leadership has not been a leading topic in the field of psychology. Most psychology departments have no one doing research directly bearing on leadership. Among the highly ranked psychology departments, leadership is scarcely to be found as a topic of research. Teaching of courses on leadership tends, on average, to occur in business schools, schools of public policy, or schools of education, not in psychology departments. Textbooks are oriented either to the business-school or the education-school market, because the psychology market is, relatively speaking, minuscule. Introductory psychology textbooks generally do not have a chapter on or even cover leadership. Curiously, most social psychology texts lack such a chapter as well. Even the American Psychological Association has no journal on leadership and no division on leadership. Those journals that do specialize in leadership studies tend to be interdisciplinary, with some but not much representation from departments of psychology both in terms of authors and readers. The result of this situation is that many students of psychology are relatively unfamiliar with the literature on leadership.

The purpose of this special issue is to introduce readers of the American Psychologist to recent theory and research on leadership. The articles are written by some of the leading theorists in the study of leadership and are intended to present an overview of much (although certainly not all) of the field as it exists today. The goal is not to present only the latest findings or cutting-edge research, but rather, to serve as a tutorial providing background that might whet readers' appetites to read more. Some of the major approaches that are covered are trait views, situational views, contingency views, and systems views. The introduction to the articles and the concluding discussion of them are intended to provide original syntheses of the ideas in the main articles but also to go beyond these articles to provide an overview of the original perspectives of the contributors.

I hope you enjoy reading this special issue as much as the other authors and I enjoyed writing it. At the very least, you will learn something about an important but relatively neglected field within psychology, the study of leadership.

The Challenges of Leadership in the Modern World

Introduction to the Special Issue

Warren Bennis University of Southern California

This article surveys contemporary trends in leadership theory as well as its current status and the social context that has shaped the contours of leadership studies. Emphasis is placed on the urgent need for collaboration among social-neuro-cognitive scientists in order to achieve an integrated theory, and the author points to promising leads for accomplishing this. He also asserts that the 4 major threats to world stability are a nuclear/biological catastrophe, a world-wide pandemic, tribalism, and the leadership of human institutions. Without exemplary leadership, solving the problems stemming from the first 3 threats will be impossible.

Keywords: leadership, followership, power, world threats, leadership theory

n the best of times, we tend to forget how urgent the study of leadership is. But leadership always matters, and it has never mattered more than it does now. If the United States presidential election of 2004 taught us anything, it was that half the nation has a radically different notion of leadership than the other half. It is almost a cliché of the leadership literature that a single definition of leadership is lacking. But how likely is it that a consensus will be reached on something as straightforward as how to define leadership when, less than two years ago, it became clear that half the electorate saw its candidate as the embodiment of a strong leader while close to the same number saw him as poorly qualified at best, and dangerous at worst? Why allude to current political leadership in an academic journal? Because leadership is never purely academic. It is not a matter such as, say, string theory that can be contemplated from afar with the dispassion that we reserve for things with little obvious impact on our daily lives. Leadership affects the quality of our lives as much as our in-laws or our blood pressure. In bad times, which have been plentiful over the millennia, twisted leaders have been the leading cause of death, more virulent than plague. Even in relatively tranquil times, national leaders determine whether we struggle through our final years, whether our drugs are safe, and whether our courts protect the rights of minorities and the powerless. Our national leaders can send our children into battle and determine whether our grandchildren live in a world in which, somewhere, tigers still stalk their prey and glaciers are more than a memory. Corporate leaders have almost as much power to shape our lives, for good or ill. The corrupt executives at Enron,

WorldCom, and Tyco—plus the other "usual suspects" were not mere symbols of corporate greed and malfeasance. Bad leadership at Enron alone impoverished thousands of employees, stealing their livelihoods, gutting their retirement accounts, and tearing them apart with stress. (I was informed recently that the total dollar cost to investors and pensioners was over \$80 billion.) There are, no doubt, people who took their own lives because of what was done at Enron by its lavishly compensated bad leaders.

It is easy to forget this context when one is describing leadership in the cool, clear, invaluable language of academic discourse. As students of leadership, it is important for us to distinguish between what we can and cannot say with authority on the subject-that is the essential first step in developing a grand unifying theory of leadership. But we must remember that the subject is vast, amorphous, slippery, and, above all, desperately important. As Robert Sternberg (2007, this issue) points out in his discussion of cognitive-systems models of leadership, creativity is an essential characteristic of leaders. As leaders, those in the forefront of the analysis of leadership must make creative choices about what aspects of this sweeping subject to study. Even as we examine those aspects that are amenable to the methodologies now at hand, some analysts must be willing to look at leadership in all its complexity, which may mean looking at elements that cannot be nailed down in the laboratory. Psychologists should do so if only to identify those aspects of leadership that seem most pressing and most overlooked and those that hold out promise for changing for the better the way leadership is studied and practiced. We have to use our creativity to identify and reframe the truly important questions.

In the bad old days, leadership was taught mainly by means of the biographies of great men. I predict that one quality of a genuine discipline of leadership studies—once such an animal exists—will be its inclusiveness. No matter how many mathematical models the discipline produces, it should always have room for inspirational stories about wonderful leaders as well as grim cautionary tales about bad ones. At least since Joan of Arc miraculously recruited French soldiers to follow her into battle, people have submitted to the will of outsized, charismatic leaders. Al-

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though heroic leaders may have commanded a disproportionate amount of people's attention in the past, psychology still does not know enough about how they develop and how they recruit and maintain their avid followers. Heroic or charismatic leadership is still an essential, unsolved part of the puzzle. I was recently reminded of this by David Gergen, a frequent advisor to U.S. presidents and an astute student of leadership. He tells how, in December 1931, while on a visit to New York, a middle-aged Briton was struck by a car while crossing Fifth Avenue. Badly hurt, but not so badly that he didn't send the British press his own account of the accident, the English visitor left the hospital as soon as possible to recuperate at the Waldorf Astoria. Now try to imagine what World War II would have been like without the galvanizing rhetoric of the leader almost done in by a New York driver-the visitor was, of course, Winston Churchill. Or imagine how different the United States, and indeed the world, would be today if, in Miami in 1933, Guiseppe Zangora had not fatally shot Chicago Mayor Anton Cermak instead of killing his intended victim, President-Elect Franklin Delano Roosevelt. No wonder people have tried to understand leadership by attempting a kind of reverse engineering of outstanding public figures. To this day, psychologists have not sorted out which traits define leaders or whether leadership exists outside of specific situations, and yet we know with absolute certainty that a handful of people have changed millions of lives and reshaped the world.

One healthy development in the recent study of leadership is a new appreciation for the lessons taught by bad leadership. Barbara Kellerman, research director at the Center for Public Leadership at Harvard's Kennedy School of Government, and Jean Lipman-Blumen, professor at Claremont Graduate University's School of Management, have both recently taken on the daunting task of analyzing what makes bad leaders tick. Kellerman's (2004) *Bad Leadership* distinguishes between incompetent leaders and corrupt ones, for example, a valuable reminder that there are many ways for leaders to fail. And in Lipman-Blumen's (2006) book, *The Allure of Toxic Leaders*, she reminds us that, most of the time, we choose our bad leaders, they do not kidnap us. She argues that the main reason we are attracted to bad leaders is that they soothe our fears—surely a hypothesis worthy of further study in the laboratory. And both authors raise the important issue of the havoc that can be wreaked by effective leaders with a perverse agenda.

As these writers suggest, leadership is always, in some sense, a matter of values. In talking about leadership, we must ask ourselves, "Leadership for what?" Every leader has an agenda, and analysis of that aim, that intent, often fits uneasily with the objectivity that psychologists rightfully strive for in scholarly research. Sternberg (2007, this issue) describes a relatively small group of leaders who are characterized by wisdom, which includes an awareness of "the common good." Such terms are too rare in the leadership literature, as is the word "justice." One of the greatest challenges for students of leadership is to find an academically respectable way to deal with the value-laden nature of the subject. No matter how much psychologists might like to avoid grappling with the values issue, we ultimately cannot. Values are part of the very fabric of the phenomenon. How we confront this without compromising our commitment to objectivity is another of our creative challenges. Perhaps we will have to invent new scholarly forms, new formats that allow us to be both expansive and rigorous. One question begging to be answered by scholars is how the simple invocation of the term "values" can attract or repel followers, as it did in the last presidential election.

As Bruce Avolio (2007, this issue) and others importantly point out in this special issue, psychologists still tend to see leadership as an individual phenomenon. But, in fact, the only person who practices leadership alone in a room is the psychotic. When speaking on the subject, I often show a slide that includes dozens of names, from Sitting Bull and Susan B. Anthony to Kofi Annan and Carly Fiorina, and I ask the audience what these leaders have in common. In fact, the single commonality among these men and women is that all of them have or had willing followers. If we have learned anything in the decades psychologists have now devoted to the study of leadership, it is that leaders do not exist in a vacuum. Shakespeare, perhaps the greatest of all students of leadership, debunked the so-called "great man" theory of leadership before it was even articulated. In Henry IV, Part I, Glendower boasts to Hotspur, "I can call spirits from the vasty deep." And Hotspur shoots back, "Why, so can I, or so can any man; But will they come when you do call them?" Any person can aspire to lead. But leadership exists only with the consensus of followers. As the late psychologist Alex Bavelas frequently reminded his students at MIT, "You can't tickle yourself." Leadership is grounded in a relationship. In its simplest form, it is a tripod-a leader or leaders, followers, and the common

goal they want to achieve. None of those three elements can survive without the others.

Given the enormous surge in interest in leadership following the terrorist attacks on the United States in 2001, I am hopeful that psychology is on the verge of making great strides in leadership studies. I do not know that we will ever have an all-encompassing theory of leadership any more than we have a genuine theory of medicine. But I do think forces are converging-a sense of urgency, a critical mass of committed scholars with highly developed skills-for the field to make a great evolutionary leap. In their contributions, all of the authors in this issue note the breakthroughs in leadership studies in the mid-20th century, when the subject was reimagined and a whole new way of thinking about it emerged. During that fertile period, the charismatic leader was deemphasized, as was trait-based leadership. The emphasis shifted to followers, groups, and systems. Those changes were brought about both by political leaders and intellectual leaders trying to make sense of the horror that a series of horrifically bad leaders had wrought. One of the leaders of that new way of looking at leading was the great Kurt Lewin, a refugee from Hitler's Germany, grateful almost to the point of giddiness to be in the democratic United States, who realized that the best minds to have survived in his generation needed to address the most urgent social problems. In 1936, at the meeting of the American Psychological Association at Dartmouth College, he founded the Society for the Psychological Study of Social Issues to apply the tools of psychology to such terrible conundrums as the rise of fascism, racial injustice, and other societal problems. The groundbreaking work of Solomon Asch, Muzafir Sherif, Irving Janis and, later, Stanley Milgram on peer pressure surely follows in spirit the path that Lewin and other public-minded scholars helped create. This new zeitgeist was informed by a hunger to understand why the world had gone mad, and it was led by scholars who felt empowered by such new tools as systems theory and a willingness to collaborate across traditional disciplinary lines.

Although we do not yet know what a theory of leadership would look like, we do know it will be interdisciplinary, a collaboration among cognitive scientists, social psychologists, sociologists, neuroscientists, anthropologists, biologists, ethicists, political scientists, historians, sociobiologists, and others. Before we can achieve a comprehensive theory, we need to fill the gaps in our knowledge. We desperately need, for instance, longitudinal studies of both leaders and followers.

The study of leadership will be increasingly collaborative because it is precisely the kind of complex problem—like the genome—that can only be solved by many fine minds working together. (Leadership itself is likely to become increasingly collaborative. We already have a few examples in the corporate world of successful power sharing—the triumvirate at the top of the search engine Google is a good example. And other shared-power models will surely develop as the most creative organizations deal with the issue of leading groups in which the ostensible leader is neither more gifted nor less gifted than the led.)

Among the existing disciplines that must contribute if modern leadership is to be understood are those related to communication. One aspect of leadership that is routinely overlooked is the extent to which it is a performance art. Because leaders must have a vision that they are able to convey and share with their followers, rhetoric is part of the equation. Although President George W. Bush is not universally admired for his spoken presentation of self, he is occasionally masterful in this regard. When crafting the memorable address he gave to Congress following 9/11, for example, he eliminated from preliminary drafts all quotable lines from the towering leaders of history, including Churchill. The president's apparent reasoning was flawless: If powerful language stuck in the memory of listeners, he wanted to make sure it was his. Perhaps because the idea offends our somewhat puritanical notions of authenticity, we tend to forget that leadership often involves acting as if one were a leader. It was Churchill who uttered during the darkest days of World War II that though he was not a lion, he would have to learn to roar like one. Centuries before, Queen Elizabeth I, who was a master of performance, once remarked, "We princes are set on stages in the sight and view of all the world." So those who understand the dramatic arts should be among our collaborators in the search for the nature of leadership.

The other experts who must be part of the collaboration are students of media and communication. Today public leaders rarely, if ever, interact with their followers directly. They are always filtered through the media. Those media are growing in number and constantly changing, and people who understand how these new media work and shape the perceptions of followers are essential to plumbing the field. Is a leader whose message is accessed on a Blackberry different in kind from one whose message is read in the pages of the New York Times? Is a politician's vision described in the news pages perceived differently from the same vision presented on the op-ed page? Do viewers of the Daily Show have a different relationship to the political candidates they favor than listeners to public radio or talk radio? Does the stature of an interviewer change the perception of the candidate? If Matthew Brady helped create our heroic notion of Lincoln, what role do today's news photographers play in our choice of leaders? Recently, I have been thinking about the role that costume plays in our perception of public figures. What message does a trimly cut jacket simultaneously suggestive of Eisenhower and Star Wars' Han Solo send? Can a candidate ever rise above the message of foolishness projected by a pair of floral, knee-length swim trunks? And do young followers, inundated with more visual images than any generation in history, react differently to visual imagery than those of us who have spent only half our lives with television? In his essay in this special issue, Sternberg (2007, this issue) insightfully discusses the importance of stories in leadership effectiveness. The modern media are a key element in the creation and distribution of those stories, and to understand modern leadership we must have a much deeper understanding of those media, in all their power and with all their biases. We must also think more and more

about leadership in the context of globalization and instant communication. The world has so shrunk because of the new media that dissidents can now climb electronically over the walls imposed on them by repressive regimes. And yet while we have instant global communication, we have no guarantee of understanding. It is safe to assume that leadership and followership, like cuisine, have distinctive flavors from one culture to another. Psychologists have to begin to master those different ways of perceiving leadership.

After studying leadership for six decades, I am struck by how small is the body of knowledge of which I am sure. I do believe that leaders develop by a process we do not fully understand, from a crucible experience-a rich trauma like Sidney Rittenberg's 16 years in Chinese prisons-that somehow educates and empowers the individual. I believe adaptive capacity or resilience is the single most important quality in a leader, or in anyone else for that matter who hopes to lead a healthy, meaningful life. Rittenberg is a perfect example. Now in his 80s, he emerged from prison not embittered, but more convinced than ever of the need for the United States, including American enterprise, to collaborate with modern China. And I believe all exemplary leaders have six competencies: They create a sense of mission, they motivate others to join them on that mission, they create an adaptive social architecture for their followers, they generate trust and optimism, they develop other leaders, and they get results.

After reading the contributions of the five leadership scholars in this issue and rereading them a few more times, and then having the time to reflect on them, I am convinced more than ever of two things: The first is that we are learning more and more every day about this most important and urgent subject. The second is my heartfelt conviction that the four most important threats facing the world today are: (a) a nuclear or biological catastrophe, whether deliberate or accidental; (b) a world-wide epidemic; (c) tribalism and its cruel offspring, assimilation (all three of these are more likely than they were a decade ago); and finally, (d) the leadership of our human institutions. Without exemplary leadership, solving the first three problems will be impossible. With it, we will have a better chance. The noble hope of advancing the empirical and theoretical foundation of leadership-after all, we are all Pelagians at heart-could influence the course of leadership and, eventually, the quality and health of our lives.

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The trait-based perspective of leadership has a long but checkered history. Trait approaches dominated the initial decades of scientific leadership research. Later, they were disdained for their inability to offer clear distinctions between leaders and nonleaders and for their failure to account for situational variance in leadership behavior. Recently, driven by greater conceptual, methodological, and statistical sophistication, such approaches have again risen to prominence. However, their contributions are likely to remain limited unless leadership researchers who adopt this perspective address several fundamental issues. The author argues that combinations of traits and attributes, integrated in conceptually meaningful ways, are more likely to predict leadership than additive or independent contributions of several single traits. Furthermore, a defining core of these dominant leader trait patterns reflects a stable tendency to lead in different ways across disparate organizational domains. Finally, the author summarizes a multistage model that specifies some leader traits as having more distal influences on leadership processes and performance, whereas others have more proximal effects that are integrated with, and influenced by, situational parameters.

Keywords: trait-based leadership, leadership theories

he quantitative analysis of leadership dates back perhaps to Galton's (1869) Hereditary Genius. Galton emphasized two basic points that have come to form, and sometimes misinform, popular notions of leadership. The first point defined leadership as a unique property of extraordinary individuals whose decisions are capable of sometimes radically changing the streams of history (see also Carlyle, 1849). This point remains a most persistent view of leadership in the popular literature; in many best-selling books, authors seek to explain leadership by describing the transformational influences of certain individuals. The second point grounds the unique attributes of such individuals in their inherited or genetic makeup. Galton (1869) argued that the personal qualities defining effective leadership were naturally endowed, passed from generation to generation. The practical implication of this view, of course, is that leadership quality is immutable and, therefore, not amenable to developmental interventions.

This perspective guided the preponderance of leadership research into the 20th century until the late 1940s and early 1950s. Then, on the basis of some important reviews (Stogdill, 1948; Mann, 1959), many researchers discarded trait-based leadership approaches as being insufficient to explain leadership and leader effectiveness. This rejection was widespread and long lasting, and it echoed in most of the major social and industrial and organizational psychology textbooks for the next 30–40 years (e.g., Baron & Byrne, 1987; Blum & Naylor, 1956; Ghiselli & Brown, 1955; Muchinsky, 1983; Secord & Backman, 1974).

In the 1980s, research emerged that directly challenged the purported empirical basis for the rejection of leader trait models (Kenny & Zaccaro, 1983; Lord, De Vader, & Alliger, 1986). Also, models of charismatic and transformational leadership rose to prominence in the leadership literature. These models, while recognizing the important role of the situation in leadership, pointed once again to the extraordinary qualities of individuals as determinants of their effectiveness (House, 1977, 1988). More recently, a number of studies have linked personality variables and other stable personal attributes to leader effectiveness, providing a substantial empirical foundation for the argument that traits do matter in the prediction of leader effectiveness (e.g., Judge, Bono, Ilies, & Gerhardt, 2002; Peterson, Smith, Martorana, & Owens, 2003; see Zaccaro, Kemp, & Bader, 2004, for a review). Thus, traits have reemerged in the lexicon of scientific leadership research.

In this article, I argue for four critical points that need to be considered in models and theories positing leader traits and attributes as explaining significant amounts of variance in leadership. First, such frameworks cannot be limited in their elucidation of central leader attributes. Many research efforts focus their attention on small sets of individual differences that should predict leadership. Although other efforts do provide long lists of key leader attributes, they are rarely organized in a coherent and meaningful conceptual construction. Leadership represents complex patterns of behavior, likely explained, in part, by multiple leader attributes, and trait approaches to leadership need to reflect this reality (Yukl, 2006; Zaccaro et al., 2004).

A second point concerns the integration of leader attributes. Rarely do studies consider how the joint combinations of particular leader characteristics influence leadership behavior (Yukl, 2006; Zaccaro, 2001; Zaccaro et al.,

Some material in this article is based on previous work by the author (Zaccaro, Kemp, & Bader, 2004).

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2004). Likewise, leader attributes may exhibit curvilinear relationships with outcomes. Speculations on such combinations and relationships have been around for a long time. For example, Moss (1931) suggested that cognitive ability without social competence could not greatly affect leadership performance. Stogdill's (1948) review of leader attributes indicated that the influence of leader intelligence was delimited by the level of intelligence exhibited by the average group member. Along this line, Ghiselli (1963) reported a curvilinear relationship between intelligence and performance, with leaders who had very high or low intelligence being less effective. Fleishman and Harris (1962) demonstrated curvilinear influences of initiating structure and consideration (considered to be stable leadership styles; see Harris & Fleishman, 1955, and Fleishman & Peters, 1962) on employee grievances and turnover. However, most conceptual models posit only additive or linear effects of leader attributes on leadership criteria. Leader attributes likely exhibit complex multiplicative and curvilinear relationships with leadership outcomes, and trait conceptualizations of leadership need to reflect this complexity.

A third point is that trait and attribute approaches must consider and account for the situation as a corresponding source of significant variance in leadership. The literature abounds in trait-by-situation models of leadership, perhaps the most prominent being Fiedler's contingency models (1964, 1971; Fiedler & Garcia, 1987). These models led many to agree with Stogdill's (1948) statement that "persons who are leaders in one situation may not necessarily be leaders in other situations" (p. 65). Yet, both empirical research (e.g., Ferentinos, 1996; Kenny & Zaccaro, 1983; Zaccaro, Foti, & Kenny, 1991) and reports in the popular literature support the premise that individual leaders can be effective across situations demanding very different leadership approaches. The situation is critical in explaining variance in leadership behavior; however, it may not be as critical in explaining differences between leaders and nonleaders. Trait perspectives of leadership need to account for the role of situational variance.

Finally, leader individual differences may differ in their relative stability or malleability over time and in the degree to which they are specific to particular situations. Several researchers have noted the distinction between traitlike individual differences (e.g., cognitive ability, personality) and statelike individual differences (e.g., selfefficacy, task skills) (Ackerman & Humphreys, 1990; Chen, Gully, Whiteman, & Kilcullen, 2000; Hough & Schneider, 1996; Kanfer, 1990, 1992). This distinction suggests that some leader attributes will be more stable and cross situational in their influences, whereas others will be more situationally bound (indicating another important role for the leadership situation). More important, stable or traitlike individual differences may predict the level of statelike attributes that can be attained and exhibited by the leader (e.g., cognitive ability influences task-specific selfefficacy; Chen et al., 2000; Kanfer, 1990, 1992). Models positing such relationships suggest that traitlike individual differences act more distally on performance through their influence on more proximal attributes (Chen et al., 2000; Kanfer, 1990, 1992; Zaccaro et al., 2004). Accordingly, trait perspectives of leadership need to consider how leader attributes may differ in their sensitivity to situational factors and their proximity, in cause, to leadership behavior.

In the remainder of this article, I present some ideas around these points. I begin with a definition of *leader trait* that is broader, in some respects, than some more traditional definitions that limit this term to personality attributes (Zaccaro et al., 2004). Then, I recount the historical ebb and flow of the leadership trait perspective and conclude by summarizing a model that incorporates several of the issues and themes just elucidated.

The Meaning of Leader Traits

Early in the leadership scientific research tradition, traits were understood to be innate or heritable qualities of the individual. No doubt influenced by Galton's (1869) work, most early researchers considered leader traits to be immutable properties that were present at the birth of a future leader. This perspective shifted, however, in the first half of the 20th century to include all relatively enduring qualities that distinguished leaders from nonleaders (Kirkpatrick & Locke, 1991). Indeed, Bird's (1940) summary of leader traits included accuracy in work, knowledge of human nature, and moral habits. Stogdill's (1948) review cited decisiveness in judgment, speech fluency, interpersonal skills, and administrative abilities as stable leader qualities.

Reflecting this shift away from traits as purely heritable qualities, *leader traits* can be defined as relatively coherent and integrated patterns of personal characteristics, reflecting a range of individual differences, that foster consistent leadership effectiveness across a variety of group and organizational situations (see the definition by Zaccaro et al., 2004, p. 104). This definition has three key components. First, leader traits are not to be considered in isolation but rather as integrated constellations of attributes that influence leadership performance. As noted earlier, researchers in most prior leader trait studies took predominantly univariate approaches to uncover the differences between leaders and nonleaders, or they focused on the independent contributions of each in a small set of personal qualities. Behavior, especially complex forms such as leadership, rarely can be grounded in so few personal determinants. Understanding leadership requires a focus not only on multiple personal attributes but also on how these attributes work together to influence performance (Yukl & Van Fleet, 1992; Zaccaro et al., 2004).

A second component in this definition of leader traits concerns the inclusiveness of a variety of personal qualities that promote stability in leader effectiveness. Traits have traditionally referred to personality attributes. However, in line with most modern leader trait perspectives, the qualities that differentiate leaders from nonleaders are far ranging and include not only personality attributes but also motives, values, cognitive abilities, social and problemsolving skills, and expertise. The emphasis in this definition is on the variety of individual differences that predict leader effectiveness. This approach is similar to the one adopted by Yukl (2006), who defined traits in terms of leader effectiveness and included personality, motives, needs, and values in his definition. Although he contrasted traits and skills, the latter were defined (p. 181) as having both experiential and inherited foundations as well as operating at both general (e.g., intelligence, interpersonal abilities) and specific (persuasion and verbal skills) levels.

Admittedly, this emphasis may blur important distinctions among personality, skills, competencies, and expertise. However, later in this article, I summarize a model of leader attributes and effectiveness (Zaccaro et al., 2004) that, in turn, sharpens these distinctions, placing them in causal correspondence to one another. Also, although some personality theorists challenged such an expansion of the trait concept (Pervin, 1994), others embraced it (Cattell, 1965; Guilford, 1975). The defining element of leader traits, here, refers to the range of qualities that can consistently and reliably differentiate leaders from nonleaders and, consequently, can serve as the basis for leader assessment, selection, training, and development.

Note that leader traits are defined in reference to leader effectiveness. This follows from functional approaches to leadership that define leadership in terms of organizational problem-solving activities (Fleishman et al., 1991; Mumford, Zaccaro, Harding, Jacobs, & Fleishman, 2000; Zaccaro et al., 2000). Accordingly, Mumford, Zaccaro, Harding, et al. (2000) specified a number of individual differences that promoted effective leader problem solving. Such an approach implicitly assumes congruence between leader effectiveness and leader emergence or, more broadly, leader role occupancy. One can argue that the individual differences promoting effectiveness also should promote leader emergence. Hogan, Curphy, & Hogan (1994) stated that "research on leader emergence and leader effectiveness identifies the factors associated with someone being perceived as leaderlike" (p. 496). The attributes that contribute to effectiveness presumably should be encoded as part of follower-leader prototypes that form the basis for leader role nominations (Lord & Maher, 1991). Indeed, researchers in several studies have demonstrated significant overlap in the components of these prototypes and many listings of individual differences proposed as contributing to leader effectiveness (e.g., intelligence, dominance; cf. Keeney & Marchioro, 1998; Lord et al., 1986). However, Judge et al. (2002) found that although extraversion and openness exhibited effect sizes that were consistent with and similar to those of leader effectiveness and emergence, other personality attributes exhibited inconsistent relationships with these two sets of leadership criteria. Also, Luthans (1988) contrasted managers who were successful, as evidenced by rapid promotion rates, with managers who were effective, as defined by unit performance and subordinate motivation. This comparison, although not perfectly analogous to the distinction between leader emergence and effectiveness, does suggest differences between these two criteria that may correspond to differences in predictive individual differences.

The question of whether the leader attributes predicting leader emergence differ significantly from those predicting leader effectiveness represents an important issue for future research. Judge et al.'s (2002) meta-analysis of personality attributes and leadership suggests both consistency and differences in personal attributes; however, there is not yet an overarching conceptual framework that elucidates the common and unique characterological predictors of different leadership criteria and how these alternate criteria relate to one another. For the purposes of the present analysis, the aforementioned definition of leader traits does not vary across distinctions in leadership criteria.

The third component in this definition of leader traits specifies leader attributes as relatively enduring, producing cross-situational stability in leadership performance. Crosssituational consistency, or coherence (James & Mazerolle, 2002), is, of course, a central element of most personality trait approaches (Funder, 2001). However, most personality theorists, and certainly leadership researchers, accept that actual behavior varies considerably across situations. This variability has been the crux for pure situational or person-situation models in personality theory. A review and summary of this argument and its potential resolution is beyond the scope of this paper (see Funder, 2001; Funder & Oser, 1983). However, similar observations and arguments fueled the rise of situational and contingency models in leadership research. Yet, some of the same observations and arguments offered by theorists to counter the premises of situational models in personality also apply to situational leadership models and, accordingly, buttress leader trait models. For example, several researchers have noted that earlier statistical estimates of the low predictability of leader traits were inaccurate (Judge et al., 2002; Keeney & Marchioro, 1998; Lord et al., 1986). Also, observations of low cross-situational stability in leader emergence have not been supported in other experimental studies (Ferentinos,

1996; Zaccaro, Foti, & Kenny, 1991) or in reanalyses of the earlier research cited as evidence for situational specificity (Kenny & Zaccaro, 1983).

The offered definition of leader traits rests on the characteristics that distinguish effective leaders from nonleaders. An interesting question that has not received much attention in the research literature pertains to the qualities that distinguish effective leaders from other high-performing individuals.¹ Effective leadership represents one form of high performance. The inherently social nature of leadership (Yukl, 2006; Zaccaro, 2004) may be the key factor that contrasts this form from other forms of high performance. Successful and effective leadership means, fundamentally, influencing others by establishing a direction for collective effort and managing, shaping, and developing the collective activities in accordance with this direction (Jacobs & Jaques, 1991; Zaccaro, 2001). Accordingly, the specification of corresponding leader traits and individual differences should be more grounded in social dynamics that characterize this form of high performance than other forms that derive from the more solitary endeavors of the performer. This specification does not argue, however, that effective leadership as high performance is completely distinct from other forms of high performance; effective problem-solving processes are likely to be important precursors of all types of achievement effectiveness, including leadership (Mumford, Zaccaro, Harding, et al., 2000; Zaccaro et al., 2000). The question of distinctions and commonalities between leadership as a form of high performance and other forms of successful achievement represents an interesting and important challenge for future research.

The enduring quality of leader attributes does not mean that they are immutable. Some leader attributes, particularly those described earlier as statelike, can be altered substantially through maturation, experience, and targeted training interventions. Indeed, the acquisition of leader skills and expertise occurs mostly through experience and training and often exhibits a constant evolution in effective leaders. However, other attributes, more traditionally traitlike in nature, are not likely to be as malleable. These differences point, again, to the situation as an important determinant of leadership growth and performance.

The Role of Situation

Although, in this article, I argue for renewed consideration of leader traits as important sources of variance in leader effectiveness, I do not, by any means, wish to minimize the importance of the leader's situation. Despite considerable research during a period of about 50 years, however, the role of the situation for the leader stills needs some clarity. Specifically, three arguments can be posed regarding the leader's situation (see the exchange of letters between Robert Sternberg and Victor Vroom [Sternberg & Vroom, 2002] that discuss related and broader issues regarding leader individual differences and leadership situations). First, as noted above, some individual differences exhibit strong cross-situational influences in their effects on performance, whereas others are more situationally related. For example, leadership skills and expertise are likely to be more closely bound and constrained by situational requirements. Individuals with particular kinds of skills and expertise can, indeed, be leaders in one situation but not in others that require very different knowledge and technical skill sets. However, note that general or more cross-situational traits are likely to act as precursors to the development and attained level of particular skills and expertise. Accordingly, their influences on leader effectiveness are likely to be more distal, although still significant. Situational determinants become more salient for those leader attributes that are more proximal to performance.

The second argument regarding the leader situation reflects the crucial distinction between who the leader is and what the leader does to be effective (cf. Sternberg & Vroom, 2002). The behavioral acts that leaders need to display to perform effectively will vary widely across different situations. However, the same individuals can and do serve as leaders across situations that entail different performance requirements, and they do so effectively (Kenny & Zaccaro, 1983; Zaccaro, Foti, & Kenny, 1991). Leader effectiveness reflects, fundamentally, an ability to respond appropriately across different dynamic organizational requirements (Zaccaro, Gilbert, Thor, & Mumford, 1991). To do so, leaders need to be able to display an array of different approaches and styles to leadership. The crucial question then becomes whether leaders are capable of displaying significant behavioral variability; if not, then, indeed, persons can be leaders only in specific situations that are commensurate with their mix of attributes. However, several prominent leadership theories and models, including some situational perspectives, can accept as part of their basic premises both leader constancy and behavioral variability (e.g., Dansereau, Graen, & Haga, 1975; Hersey & Blanchard, 1969; House, 1971; Vroom & Yetton, 1973). Further, Hooijberg and colleagues (Hooijberg, 1996; Hooijberg & Quinn, 1992) argued that effective leaders have an expansive behavioral repertoire and can effectively apply the appropriate responses to different situations (see also Zaccaro, Gilbert, et al. 1991; Zaccaro, 2002). These studies support the argument that contextual parameters determine leadership behavior but may play less of a role in determining the leader role occupant.

The third argument about the leader situation follows from the second argument and, actually, refers to the specification of leader traits relative to situational dynamism. Most prominent and traditional treatments of leader traits assume behavioral constancy, that is, a trait presumably reflects a behavior pattern that remains stable across different types of situations. Recently, however, researchers have argued for traits and attributes of the leader that promote an ability to adapt and change one's behavior as the situation changes. These attributes include cognitive complexity, cognitive flexibility, metacognitive skills, social intelligence, emotional intelligence, adaptability, open-

¹ I want to acknowledge and thank an anonymous reviewer for raising this point.

ness, and tolerance for ambiguity (Boal & Whitehead, 1992; Kozlowski, Gully, Salas, & Cannon-Bowers, 1996; McCrae & Costa, 1987, 1990; Ployhart & Bliese, 2006; Streufert & Swezey, 1986; Zaccaro, 2001, 2002). These characteristics are enduring qualities of the leader, that is, traits that foster behavioral variability in response to situational variability. This point of view can account for both the importance of situational parameters as the primary source of variance in leadership behavior (i.e., what the leader does) and the importance of traits as the primary source of variance in leader role occupancy (i.e., who the leader is).

The Ebb and Flow of the Leader Trait Perspective

These views of leader traits and the leader situation have evolved from several earlier perspectives of leadership. Although the rise and fall (and rise, again) of leader traits often has been described in stark terms in most textbooks, the reality of their prominence in leadership research is more ambiguous (Day & Zaccaro, 2007). The decline in the popularity and esteem of the leader trait perspective is, perhaps, most traceable to Stogdill's (1948) review. After surveying research from 1904 to 1947, he stated, "The evidence suggests that leadership is a relation that exists between persons in a social situation, and that persons who are leaders in one situation may not necessarily be leaders in other situations" (p. 65). This statement (along with reviews by Bird, 1940, Jenkins, 1947, and Mann, 1959) has been cited ubiquitously as sounding the death knell for the leader trait perspective. Indeed, during the next 30 years, many textbooks disclaimed that leaders were different from followers in their personal attributes. Consider these examples:

Under one set of circumstances an individual will be a good leader and under others he will be a poor one. (Ghiselli & Brown, 1955, p. 47)

The conclusion . . . that leaders do not differ from followers in clear and easily recognized ways, remains valid. (Baron & Byrne, 1987, p. 405)

These observations prompted the movement to a more situational view of leadership. Some frameworks offered contingency models, emphasizing the interaction between traits and situations (Fiedler, 1964, 1971; Fiedler & Garcia, 1987), whereas others stressed primarily the leadership situation (e.g., House, 1971; Vroom & Yetton, 1973). However, Stogdill's (1948) next sentences, which appear in the same paragraph as his famous quote and have never been cited as far I know, stated the following:

Must it then be assumed that leadership is entirely incidental, haphazard, and unpredictable? Not at all. The very studies which provide the strongest arguments for the situational nature of leadership also supply the strongest evidence that leadership patterns as well as non-leadership patterns of behavior are persistent and relatively stable. (p. 65)

Accordingly, Stogdill, in his 1948 review and in his updated review (1974; see also a further update by Bass,

1990), listed several personal qualities that distinguish the "average person who occupies a position of leadership" from "the average member of his group" (Stogdill, 1948, p. 63). So do most of the other oft-cited reviews of leader qualities, such as the review in which Mann (1959) stated that "a number of relationships between an individual's personality and his leadership status in groups appear to be well established" (p. 252). However, these nuances and observations were lost in the shifting zeitgeist to situationism and interactionism in the 1950s and 1960s. This shift cannot be considered to have been entirely data driven. Although the observed associations between leader attributes and leadership criteria were not impressive, neither were they negligible, especially given the strong likelihood that their sizes were attenuated by a host of measurement errors and biases (Gibb, 1954; Zaccaro et al., 2004). Indeed, subsequent meta-analyses of leader characteristics and personality that were designed to correct for some of these attenuating factors consistently demonstrated significant effects (Day, Schleicher, Unckless, & Hiller, 2002; Judge et al., 2002; Keeney & Marchioro, 1998; Lord et al., 1986).

What about Stogdill's (1948) assertion that persons can be leaders in one situation but not necessarily in others? The premise of situational constancy in leader role occupancy was tested in a series of rotation design studies (Kenny & Zaccaro, 1983) in which aspects of the situation, such as group membership or group task, are altered, with situational variations presumably calling for different leader performance requirements. Team members are then evaluated on indices of leader emergence. Several early studies (Barnlund, 1962; Bell & French, 1950; Borgatta, Couch, & Bales, 1954; Carter & Nixon, 1949; Gibb, 1947) concluded, on the basis of their results, that leader emergence was indeed situationally grounded: Leaders in one situation did not tend to emerge in other situations. However, as in earlier leader attribute studies, both methodological and measurement issues attenuated the magnitude of these effects, as well. For example, all of these studies, with the exception of Barnlund (1962), failed to vary both group membership and group task, rendering them inadequate tests of the situational constancy argument. Regarding the Barnlund (1962) study, in which authors used the more complete design, Kenny and Zaccaro (1983) reexamined the data from this study using more sophisticated statistical models. They found that, contrary to Barnlund's (1962) original conclusions, between 49% and 82% of the variance in leader emergence could be attributed to properties of the leader. In other more recent studies, researchers reported similar conclusions from rotation designs that also varied task and group membership (Ferentinos, 1996; Zaccaro, Foti, & Kenny, 1991). Simply put, persons who emerge as leaders in one situation also emerge as leaders in qualitatively different situations.

Stogdill's (1948) review, although cited as evidence against leader traits, contained conclusions supporting an individual difference argument, as did Mann's (1959) study. In the subsequent meta-analyses of these earlier studies (e.g., Lord et al, 1986), and in the results of the rotations design studies, researchers suggested that the earlier data on leader traits and outcomes were stronger than stated in most interpretations. Yet, in contravention to these findings, the shift in the leadership literature to a more situational or interactionist approach to leadership was fairly ubiquitous, certainly more than warranted by the data. Why was the shift to an alternate view so pervasive and long lasting in mainstream leadership literature? Day and Zaccaro (2007) argued that this changing zeitgeist in leadership research reflected the growing focus on leadership by social psychologists during the mid 1930s to the late 1940s. Led by Lewin's classic premise that behavior derives from person and environment factors, social psychologists emphasized the context as the predominant impetus for understanding most behavior. This orientation became applied to leadership.

The emergence of situational perspective in leadership studies dates from the research programs occurring at Ohio State University and the University of Michigan, and both programs reflected the influence of this social psychological perspective. For example, Ed Fleishman, one of the major contributors to the Ohio State University program, noted that Lewin's classic study of leadership climate (Lewin, Lippitt, & White, 1939) greatly influenced his own dissertation (also a classic; E. A. Fleishman, personal communication, April 14, 2003). The suggestion of this focus to Fleishman came from John Hemphill, who, during his graduate career, was, in turn, mentored by a social psychologist. The University of Michigan program also reflected this perspective through the leadership studies of Daniel Katz (Katz, Maccoby, Gurin, & Floor, 1951; Katz, Maccoby, & Morse, 1950) as well as the Institute of Social Research, which was attended by several of Lewin's students.

Although the prevailing zeitgeist in the leadership literature from 1950 to 1980 was predominantly situational, individual differences still were evident in several research lines, particularly in the practices of industrial psychologists. This research tended to take place with organizational managers using advancement and promotion as criteria. Research by Miner (1978) and McClelland and Boyatzis (1982) provided evidence linking motivational traits to managerial advancement and effectiveness. Bray, Campbell, and Grant (1974) conducted longitudinal research linking attributes such as achievement motivation, interpersonal skills, intelligence, and administrative skills to levels of attained positions 20 years later. Looking at failure to advance, McCall and Lombardo (1983) identified managerial attributes that derailed rising executives from attaining high positions.

In these and other studies (e.g., Bentz, 1967; Boyatzis, 1982), researchers provided substantial empirical evidence that supported trait-based leadership perspectives. However, with some exceptions, this research tradition tended to be atheoretical, without a systematic conceptual framework that explained how or why particular leader attributes were to be associated with targeted leadership criteria. This lack may have diminished the potential influence of the attributes on the stream of leadership thought. Indeed, the paucity of conceptual models relating leader characterological attributes to leadership processes and outcomes has been an early and ongoing problem (Zaccaro et al., 2004). These models need to specify how different leader attributes operate in joint or multiplicative ways to affect leadership outcomes as well as to provide mediating mechanisms by which such attributes exert influence.

A Model of Leader Traits and Leadership

Zaccaro et al. (2004) offered a model of how leader attributes influence indicators of leader performance. This model, shown in Figure 1, is based on other models of



Note. From "Leader Traits and Attributes," by S. J. Zaccaro, C. Kemp, & P. Bader, 2004, in J. Antonakis, A. T. Cianciolo, and R. J. Sternberg (Eds.), The Nature of Leadership (p. 122), Thousand Oaks, CA: Sage. Copyright 2004 by Sage Publications. Reprinted with permission.

leader individual differences and performance (Mumford, Zaccaro, Harding, Fleishman, & Reiter-Palmon, 1993; Mumford, Zaccaro, Harding, et al., 2000) and rests on several tested premises about leader traits. The first premise argues that leadership emerges from the combined influence of multiple traits. However, although many recent studies have taken a multivariate approach to maximize explained variance in leadership (e.g., Connelly et al., 2000; Hammerschmidt & Jennings, 1992; Judge et al., 2002), few studies have taken an integrated approach to describe how multiple traits are combined in optimal ways to jointly influence leadership. Zaccaro (2001) argued that effective executive leadership derived from an integrated set of cognitive abilities, social capabilities, and dispositional tendencies, with each set of traits contributing to the influence of the other. For example, although leaders may have the cognitive ability to derive complex mental representations of their operational environment, a low tolerance for ambiguity or low need for achievement may mitigate the leader's use of such abilities to solve organizational problems. Likewise, high intelligence that can be useful in problem construction and solution generation will be useless for leader effectiveness if the leader also does not have the social capacities to implement generated solutions.

In several recent studies, researchers have offered some evidence for the efficacy of this trait pattern approach to leadership (Bader, Zaccaro, & Kemp, 2004; Kemp, Zaccaro, Jordan, & Flippo, 2004; Smith & Foti, 1998). Kemp et al. (2004) assessed metacognition, tolerance for ambiguity, and social intelligence in military officers and found that rated performance on a 3-day decision-making simulation was stronger for officers who exhibited high levels of all three attributes. Officers who displayed lower scores on one or two of these attributes performed no more effectively than did officers who were low on all three attributes. Similar trait pattern findings in which researchers used different leader attributes have been reported by Bader et al. (2004) and Smith and Foti (1998).

A related line of research refers to leader types. Although this research has been limited in number, in some studies researchers have demonstrated how different combinations or patterns of individual differences influence leadership. McCaulley (1990) examined distinctions among the 16 types composing the Myers-Briggs Type Indicator (Myers, 1962; Myers & McCaulley, 1985) across levels of successful and unsuccessful leaders. Using these data, Zaccaro (2001) noted that intuitive/thinking types were somewhat more prevalent at higher organizational levels (Jacobs & Jaques, 1991). Bray et al. (1974) associated differences in leader types with career tendencies to embrace new experiences and learn from them. Mumford et al. (2000) identified seven different leader types among Army officers. Three of the types were more characteristic of upper level officers, whereas differences in problemsolving skills and patterns of career development were discerned across the seven types. In these studies, researchers argue for a more sustained focus on leader types. For example, are there generic leader types that (a) are exhibited consistently across different organizational contexts and (b) demonstrate consistent relationships with leadership criteria across these contexts? Also, what are the dynamics and conceptual connections that bind different characteristics to particular types, and how do these connections relate, conceptually, to leadership criteria? The studies to date suggest that future efforts at examining and addressing these and other related questions can provide a promising frontier in research on leader traits and attributes.

The model in Figure 1 defines several integrated sets of leader attributes, including cognitive capacities, personality or dispositional qualities, motives and values, problem-solving skills, social capacities, and tacit knowledge (Mumford, Zaccaro, Harding, et al., 2000). Reviews by Bass (1990), Zaccaro (2001), Zaccaro et al. (2004), and Yukl (2006) have specified the particular attributes that belong in each of these sets. For example, cognitive capacities include general intelligence, cognitive complexity, and creativity. Dispositional attributes include adaptability, extroversion, risk propensity, and openness. Motives and values include need for socialized power, need for achievement, and motivation to lead. Social capacities include social and emotional intelligence as well as persuasion and negotiation skills. Problem-solving skills include metacognition, problem construction and solution generation, and self-regulation skills. This list is by no means exhaustive; readers are referred to the references noted previously in this paragraph for more extensive treatments of specific leader attributes.

As noted previously, some of these characteristics are more situationally bound than others. For example, the weighted contributions of certain leadership skills vary across different situations. Likewise, expertise and tacit knowledge are even more strongly linked to situational performance requirements. Nonetheless, several cognitive, social, and dispositional variables will exert a constant, stable, and significant influence on leadership, relatively independent of situational influences (see reviews by Bass, 1990; Zaccaro, 2001; Zaccaro et al., 2004; see also metaanalyses by Judge & Bono, 2000; Judge et al., 2002; Lord et al., 1986).

Another premise of the model in Figure 1 argues that leader traits differ in their proximal influence on leadership. This model is a multistage one in which certain distal attributes serve as more universal precursors for the growth and development of more situationally bound and proximal personal characteristics (Ackerman & Humphreys, 1990; Barrick, Mitchell, & Stewart, 2003; Chen et al., 2000; Hough & Schneider, 1996; Kanfer, 1990, 1992; Mumford, Zaccaro, Harding, et al., 2000). These attributes serve as foundational or basic qualities that promote core effectiveness across most generic leadership situations. Proximal traits include attributes such as problem-solving skills, social appraisal and interaction skills, and knowledge. The leader trait model specifies the proximal traits as precursors to leadership processes that, in turn, predict leadership outcomes. Situational influences help determine the weighted contribution of particular skills (Yukl, 2006). For example, changes in performance requirements across organizational levels will alter the importance or contribution of particular traits and trait patterns (Hunt, 1991; Zaccaro, 2001). Likewise, certain group parameters (such as cohesion and collective expertise) and certain organizational variables (such as degree of formalization, types of structure, and support for innovation) can inhibit or constrain the practice of leadership, regardless of particular leader qualities (Kerr & Jermier, 1978). Situational influences, then, moderate (a) the effects of specific proximal attributes (e.g., expertise) on leadership processes and (b) the effects of processes on leadership outcomes (Zaccaro et al., 2004). The quality and level of these proximal skills, however, are fundamentally defined by more universal distal traits.

This model, then, integrates situational influences into a framework that remains grounded in the stable individual differences distinguishing leaders from nonleaders. However, as noted previously, the role of the leader's situation and of situation moderators remains ambiguous. In future studies, researchers need to disentangle the importance of context as a factor in the relationships between leader attributes and performance. Although Fiedler's (1964, 1971) contingency model provided an important perspective on this issue, Zaccaro and Klimoski (2001) defined the leadership context in broader terms. They argued that theories of organizational leadership need to specify more clearly how context shapes the performance requirements for leaders and how attributes of leaders promote consistent effectiveness across varying organizational requirements.

Leader Traits and Leader Development

The model in Figure 1 describes how leader traits and attributes shape subsequent leader performance and other leadership criteria. As expected, the relationship is not simple or direct. The influences of distal attributes are mediated by proximal attributes, whereas the effects of the latter are mediated by leadership processes and are moderated by aspects of the leader's operating environment. Note that distal attributes provide the foundation for the emergence and growth of proximal attributes as well as the level of their display by leaders. This is a complex model of leader attributes and performance, and many of its proposed categorical linkages have received limited tests. Accordingly, in future studies, researchers need to focus on expanding and testing parts of this model.

The model in Figure 1 suggests several implications for leader development. Distal or foundational attributes are likely to be relatively immune to most typical leader development interventions. These interventions emphasize proximal attributes such as skills and requisite behavior patterns. Systematic and long-term interventions may have some impact on distal attributes: For example, the Army leader development system has a career-long perspective that emphasizes different courses and operational assignments as a leader ascends the organizational ranks. However, the question remains open (and is an important focus for future research) as to whether such a system can, indeed, foster changes in fundamental qualities such as cognitive complexity, social intelligence, and openness to experience.

Because distal attributes tend to be relatively immutable, most companies are likely to assess a candidate's readiness for leader development on the basis of his or her level of attainment on such qualities (Zaccaro, Wood, & Herman, 2006). However, subsequent interventions will tend to focus on development and change in particular skills, competencies, and expertise, which are defined as contributors to effective leadership in future anticipated roles. That is, proximal attributes, such as these qualities, are more malleable and susceptible to sustained and systematic intervention. Recent treatises (Day, 2000; Day, Zaccaro, & Halpin, 2004; McCauley & Van Velsor, 2004; Mumford, Marks, Connelly, Zaccaro, & Reiter-Palmon, 2000; Zaccaro & Banks, 2004; Zaccaro et al., 2006) speak more fully to the role of development in shaping growth in leader attributes and leadership capacity. Different types of developmental assignments, particularly those that stretch the existing expertise and capabilities of the leader (McCauley, Eastman, & Ohlott, 1995; Ohlott, 2004), will have varying effects on different sets of leader skills. The timing of these assignments, relative to emerging leader performance requirements, also will determine their efficacy in shaping the development of particular leader attributes (Mumford, Zaccaro, Johnson, et al., 2000; Zaccaro et al., 2006). These propositions remain important issues for future research on leader traits. Specifically, researchers need to do more empirical studies to examine precisely how different developmental interventions promote growth in particular leader qualities and what training strategies are most suited for particular sets of proximal leader attributes.

In this article, I have discussed leader traits primarily as precursors to leader effectiveness. However, certain personal attributes promote how leaders learn and grow from experience. Indeed, Tesluk and Jacobs (1998) defined several means by which individual differences can influence experiencebased development. Traits such as openness to experience and risk tolerance can determine the likelihood that individuals will approach and accept developmental or stretching assignments. Also, cognitive and motivational attributes, such as metacognitive skills, self-regulation skills, mastery motives, and learning goal orientation, may influence how much knowledge and information a leader derives from his or her experience. Along this line, Banks, Bader, Fleming, Zaccaro, and Barber (2001) reported that developmental work experiences resulted in tacit knowledge gains in Army officers only when they had the requisite metacognitive skills and cognitive complexity to interpret the lessons offered by such experiences. Thus, traits and attributes are important not only for the leader's present effectiveness but also for acquiring, from training and experience, the kinds of more situationally based and proximal skills that are likely to predict effectiveness in future contexts that reflect more complex performance requirements (Mumford, Marks, et al., 2000; Zaccaro et al., 2006).

Conclusion

I have made five arguments in this article. First, the prior rejection of trait-based approaches was not sufficiently founded on empirical bedrock. Second, a substantial and growing empirical research base argues for traits that are significant precursors of leadership effectiveness. Third, combinations of traits and attributes, integrated in conceptually meaningful ways, are more likely to predict leadership than are independent contributions of multiple traits. Fourth, dominant leader trait patterns are likely to be those that reflect an individual's stable tendency to lead in different ways across disparate organizational domains. Finally, some leader traits have more distal influences on leadership processes and performance, whereas others have more immediate effects that are integrated with, and influenced by, situational parameters.

Despite the long history of the trait-based approach and its recent resurgence, a consensus about the role of leader traits, the magnitude and mechanisms of their influence, and the determining role of leadership situations has remained elusive. In the arguments offered here, I mean to provide a basis for more conceptually driven and sophisticated research. Throughout this article, I have offered a number of possible future directions. Such research, paired with the methodological and statistical innovations that, in part, fueled the resurgence in the study of leader traits, may provide the means of defining the basis for the extraordinary qualities of effective leaders.

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The Role of the Situation in Leadership

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Leadership depends on the situation. Few social scientists would dispute the validity of this statement. But the statement can be interpreted in many different ways, depending, at least in part, on what one means by leadership. This article begins with a definition of leadership and a brief description of 3 historically important theories of leadership. The most recent of these, contingency theories, is argued to be most consistent with existing evidence and most relevant to professional practice. The Vroom, Yetton, and Jago contingency models of participation in decision making are described in depth, and their work provides the basis for identifying 3 distinct ways in which situational or contextual variables are relevant to both research on and the practice of leadership.

Keywords: participation, situational leadership, normative models, contingency theory

he term *leadership* is ubiquitous in common discourse. Political candidates proclaim it, organizations seek it, and the media discusses it ad nauseum. Unfortunately, research on leadership has done little to inform these endeavors. As Bennis and Nanus (1985) have noted,

Literally thousands of empirical investigations of leaders have been conducted in the last seventy-five years alone, but no clear and unequivocal understanding exists as to what distinguishes leaders from nonleaders, and perhaps more important, what distinguishes *effective* leaders from *ineffective* leaders. (p. 4)

Although this assertion is over 20 years old, our position is that any serious review of the more recent literature would reveal that the quote is as relevant today as it was then.

One of the problems stems from the fact that the term *leadership*, despite its popularity, is not a scientific term with a formal, standardized definition. Bass (1990) has lamented the taxonomic confusion by suggesting that "there are almost as many definitions of leadership as there are persons who have attempted to define the concept" (p. 11).

In this article, we begin by examining a set of issues surrounding the definition of leadership. Then we pursue our central objective to examine the role of situational factors in leadership. Our focus is on the leadership of organizations—public, private, or nonprofit—rather than leadership in political, scientific, or artistic realms.

The Definitions of Leadership

Virtually all definitions of leadership share the view that leadership involves the process of influence. One thing that all leaders have in common is one or more followers. If no one is following, one cannot be leading. One person, A, leads another person, B, if the actions of A modify B's behavior in a direction desired by A. Note that this definition of leading is restricted to intended influence. Eliminated are instances in which the influence is in a direction opposite of that desired by A or in which changing B's behavior was not A's intention.

If leading is influencing, then what is leadership? Clearly, if this term is useful, it refers to a potential or capacity to influence others. It is represented in all aspects of a process that includes the traits of the source of the influence (see Zaccaro, 2007, this issue), the cognitive processes in the source (see Sternberg, 2007, this issue), the nature of the interaction that makes the influence possible (see Avolio, 2007, this issue), and the situational context that is the subject of this article.

Note that the definition given above makes no mention of the processes by which the influence occurs. There are, in fact, a myriad of processes by which successful influence can occur. Threats, the promise of rewards, well-reasoned technical arguments, and inspirational appeals can all be effective under some circumstances. Do all of these modes of influence qualify as leadership? It is in the answer to this question that leadership theorists diverge. Some restrict the term *leadership* to particular types of influence methods, such as those that are noncoercive or that involve appeals to moral values. Others use the form of influence not as a defining property but as the basis for distinguishing different types of leadership. For example, Burns (1978) distinguished between transactional and transformational leadership, terms that are described in more detail by Avolio (2007). Similarly, other scholars have written about charismatic leadership (Conger & Kanungo, 1998), tyrannical leadership (Glad, 2004), and narcissistic leadership (Kets de Vries & Miller, 1985).

Another point of difference among definitions of leadership lies in their treatment of the effects of influence. Most theorists assume there is a close link between

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leadership and the effectiveness of a group or organization. If fact, organizational effectiveness is often taken as a strong indication of effective leadership. Exhibiting leadership means not only influencing others but also doing so in a manner that enables the organization to attain its goals. The usefulness of adding effectiveness to the definition of leadership has recently been questioned by Podolny, Khurana, and Hill-Popper (2005). They noted the tenuous connections between these two variables in economic organizations and suggested that leadership be defined as a process of "meaning-making" (p. 1) among organizational members.

We support disentangling the definition of leadership from organizational effectiveness. Not only is the effectiveness of an organization influenced by many factors other than the quality of its leadership, but there are many processes by which leaders can impact their organizations that have little or nothing to do with what is defined as leadership. For example, mergers and acquisitions, changes in organizational structure, and layoffs of personnel may have great impact on shareholder value but do not necessarily embody the influence process integral to leadership. One would expect leadership as defined here to contribute to organizational effectiveness, but it would be neither necessary nor sufficient for achieving it.

To the myriad of definitions that have been put forward over the years, we offer the following working definition that will, at least, serve the objectives of this article. We see leadership as a process of motivating people to work together collaboratively to accomplish great things. Note a few implications of this definition.

- 1. Leadership is a process, not a property of a person.
- 2. The process involves a particular form of influence called *motivating*.

- 3. The nature of the incentives, extrinsic or intrinsic, is not part of the definition.
- 4. The consequence of the influence is collaboration in pursuit of a common goal.
- 5. The "great things" are in the minds of both leader and followers and are not necessarily viewed as desirable by all other parties.

A Heroic Conception of Leadership

Most early research on leadership was based on an assumption that has been largely discredited. Leadership was assumed to be a general personal trait independent of the context in which the leadership was performed. We refer to this as a *heroic* conception of leadership. Heroic models originated in the great man theory of history proposed by 18th-century rationalists such as Carlyle, Nietzsche, and Galton. Major events in world history were assumed to be the result of great men whose genius and vision changed the world in which they lived. Among psychologists, William James (1880) stressed that the mutations of society were due to great men who led society in the directions they believed to be important.

The development of psychological testing in the early part of the 20th century provided the potential for testing the trait concept. If leadership is a general personal trait, it should be measurable, and people with a high level of this trait could be placed in positions requiring their talents. If the heroic model proved to be correct, society could enormously benefit through improved leader selection.

Efforts to test this heroic model have compared the traits of leaders with followers and effective leaders with those who were ineffective. The psychological tests used have ranged from tests of aptitude and ability, including intelligence, to personality tests measuring traits such as extroversion, dominance, and masculinity.

A detailed summary of all of this work is beyond the scope of this article. Zaccaro (2007), whose article appears in this special section, discussed the evidence in more detail. Stogdill, who reviewed 124 studies, noted substantial variability in the findings reported by different investigators. He stated that "It becomes clear that an adequate analysis of leadership involves not only a study of leaders, but also of situations" (Stogdill, 1948, pp. 64–65).

Reviews such as those by Stogdill (1948) gave pause to those investigators looking for the components of the trait of leadership. Beginning in the 1950s, there was a move away from dispositional variables as the source of leadership to other and possibly more promising approaches. Zaccaro (2007) made the case for resurrecting the study of leadership traits, arguing that their rejection was premature and based on something other than an unbiased appraisal of the evidence.

Although the notion of leadership has declined as a starting point for research, it still constitutes the prevalent view held by the general public (see Avolio, 2007). In their article, Hackman and Wageman (2007, this issue) sought to account for this discrepancy with their concept of the leader attribution error.



Arthur G. Jago

The Search for Effective Leader Behaviors

Disenchantment with the search for universal traits of leadership led to a new movement in leadership research in the 1950s and 1960s. This research was primarily located in two universities: Ohio State University and the University of Michigan. The shared focus of both research programs was an interest in how leaders behave. They were not concerned with leadership traits as indicated by performance on standardized tests but rather with the leader's actions in carrying out the leadership role. The Ohio State studies, for example, focused on the independent behavioral dimensions of consideration and initiating structure. The former dealt with the establishment of mutual trust, two-way communication, rapport, and a concern for the employee as a human being both in and out of the work setting. The latter dealt with defining working relationships, work schedules, work methods, and accomplishment.

Leader behavior research was a step in the direction of acknowledging the role of situation or context in leadership. Unlike traits, behavior is potentially influenced not only by the leaders' dispositions but also by the situations that leaders confront. For example, Lowin and Craig (1968), in an imaginative laboratory experiment, showed that leaders confronted with ineffective teams behaved in a much less considerate and supportive manner than those confronted with effective teams. Leader behavior can therefore be an effect of subordinate behavior as well as a cause of it.

Nonetheless, the Ohio State University and University of Michigan studies were primarily concerned with the consequences of leader behavior as opposed to its antecedents. Furthermore, in measuring leadership behavior, they focused exclusively on what leaders did most of the time or on average rather than on the context of the behavior or how that context might cause a shift in behavior from that average.

We conclude that neither of the two approaches to the study of leadership addressed so far has produced a solid body of scientific evidence sufficient to guide practice. The relationships between leader behavior and effectiveness varied markedly from one study to another. Neither the behavior of leaders in carrying out their leadership roles nor the nature of the challenges they met did justice to the complexity of the phenomena. Today, most researchers include situational variables in their investigations, either as determinants of leader behavior or as moderating variables interacting with traits or behavior.

The Pure Situational Theory

We turn now to our central task of exploring theories and research examining the role of situational factors in leadership. In discussing the heroic model, we examined its historical origins in the great man theory of history. The antithesis of this movement was an environmental position proposed by many philosophers, including Hegel and Spencer. They saw "great men" as merely puppets of social forces. These forces selected people for positions of leadership and shaped their behavior to coincide with social interests.

In a similar vein, Perrow (1970) argued that the real causes of effective and ineffective organizational leadership reside in structural features rather than the characteristics of the people who lead those organizations. The traits of leaders reflect the mechanisms by which they are selected, and their behavior is constrained by the situations that they face. Perrow argued that leadership should be viewed as a dependent rather than an independent variable. To put it differently, the traits and behavior of leaders are mediating variables between structural antecedents and organizational outcomes. Supporting this position are longitudinal studies of changes in organizational effectiveness during periods in which organizations had changes in top leadership (Lieberson and O'Connor, 1972; Salancik & Pfeffer, 1977). Their data show that very little of the variance in organizational outcomes could be explained by changes in leadership. Pfeffer (1977) concluded, "If one cannot observe differences when leaders change, then what does it matter who occupies the positions or how they behave?" (p. 108). Similarly, on the basis of their study of 46 college and university presidents, Cohen and March (1974) compared the role of organizational leaders with that of a driver of a skidding car, adding that "whether he is convicted of manslaughter or receives a medal for heroism is largely outside his control" (p. 203).

The argument that the attributes of the leader are irrelevant to organization effectiveness has three components: (a) Leaders have very limited power (much less than is attributed to them), (b) candidates for a given leadership position will have gone through the same selection screen that will drastically curtail their differences, and (c) any remaining differences among people will be overwhelmed by situational demands in the leadership role.

When these assumptions are valid, it is easy to see that individual differences would be largely irrelevant to leadership. But how frequently are they valid? Most leaders are not figureheads; selection criteria may reduce the variance in individual differences but they do not eliminate it; and many of the challenges facing leaders are ambiguous, replete with uncertainty, and leave lots of room for differences in interpretation and action.

Most social scientists interested in leadership have now abandoned the debate between person or situation in favor of a search for a set of concepts that are capable of dealing both with differences in situations and with differences in leaders. We follow convention in referring to these as *contingency theories*. Empirically, contingency theories guide research into the kinds of persons and behaviors who are effective in different situations.

Fiedler's Contingency Model

The first psychologist to put forth a fully articulated model dealing with both leader traits and situational variables was Fred Fiedler (1967). He divided leaders into relationship-motivated and task-motivated groups by means of their relatively favorable or unfavorable description of the leader's least preferred coworker on a set of bipolar adjectives. Fiedler studied the relative effectiveness of these two types of leaders in eight different situational types created by all combinations of three dichotomous variables: (a) leader–member relations, (b) follower–task structure, and (c) leader–position power. Fiedler found that the relationship-motivated leader outperformed the task-motivated leader in four of the eight situations but that the reverse was true in the other four situations.

Fiedler argued that one's leadership motivation is a rather enduring characteristic that is not subject to change or adaptation. Hence it is closer to a trait description than to a behavior description. For this reason, he eschewed the type of leadership training that the Ohio State University or University of Michigan studies may have suggested (Fiedler, 1972, 1973) or selection techniques that the earlier trait research favored. The implication of Fiedler's theory is for a leader to be placed in a situation that is favorable to his or her style. Short of that as a possibility, he favored trying to "engineer the job to fit the manager" (Fiedler, 1965); that is, altering one or more of the three situational variables until a fit with the leader is achieved (Fiedler & Chemers, 1984).

Two meta-analyses of the original work and subsequent studies provide at least partial support for this theory (Peters, Hartke, & Pohlmann, 1985; Strube & Garcia, 1981). Nonetheless, the theory has also generated considerable theoretical and methodological controversy over the years (e.g., Ashour, 1973; Kerr, 1974; McMahon, 1972; Schriesheim & Kerr, 1977; Shiflett, 1973; Vecchio, 1977). In spite of the controversies, it is clear that Fiedler was a pioneer in taking leadership research beyond the purely trait or purely situational perspectives that preceded his contribution.

Path-Goal Theory

Shortly after the publication of Fiedler's theory, a group of psychologists (Evans, 1970; House, 1971; House & Dessler, 1974; House & Mitchell, 1974) advanced a contingency theory that attempted to resolve some of the inconsistent and contradictory results that had emerged in research on consideration and initiation structure after the original Ohio State University studies. This theory suggests that the leader's role is to create and manage subordinate paths toward individual and group goals, to clarify expectations, and to supplement the environment when sufficient rewards from the environment are lacking. The effectiveness of consideration and initiating structure (and two additional behaviors, achievement-oriented leadership and participative leadership) are thought to depend on contingency factors found in (a) subordinate characteristics (e.g., authoritarianism, locus of control, ability) and (b) environmental characteristics (e.g., task, authority system, work group). When behaviors are properly matched to the situation, job satisfaction is produced, acceptance of the leaders occurs, and effort to performance and performance to reward expectations are elevated (House & Mitchell, 1974).

One well-established hypothesis from path–goal theory is that initiating structure (sometimes referred to as directive or instrumental behavior) will be effective in situations with a low degree of subordinate task structure but ineffective in highly structured subordinate task situations. In the former situation, followers welcome such behavior because it helps to structure their somewhat ambiguous task, thereby assisting them in goal achievement. In the latter situation, further structuring behavior is seen as unnecessary and associated with overly close supervision.

A meta-analysis (Indvik, 1986) is largely supportive of the key propositions in the theory, although some have suggested that the theory is still being developed and testing is incomplete (Evans, 1996; Schriesheim and Neider, 1996). The practical applications of this theory, although not yet developed, would be to the training of leaders rather than selection (trait studies) or placement (Fiedler's model). However, this training would go beyond the skills used in displaying consideration and initiating structure and would include skills in diagnosing the situation that one encounters and selecting the appropriate behavioral response to that diagnosis.

Normative and Descriptive Models of Leadership and Decision Making

Our own work (Vroom, 2000; Vroom & Jago, 1988; Vroom & Yetton, 1973) shares with path–goal theory a perspective on behavioral contingencies. However, our theory is much narrower in its focus. Specifically, it deals with the form in and degree to which the leader involves his or her subordinates in the decision-making process. As such, it does not presume to be a theory that encompasses all or even most of what a leader does. The sharpness of our focus nonetheless allows a great degree of specificity in the predictions that are made.

Likert (1961, 1967) has argued for a highly participative model of effective leadership largely on the basis of the University of Michigan studies mentioned earlier. However, more recent reviews and meta-analyses suggest that effectiveness of participation is far from a universal truth (Locke & Schweiger, 1979; Miller & Monge, 1986; Schweiger & Leana, 1986). Such variability in results suggests a contingency theory in which the effectiveness of participation is dependent on specific situational variables.

Our original work began with a normative or prescriptive model (Vroom & Yetton, 1973). Five decision processes were specified that ranged from highly autocratic through consultative to highly participative (i.e., consensus). Seven situational variables were identified that could vary with the decision encountered (e.g., decision importance, need for commitment, goal alignment, potential for conflict) and that would govern the most appropriate behavioral response. Prescriptive decision rules were created that eliminated certain decision processes from the *feasible* set when those processes threatened either decision quality and/or decision implementation for a specific situation. If multiple processes remained in the feasible set, the prescriptive theory gave discretion to the leader in choosing among them, perhaps using the opportunity costs (e.g., time) or developmental opportunities for subordinates as additional criteria for choice. In its most common representation, the prescriptive model takes the form of a decision tree with branches that apply rules relevant to a specific decision situation.

Six studies summarized in Vroom and Jago (1988) and other subsequent studies support the validity of the prescriptive model and its component rules. In an attempt to increase prescriptive validity, Vroom and Jago (1988) introduced five additional situational factors (e.g., severe time constraints) and increased the prescriptive specificity by using linear equations rather than decision rules. In two studies, researchers have examined the incremental improvements in the 1988 model (Brown & Finstuen, 1993; Field, 1998). Vroom (2000) has made further changes in the specification of key variables and the method of depicting model prescriptions.

In addition to conducting research on a normative model, Vroom and Yetton (1973) and Vroom and Jago (1988) have sought to understand how situations affect leader behavior. They gave leaders a set of 30 written cases, each describing a situation in which a leader was confronted with a problem to solve or decision to make. Each subject was asked to choose from a set of five decision processes, varying in the form and amount of participation provided by members of his or her team. Thus the dependent variable was one of behavioral intent rather than actual behavior. Various problem sets have been used over time, but each manipulates relevant situational variables in a systematic manner that reflects a within-person, repeated-measures, experimental design. When administered to a sample of managers, a problem set produces a two-dimensional data matrix. Each row represented the responses from a single manager to each of the 30 circumstances. Each column represented the responses elicited from different managers to a single situation.

In the analysis of these data, row variance was collapsed across columns, which produced something quite analogous to average style measures from the Ohio State University and University of Michigan studies. Vroom and Yetton (1973) and Vroom and Jago (1988) found that people are different in their overall levels of participation. But when they looked at all the variance in the Row × Column (Person × Situation) matrix, such preferred style differences only accounted for about 8-10% of the total variance. In the same matrix, situation, treated as a nominal variable, accounts for about 30% of the variance. As Vroom and Yetton (1973) noted more than 30 years ago, it makes more sense to talk about autocratic versus participative situations than autocratic versus participative leaders (although both types of differences exist).

Of even greater interest is what the matrix data reveal about how managers respond to specific types of situations (Vroom & Jago, 1988; Vroom & Yetton, 1973). Some of these implicit decision rules are widely shared among managers (e.g., becoming more participative when subordinates possess knowledge or expertise in the domain of the problem or decision than in situations where they do not). Other decision rules describe some leaders but not others. For example, two managers may be equally participative on average over the 30 cases. However, one may involve others in making important decisions but not in those that are unimportant, whereas the second manager does exactly the reverse. Similarly, in a study involving more than 1,000 managers, 38% of managers, referred to as conflict confronters, become more participative in high-conflict situations. A somewhat larger percentage (58%), called *conflict* avoiders, become more autocratic in a matched set of situations that were high in conflict.

Further studies using the Vroom, Yetton, and Jago methodology have also documented that leaders use complex decision rules that respond to configurations or combinations of situational dimensions (Jago, 1978). For example, responses to conflict often depend on whether acceptance or commitment on the part of subordinates is required. When it is important that subordinates accept a decision, leaders are less participative when conflict is likely than when it is not. However, when subordinates' acceptance is irrelevant, leaders are more participative when conflict is likely than when it is not. In the first case, leaders may believe that participation may exacerbate conflict, thereby reducing acceptance. In the second case, the same leaders may believe that conflict may be constructive and increase decision quality without jeopardizing subordinate acceptance. These analyses give cause to question Hill and Schmitt's (1977) representation of the decision maker as a linear processor of informational cues.

The Vroom, Yetton, and Jago approach to individual differences is strikingly similar to what Mischel discovered in studying the behavior of children in a summer camp:

The findings made clear that individuals who had similar average levels of a type of behavior (e.g., their overall aggression) nev-

ertheless differed predictably in the types of situations in which their aggressiveness occurs. A child characterized by a pattern of becoming exceptionally aggressive when peers approach him to play, but less aggressive than most other children when chastised by an adult for misbehaving, is different from one who shows the opposite pattern, even if both have similar overall levels of total aggressive behavior. Collectively, the results showed that when closely observed, individuals are characterized by stable, distinctive, and highly meaningful patterns of variability in their actions, thoughts, and feelings across different types of situations. These *if* \dots *then* \dots situation–behavior relationships provide a kind of "behavioral signature of personality." (Mischel, 2004, pp. 7–8)

Of course, there are differences between the two investigations. Mischel (2004) observed behavior in real situations, whereas Vroom and Yetton (1973) and Vroom and Jago (1988) observed behavior in situations that are hypothetical. But their conclusions are the same—that much of the variance in behavior can be understood in terms of dispositions that are situationally specific rather than general.

The Mischel (2004), Vroom and Yetton (1973), and Vroom and Jago (1988) research has given new life to the trait concept by defining it in terms of consistency in behavior in a class of situations. Not only is this a resolution of Mischel's personality paradox, but it also opens the doors to a new and potentially powerful method for training leaders (Vroom, 2003). Vroom and Jago (1988) described a four-day training program that used practice in the normative model and feedback to managers based on their responses to a standard set of cases. The cases were selected in accordance with a multifactorial design in which eight factors, all deemed relevant to power-sharing behavior, were varied. This made it possible to show each manager his or her unique decision rules. The managers were 159 department heads and directors in a large international travel and financial corporation. They were trained in groups of about 20, and the training was conducted at a variety of sites in Europe, North America, and Asia. The effects of the training were evaluated six months to two years after the training by questionnaires given to managers, peers, and subordinates of the trainees as well as measures given to the trainees themselves. The results showed that the managers became more participative after the training, particularly in situations in which participation was deemed effective by the normative model.

Since the original study, the model and training methods have been substantially altered and are now being used in at least a dozen different countries and in target populations ranging from MBAs to CEOs. Well over 100,000 managers have received both training in the normative model and detailed reports showing how their choices on standardized cases compared with those of the model, their peers, and a selected reference group (Vroom, 2003). Each report identifies the manager's implicit decision rules, how these implicit rules compare with the rules of others and with the model, and a set of individualized recommendations for improving one's effectiveness in this facet of leadership.

A Taxonomy of Situation Effects

What final conclusions can one draw about the role of situations in leadership? Our analysis had identified three distinct roles that situational variables play in the leader-ship process.

1. Organizational effectiveness (often taken to be an indication of its leadership) is affected by situational factors not under leader control. Although army generals, orchestra conductors, and football coaches receive adulation for success and blame for failure, successful performance is typically the result of the coordinated efforts of many. In open systems, including corporations, goal attainment is also influenced by the actions of competitors, enactment of new legislation, new technologies, interest rates, and currency fluctuations (to name just a few variables). All of these factors can have large effects on organizational effectiveness, making it difficult to discern leadership effects. It is these direct effects of situation that are one of the principal bases for what we have termed the pure-situational theory and have led some to conclude that leadership is entirely illusory. A far more sensible approach is to regard the potency of leadership to be a matter of degree and to attempt to discover the kinds of situations that determine when leadership makes a difference (see Hackman & Wageman, 2007).

2. Situations shape how leaders behave. Many years ago, Cronbach (1957) identified two distinct disciplines of psychology. One of these, represented by experimental and social psychology, was concerned with the effects of external events on behavior. The second was concerned with measurement of individual differences. Neither discipline was capable of explaining behavior by itself. People, including leaders, are affected by their environment as well as by fairly stable characteristics that predispose them to certain kinds of behavior. Unfortunately, the field of leadership has identified more closely with the field of individual differences and has largely ignored the way the behavior of leaders is influenced by the situations they encounter. The heroic model, with its search for a general trait of leadership, as well as the investigations of leader behavior at Ohio State University and the University of Michigan assumed a degree of invariance across situations that is seldom, if ever, observed.

The Vroom, Yetton, and Jago research (Vroom, 2000; Vroom & Jago, 1988; Vroom & Yetton, 1973) indicates the importance of incorporating the situation into the search for lawfulness rather than removing it. Their research, showing that situation accounts for about three times as much variance as do individual differences, underscores the important role that situational forces play in guiding action. But the lack of evidence for consistent individual differences should not be taken to mean that individual differences are largely irrelevant in leadership. It may simply mean that psychologists are looking in the wrong place for them!

The Vroom, Yetton, and Jago research (Vroom, 2000; Vroom & Jago, 1988; Vroom & Yetton, 1973) has pointed to the value of situation-specific trait descriptions, described as consistent behavior patterns in specific kinds of contexts. Mischel (2004) referred to these as " $if \ldots$ then \ldots relationships" (p. 8), and we have called them decision rules.

3. Situations influence the consequences of leader behavior. Popular books on management are filled with maxims such as push decision power down, delegate, enlarge jobs, place your trust in people, the customer must come first, and so on. Each of these maxims is situation free. The advice is unfettered with information about the kinds of situations in which the recommended actions are effective and those in which they are ineffective.

Clearly, normative theories require situational qualifiers. Actions must be tailored to fit the demands of each situation. A leadership style that is effective in one situation may prove completely ineffective in a different situation. Tannenbaum and Schmidt (1958) stimulated thinking about the possibility of developing a contingency model of leadership by suggesting a wide range of situational factors that should be considered by managers in adopting a leadership style. Hersey and Blanchard (1982) carried the process one step further by proposing a taxonomy of four styles ranging from telling to delegating and a framework for matching each to the situation. However, their one situational variable—the maturity of followers—essentially ignored other important features of the context within which the interaction took place.

The normative models of Vroom, Yetton, and Jago represent more ambitious attempts to model the interaction between leadership style, situation, and effectiveness outcomes. In their research, the situational variables used in predicting the consequences of a leader's choices are the same as those used in explaining the choices that a leader actually makes. The advantage of using the same situational variables in both normative and descriptive analyses is the ease with which the effectiveness of a leader's choices can be determined. One can compare a leader's choices in each situation with the choice recommended by the normative model. In this way, the overall effectiveness of a leader's choice can be determined as well as the source of his or her ineffectiveness.

Participation in decision making is but one of many dimensions of leader behavior that can be studied in the manner that we have used here. Consider, for example, consideration and initiating structure, the two dimensions identified in the Ohio State University studies, or their counterparts, employee-centered and production-centered concepts, used extensively in leadership training (Blake & Mouton, 1964). These behaviors result from specific choices that leaders make in specific situations. Unpacking these concepts from their trait heritage can permit an examination of their structural determinants, their dispositional components, and interactions between them. It can also stimulate research on the role of context in governing the effectiveness of these behavioral patterns.

A Concluding Note

Mischel (2004) has recently written about a phenomenon he called the *personality paradox*: "How can we reconcile our intuitions—and our theories—about the invariance and stability of personality with the equally compelling empirical evidence for the variability of the person's behavior across diverse situations?" (p. 1).

Mischel's question is remarkably similar to a paradox that we have confronted in writing this article. Perhaps we could call this a *leadership paradox*. Intuition and some theories lead one to see stability and consistency in leader behavior and its outcomes, despite compelling evidence for the role of situation and context. Similarly, intuition and theories lead one to see stability and consistency in leader performance across diverse situations and to drastically overestimate leaders' control over organizational outcomes (see Hackman & Wageman's, 2007, concept of the leader attribution error). In each of these cases, the perceptual distortions have resulted from a failure to recognize the important role that situation or context plays in leadership.

Viewing leadership in purely dispositional or purely situational terms is to miss a major portion of the phenomenon. Earlier in this article, we defined leadership as a process of motivating others to work together collaboratively to accomplish great things. The task confronting contingency theorists is to understand the key behaviors and contextual variables involved in this process. Looking at behavior in specific classes of situations rather than averaging across situations is more consistent with contemporary research on personality and more conducive to valid generalizations about effective leadership. If . . . then . . . relationships are not only at the core of attempts to understand what people do but are also the basis for attempts to understand what leaders should do.

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Promoting More Integrative Strategies for Leadership Theory-Building

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The agenda for theory and research in the field of leadership studies has evolved over the last 100 years from focuses on the internal dispositions associated with effective leaders to broader inquiries that include emphases on the cognitions, attributes, behaviors, and contexts in which leaders and followers are dynamically embedded and interact over time. Leadership theory and research has reached a point in its development at which it needs to move to the next level of integration—considering the dynamic interplay between leaders and followers, taking into account the prior, current, and emerging context—for continued progress to be made in advancing both the science and practice of leadership.

Keywords: authentic leadership development, integrative theories, contingency theories

he field of leadership studies has frequently focused on the leader to the exclusion of other equally important components of the leadership process (Rost, 1991). Indeed, if the accumulated science of leadership had produced a periodic chart of relevant elements analogous to that in the field of chemistry, one might conclude that leadership studies had traditionally focused too narrowly on a limited set of elements, primarily highlighting the leader yet overlooking many other potentially relevant elements of leadership such as the follower and context. Highlighting this issue, Zaccaro and Klimoski (2001) noted,

Most theories of organizational leadership in the psychological literature are largely context free. For example, leadership is typically considered without adequate regard for the structural contingencies that affect and moderate its conduct. We maintain, however, that organizational leadership cannot be modeled effectively without attending to such considerations. (p. 12)

Potential Benefits of Taking a More Integrative Focus

By working toward identifying and integrating all of the elements that constitute leadership, researchers can position the field of leadership studies to better address questions such as the degree to which leaders are born versus made; whether what constitutes leadership effectiveness is more universal or culturally specific; whether different forms of leadership, such as charismatic or transformational, are more or less likely to emerge on the basis of the stability or criticality of the context; and whether one style of leadership is more or less effective depending on the contingencies and demands facing leaders and followers.

Addressing each of the above issues requires an examination of leadership that considers the relevant actors, context (immediate, direct, indirect, etc.), time, history, and how all of these interact with each other to create what is eventually labeled *leadership*. This recommendation is in line with suggestions made by Marion and Uhl-Bien (2001), who criticized the field of leadership studies for its tendency to follow a more reductionist strategy, concluding that "leaders are one element of an interactive network that is far bigger than they" (p. 414).

Moving toward more integrative strategies for theorybuilding and testing has also been recommended by Lord, Brown, Harvey, and Hall (2001) with respect to one of the more traditionally leadercentric areas of leadership studies. Lord et al. (2001) discussed what they called a connectionist-based model of leadership prototype generation to emphasize how perceptions of leadership are contingent on the context and the dynamic states in which such mental representations are created. They argued that one's schema of leadership can be a function of the culture, leader, follower, task, or behavioral inputs and how they each interact to form leadership categories and behavioral scripts. Lord et al. (2001) emphasized that "leadership categories are generated on-the-fly to correspond to the requirements of different contexts, tasks, subordinates or maturational stages of a group or organization" (p. 314) and that "leadership perceptions are grounded within a larger social, cultural, task and interpersonal environment" (p. 332). Their model indicates that even one's internal representation of how leadership is mentally construed and how one makes sense of situations appears to be a function of the proximal (group or task) and distal (organizational or national culture) context in which those mental representations are formed.

I begin the promotion of more integrative theories of leadership by first discussing the importance of followers to what constitutes leadership. I then examine how the inclu-

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sion of context found its way into the field of leadership studies, highlighting early work on contingency theories of leadership. This discussion is followed by one of more recent work on leadership, leadership development, and strategic leadership, demonstrating the necessity of advocating more integrative strategies to advance the science and practice of leadership.

Examining a Follower Focus

Grint (2000) described the field of leadership studies as being theoretically inadequate from its inception because it primarily excluded followers when explaining what constituted leadership. Grint (2005) stated that "it only requires the good follower to do nothing for leadership to fail" (p. 133) and that it is the followers who teach leadership to leaders. Howell and Shamir (2005) concluded that "followers also play a more active role in constructing the leadership relationship, empowering the leader and influencing his or her behavior, and ultimately determining the consequences of the leadership relationship" (p. 97). Lord, Brown, and Frieberg (1999) asserted, "the follower remains an unexplored source of variance in understanding leadership processes" (p. 167).

After reviewing the accumulated research on transformational leadership theory, which has been the most frequently researched leadership theory over the last two decades, I could only find three published studies that specifically focused on how follower characteristics moderated the effects of leadership on work outcomes (i.e., Dvir & Shamir, 2003; Ehrhart & Klein, 2001; Wofford, Whittington, & Goodwin, 2001). For example, Ehrhart and Klein reported that followers scoring high in achievement orientation, self-esteem, and risk-taking were more likely to be drawn to transformational leaders. What this research suggests is that a follower's decision to follow a leader may be a more active process, based on the extent to which the leader is perceived as representing the follower's values and identity (Howell & Shamir, 2005). Unfortunately, most leadership research has considered the follower a passive or nonexistent element when examining what constitutes leadership. An exception to this conclusion is the work that has been done on relational models of leadership, such as the vertical dyad linkage (Dansereau, Graen, & Haga, 1975) or leader–member exchange theory (Graen & Uhl-Bien, 1995). The main gist of leader–member exchange theory is that the quality of the exchange relationship between leaders and followers will determine the qualities of leadership and outcomes achieved.

Early Beginnings of Exploring the Context

Although leadership studies dating back to the early 20th century focused more on the leader than on the context of leadership in which it was observed (Ayman, 2003; Avolio, Sosik, Jung, & Berson, 2003; Day, 2000), there have been some important inquiries into what constitutes leadership throughout human history that included reference to the context. For example, Plato's philosophical discussions of the moral and ethical purpose of leadership highlighted the relevance of the context.

Similar to discussions of ethical leadership, early writings on what constituted charismatic leadership also focused on the context. Weber (1924/1947) recognized that there were certain unique qualities of leaders that differentiated the bureaucratic from the charismatic leader. Weber argued that a social crisis was necessary to promote the emergence of charismatic leaders. Although subsequent research on the emergence of charismatic leadership has challenged Weber's base assumption (Bass, 1990), the stability of the context remains an important feature in both theoretical and empirical work on what constitutes charismatic leadership (Bass, 1985; Beyer, 1999; Conger & Kanungo, 1988; Klein & House, 1995).

Traditional Contingency Models of Leadership

Emergent contingency models of leadership such as Fiedler's (1967) trait contingency model, Vroom and Yetton's (1973) normative contingency model, House and Mitchell's (1974) path–goal theory, and Hersey and Blanchard's (1969) situational theory all linked different leadership styles to specific contextual demands that resulted in better performance outcomes—including, in some instances, the nature of the follower in the leader-and-follower equation. Contingency theories of leadership emerged in the literature primarily because prior empirical research examining the link between leadership traits and performance had produced conflicting results (Stogdill, 1974). This led to claims that the achievement of desired outcomes was a function of what some authors termed the *fit* or *match* between a leader's traits, style, and orientation and follower maturity and situational challenges. Reinforcing this direction, Shartle (1951) reported the best predictors of leadership effectiveness were the values or culture of the organization and the behaviors of the leader's supervisor.

Tannenbaum and Schmidt (1958) defined the contingency theorist (and, by extension, the contingency theorists' approach to explaining leadership) as "one who is keenly aware of the forces which are most relevant to his behavior at any given time (and) who is able to behave appropriately in the light of these" (p. 101). Stogdill (1974) sharpened this contextualized view of leadership, stating that "the evidence suggests that leadership is a relation that exists between persons in a social situation, and that persons who are leaders in one situation may not necessarily be leaders in other situations" (pp. 63–64).

Contingencies have been incorporated both ad hoc and post hoc into leadership theory by distinguishing between internal contingencies and external contingencies. External contingencies include facets of the context such as strategy, technology, organizational structure, position, stability, tasks, climate strength, social and physical distance, and culture. Yukl (1999) also suggested that leadership scholars should consider differentiating between these external contingencies, using what he termed hard versus soft contingencies. For example, for Weber (1924/1947) and Fiedler (1967), the stability of the social context was a hard contingency integrated into their respective theories of leadership. In contrast, Hofmann, Morgeson, and Gerras (2003) suggested that an organization that has a psychologically safe climate in which workers feel comfortable questioning practices, admitting mistakes, and voicing dissent may represent a soft contingency that moderates the relationship between the leader's style and follower safety citizenship role behaviors.

A number of leadership theories, such as path–goal theory (see House & Mitchell, 1974), have included in their revised formulations internal contingencies such as personal qualities of leaders, experience of followers, personality of followers, gender, motivation, capability, and cultural orientation. With respect to leadership development, motivation to learn and to develop oneself could be considered soft internal contingencies, potentially impacting how what constitutes the rate or impact of leadership development is conceptualized (Avolio, 2005; Avolio & Luthans, 2006; Maurer, 2002).

Judge and Piccolo (2004) completed a meta-analysis examining some of the core research predictions and contingencies associated with Avolio and Bass's full-range model of leadership (see Avolio, 1999; Bass, 1998), which includes both transformational and transactional components of leadership. Judge and Piccolo (2004) concluded,

the meta-analytic results presented in this study provide the most complete test of the full range of leadership.... The results provide important support for the validity of transformational, as well as contingent reward and to some extent, laissez-faire leadership. The validity of transformational leadership, in particular, seems to generalize across many situations, including when it is studied in rigorous settings. (p. 765) However, when Judge and Piccolo examined a number of soft situational contingencies, there was considerable variation in the validity coefficients for both transformational and transactional leadership. For example, they reported that transformational leadership and performance had a correlation of .42 in business versus one of .51 in military settings.

Like many other leadership theories, transformational leadership started out without sufficient attention to contextual contingencies, with later revisions to the theory incorporating a number of soft contingencies to provide a more complete picture of the relationship between transformational leadership and performance. These contingencies now include cultural differences, environmental stability, industry type, organizational characteristics, task characteristics, nature of the goals, nature of the performance criterion, characteristics of followers, and group membership.

One might ask a very practical question: *Should this theory, like others in leadership, have started with a more integrative focus that included a broader array of potential contingencies*? It can be inferred from Marion and Uhl-Bien's (2001) comments that researchers need to stop underestimating the many potential elements that should be considered from the outset to "fully" explain the complexity of leadership.

Conger (2004) clearly answered the above question, criticizing authors who have produced normative theories of leadership such as transformational leadership, stating that "we have been losing an appreciation for the fact that leadership approaches do indeed depend on *the situation*" (p. 138). It seems many theories in the field of leadership have been "back-filled" with a very narrow set of contingencies rather than from the outset using a broader and more integrative strategy that encompasses whatever the field of leadership deems to be core elements to theory-building.

Culture as Context

Cross-cultural researchers have begun to examine whether the qualities of desired and effective leadership are contingent or universal. A universal cultural theory describes or prescribes aspects of leadership that could apply to any situation (Yukl, 2002), whereas contingent theories either describe or prescribe aspects of leadership that apply in some but not all situations (Yukl, 2002). House, Hanges, Javidan, Dorfman, and Gupta (2004) suggested that integrity may generalize across cultural contexts as being a quality desired in all leaders. Yet, even though the construct of integrity may be seen as desirable and universal across cultures, other scholars have acknowledged that it could be observed in a variety of forms and still be referred to as *high-integrity leadership* (Bass, 1997).

An additional challenge to advancing cross-cultural leadership theory and research is that the "exact same" leadership action or behavior may not be viewed in the same way by different leaders or followers within the same culture or between cultures (Lord & Brown, 2004). For example, according to Triandis (1995), *allocentrics* define themselves or their identity in terms of the in-groups to which they belong. Allocentrics are more likely to view the actions of leadership as being more desirable and effective to the extent that these focus on what is good for the group versus individual self-interests (Bass, 1985).

In contrast, *idiocentrics* view the individual as having primacy over in-group goals. Idiocentrics are more motivated to satisfy self-interests and personal goals, whether at the expense of group interests or not (Markus & Kitayama, 1991; Triandis, 1995). Idiocentrics may view leadership behaviors that reinforce actions that are good for the overall group as being in conflict with their self-interests and, therefore, less desirable.

The emerging field of cross-cultural leadership research has underscored the importance of examining how the inclusion of the context in models of leadership may alter how what constitutes effective or desirable leadership is operationally defined, measured, and interpreted. Integration of culture as a contextual factor in models of leadership necessitates that researchers consider

- the cultural implicit theories of both leaders and followers;
- enacted behaviors and how they are interpreted;
- the broader cultural context in which leaders and followers interact;
- the duration of the leader-follower relationship; and
- exogenous events that may trigger different interpretations of leadership, such as instability, uncertainty, and growth.

Exploring Individual Differences

Since the inception of research on what constitutes leadership, the focus has been on the role that individual differences like personality and general mental ability play in determining who emerges as a leader and how effective the person is in leadership positions (e.g., Bass, 1990; Chan & Drasgow, 2001; Judge, Bono, Ilies, & Gerhardt, 2002). Highlighting this focus, Carlyle's (1907) great man theory framed leadership as being primarily focused on specific traits that differentiate effective from ineffective leaders. The accumulated research now shows that there are some universal traits leaders possess that are repeatedly associated with effective leadership, including persistence, tolerance for ambiguity, self-confidence, drive, honesty, integrity, internal locus of control, achievement motivation, and cognitive ability (Den Hartog & Koopman, 2001; Kirkpatrick & Locke, 1991; Yukl, 1998).

Although traits were originally thought to be fixed, there now is a growing awareness, expressed by authors such as Dweck and Leggett (1988), that some traits may be more malleable and interact with facets of the context in contributing to leadership emergence and effectiveness. This research stream stems in part from the work of developmental psychologists like Riegel (1975), who suggested that "human development can only be understood by conceiving the emergence of behavior over time as a result of an ongoing exchange between the organism and the environment" (p. 46), and from early work by Graves (1959), who stated, "Finally, it was assumed that just as the seed must have favorable living circumstances to flower fully so to is man's ethical potential limited by the life circumstances which the human develops" (p. 8).

Plomin and Daniels (1987) suggested that "behavioral-genetics research seldom finds evidence that more than half of the variance for complex traits is due to genetic differences among individuals" (p. 1). Supporting this claim, preliminary evidence from behavioral genetics leadership research suggests that 30% of the variance in leadership style and emergence can be accounted for by genetic predispositions, while the remaining variance can be attributed to nonshared environmental influences such as individuals being exposed to varying opportunities for leadership development (e.g., Arvey, Rotundo, Johnson, Zhang, & McGue, 2006). It seems reasonable to suggest that traits interact with the context and, therefore, that the relationship between one's traits and leadership emergence will vary as a consequence of the nature of the context.

There has also been some recent discussion in the leadership literature that certain types of events can trigger leadership emergence and nurture its development, yet there is little empirical evidence linking such events to individual dispositions of either leaders or followers (Avolio, 2005; Avolio, Gardner, Walumbwa, Luthans, & May, 2004). This emerging research stream on what the authors have called *authentic leadership development* underscores the importance of a view of leadership that takes into consideration the facets of the context that contribute to and detract from its development.

Evidence regarding the impact that events have on development include children who were exposed to an authoritarian parenting style and were shown later in life to have higher achievement orientation, self-confidence, internal locus of control, and self-efficacy (Baumrind, 1991). For example, Schmitt-Rodermund (2004) investigated the impact of personality and authoritative parenting on adolescents' and business founders' self-reports of early entrepreneurial competence, reporting higher levels of leadership in high school, curiosity, and entrepreneurial skill.

In sum, there appears to be some recognition in the leadership literature that not all traits are fixed with regard to their impact on leadership development, emergence, and success. Moreover, traits themselves may evolve over time and change depending on the dynamic exchange between the leader, follower, and context, suggesting that traits are not either/or but a matter of degree in shaping leadership effectiveness, emergence, and development.

A More Integrative View of Leadership Theory-Building

On the basis of a review of the literature, there are some elements that I would deem essential to building more integrative theories of leadership that have well-established lines of research. The broad categories for characterizing these elements include the following:

Cognitive Elements: One element of what constitutes an emergent leadership theory is the way leaders and followers interpret their relationships, roles, capabilities, motivation, emotions, challenges, and objectives. Each and every action or reaction is filtered by leaders' and followers' implicit models or cognitive categorization schemes– systems. Moving to the next levels—in which behaviors and, in turn, context are examined—each is shaped by the way information is recognized, categorized, processed, interpreted, and recalled.

Implicit theories of the self are also particularly relevant to understanding leadership and its development. For example, Dweck and Leggett (1988) have made the distinction between *entity* and *incremental* theory with respect to how one views traits or predispositions. Entity theory views traits as fixed, whereas incremental theory views them as malleable. Each theory explains different modes of processing regarding what constitutes "the self," which affects the likelihood of different individuals being more or less willing to embrace leadership development. For example, for an individual who views leadership as something that can change over time, challenges being confronted will more likely positively trigger or shape development than they will for someone who views leadership as preordained (Maurer, 2002).

Individual and Group Behavior: Going back 50 years in the leadership literature, many prominent models of leadership were built on how leaders behaved-the individual level (Bass, 1990). Yet it is also known that the perception of such behaviors by followers and the choice by the leader to exhibit them are guided by the intraindividual level and will vary in their impact depending on the nature of followers and context at the group level, including prior, emerging, and possible future contexts, as detailed below. Leadership behaviors can be directed to specific followers or they can be directed toward an entire group of followers. For example, a leader may prime a group of followers to be more promotion oriented, supporting greater risk-taking, challenge, and innovation (Kark & Van-Dijk, in press), which could emerge as a group-level climate.

Historical Context: Since the inception of leadership studies, attention has been given to what has transpired prior to the emergence of leaders. The characteristics of the historical context provide opportunities for the emergence of different orientations toward leadership (e.g., charismatic leaders emerge during times of social crises). The historical context can impact what types of leadership and followership are considered acceptable and unacceptable, effective and ineffective.

Proximal Context: The proximal context is what leaders and followers are embedded in and includes the work or unit climate, group characteristics, task characteristics, and performance domain. The proximal context is the most immediate in terms of time and in terms of impact on both leaders and followers and their relationships. In contingency models, it has been a central feature included to explain leadership effectiveness.

Distal Context: The distal context comprises the organizational culture and characteristics of the broader social-cultural environment such as stability-turbulence, nature of competitors, cycle time in terms of innovation, national events, and culture. One could add here a "distal historical" context that continues to impact current behavior (e.g., the civil rights movement) as well as a "proximal historical" context (e.g., the controversy over immigration rights). Leaders and followers interpret, decide, and behave in part on the basis of the distal context they import into current mean making and decision making and in part on the basis of what they may have previously overlooked and now reflect on and reinterpret.

Applying these five facets to the promotion of more integrative theories of leadership, assume that a particular leader somehow gets his or her immediate follower to successfully assume a leadership role, which is a core proposition in transformational leadership theory (Bass, 1985). Examining this leader-and-follower link, one might assume that their respective implicit models of leadership include the belief that leadership is something that can be mutually developed. Connected to these beliefs is the behavior modeling exhibited by a positively oriented leader who builds the follower's efficacy to exercise greater responsibility for leadership. For example, the leader may signal his or her belief that followers who identify their core strengths can accelerate their development as leaders (Avolio, 2005; Luthans & Avolio, 2003). Followers may then behave in ways that demonstrate their willingness to assume increased responsibility, which the leader reinforces through feedback and recognition, completing the cycle for development.

Of course, what is observed at the leader-and-follower level in part is a result of the climate in which each are embedded. Organizational climate refers to shared perceptions among organization members with regard to the organization's fundamental properties (i.e., policies, procedures, and practices; Reichers & Schneider, 1990). For example, if the follower describes the unit's climate as "forgiving of mistakes" and "open to new ways of thinking," he or she would be more likely to engage in tasks requiring greater responsibilities, discretion, and risk. If the tasks happen to be ones that are of lower risk, the likelihood is even higher that followers will engage in developing leadership potential. Overall, the more an organization's climate is positively oriented toward developing followers into leaders and has a history of doing so, the more likely followers will be to engage in leadership responsibilities and experiences, creating a climate of engagement.

An Integrative View of Authentic Leadership Development

It may seem ironic, given the inordinate amount of attention paid to leadership development, that only recently has there been any serious attempt to formulate a *theory* of leadership development (Avolio & Luthans, 2006). Most of the attention in the leadership literature has been focused on determining what causes leaders to emerge and be effective. Relatively little effort has been devoted to systematically explaining how such leaders and leadership develop.

Without a doubt, future research on leadership development will need to focus on the interaction of genetic and developmental components that foster leadership at different points across the life span (Ilies, Arvey, & Bouchard, 2006; Plomin, DeFries, McClearn, & McGuffin, 2001) while including a closer examination of relevant contextual factors (Arvey et al., 2006). As noted by Arvey et al. (2006),

what might be of great interest is the question of determining more precisely the kinds of environmental experiences that are most helpful in predicting and/or developing leadership and the ways in which these experiences possibly interact and/or correlate with genetic factors. (p. 16)

Paralleling the field of leadership studies in general, leadership development theory and research has focused on changing the leader, with much less attention given to the interaction of leaders, followers, and context (Avolio, 2005; Day, 2000). It is rather surprising that previous discussions of leadership development have not integrated the context into models of development, ignoring numerous authors' suggestions that coping with difficult situations or challenging events facilitates leadership development (Maurer, 2002; McCauley & Van Velsor, 2003).

Bray, Campbell, and Grant (1974) reported that highcapacity managers at AT&T exposed to challenging events early in their careers were the most successful over a 10-year period. McCauley (2001) focused on the need to integrate the individual and the context as a strategy for fostering leadership development, suggesting that it is important to "provide a variety of developmental experiences, ensure a high level of ability to learn, and design the context so it supports development" (p. 348). These facets are captured in London and Maurer's (2003) model of leadership development, which includes establishing the congruence between characteristics of the organization and the individual in shaping the potential for leadership development. How, then, does one build a theory of leadership development without considering the nature of those experiences and contingencies across a person's life span that contributes positively and/or negatively to leadership development?

Recent work by Avolio and his colleagues (W. L. Gardner, Avolio, Luthans, May & Walumbwa, 2005) has attempted to take on the challenge of including up front the core facets described above in explaining what constitutes what they have referred to as *authentic leadership development*. Their model of authentic leadership development includes elements of the leader, follower, and context in explaining what actually improves or develops leadership (W. L. Gardner et al., 2005), which was their rationale for choosing the word *authentic*. For example, the model explicitly shows that the cognitive elements comprising a leader's development, such as self-awareness and self-regulation of the leader's behavior, are mirrored in the follower's development. Gardner et al. take the position that parallel processes are associated with both leader and

follower development and that these processes are embedded in a climate, as noted above, that may be more or less facilitative of actual leadership development.

Due to space limitations, I cannot fully describe the authentic leadership development model, but I can offer an example of how its core elements correspond to those identified above as being essential to promoting an integrative strategy for building leadership theory (for a more detailed discussion of the model, see W. L. Gardner et al., 2005):

- *Cognitive Elements:* A key starting point for the model is the focus on leader and follower self-awareness, which includes how individuals view their actual self and translate that into what could be their possible self or selves. It includes what W. L. Gardner et al. (2005) have called *balanced processing*, which refers to how objectively individuals view information about themselves in current as well as projected future contexts and, then, how they determine decisions. Bridging actual and possible selves helps to represent fundamental aspects of leadership development.
- *Individual Leader–Follower Behavior:* The model incorporates an emphasis on exhibiting authentic leadership behavior, which links to how leaders and followers regulate the translation of their awareness into behaviors–actions that are considered authentic, such as regulating transparency in relationships and ethical decision making.
- *Historical Context:* History is included in terms of the personal background of both leaders and followers and how such history has triggered or stifled development in the past. The model emphasizes that throughout one's life course, there are many potential trigger events that can stimulate growth and development, in part dependent on the level of leader and follower self-awareness and energy placed in self-reflection activities.
- *Proximal Context:* The model highlights how an engaged and ethical organizational climate can facilitate the development of authentic, transparent, ethical leaders and followers.
- *Distal Context:* In W. L. Gardner et al.'s (2005) model, distal context is not specifically presented, but as part of their discussion of leadership development, they include national or international events that are outside the organization that may shape development.

Although the model of authentic leadership development starts with a more integrative focus, as this theory evolves, it must remain open to including additional elements, such as internal and external contingencies that may help explain the full complexity involved with how leaders and leadership genuinely develops. Nevertheless, taking a more integrative focus from the outset may lessen the need to include post hoc additions to this theory.

Conclusions, Future Directions, and Implications

The evolution of leadership theory and practice has come to a point at which a more integrative view spanning from genetics to cultural-generational and strategic levels should be considered at the outset when building theories of leadership and leadership development (Hunt & Dodge, 2000). The recommendations in this article go beyond more traditional situational or contingency models to advocate a fuller and more integrative focus that is multilevel, multicomponent, and interdisciplinary and that recognizes that leadership is a function of both the leader and the led and the complexity of the context. Indeed, future leadership theory and research may focus on what Marion and Uhl-Bien (2001) described as leaders dealing with the conditions of organizations versus local manifestations. As an example, Marion and Uhl-Bien (2001) said that for leaders to create innovation, they may have to create the conditions that spark innovation rather than creating innovation in the individual per se; in their words, "leaders are part of the dynamic rather than being the dynamic itself" (p. 414).

Focusing on the creation of conditions by leaders, I also advocate that more work needs to be done on the connections created by leadership. For example, there is emerging work linking social network theory to leadership theory, even though to date, "little empirical work has been done on leadership and social networks" (Brass, Galaskiewicz, Greve, & Tsai, 2004, p. 800). To the extent that leadership creates the conditions for distinct patterns of relationships between individuals in organizations to create and/or transform social network structures, there is a need to establish linkages between leadership and social network theory. A starting point for exploring this area comes from Balkundi and Kilduff's (2005) proposed model showing how cognitions in leaders' and followers' minds influence the actual social network structures and relationships that are established and that these social networks within and even between organizations ultimately facilitate leadership effectiveness. For example, the leader's ability to influence others will depend in part on the social network in which that leader is embedded and how positive the network is regarding the leader's initiatives. In this proposed model, there is a full extension of an integrative framework spanning cognitive implicit theories through to the external structure of social network relationships and how individual actors and their relationships are embedded in a larger social network structure. In line with the proposed integrative framework, Balkundi and Kilduff (2005) concluded, "Our network approach locates leadership not in the attributes of individuals but in the relationships connecting individuals" (p. 942).

I suspect that a more integrative focus regarding leadership theory and research will become even more relevant as the study of leadership is escalated to more strategic levels. For example, whether one is studying individual top leaders, top management teams, or the entire leadership system in an organization, focusing on ways to integrate the context at multiple levels of analysis into leadership models will take on increasing importance. Specifically, how the top executives in an organization share leadership and influence that organization's performance may depend in part on the evolutionary stage of the organization and the stability of the context in which it is presently operating (Lord & Maher, 1991). Rapidly changing contexts will place more pressure on leaders to use the talent and wisdom of their top management teams in arriving at critical decisions. At the strategic leadership level, it also becomes important not only *that* a good decision is made but *how* that decision is effectively executed across levels of the organization—and again, the context will matter.

This discussion extends to the emerging work in the area of strategic leadership (Boal & Hoojberg, 2001; Canella & Monroe, 1997; Finkelstein & Hambrick, 1996). Various authors have suggested that the executive's personality and leadership style can impact many aspects of the organization's strategy and culture. For example, Waldman, Javidan, and Varella (2004) were interested in examining how the charismatic leadership of firms impact firm performance. They suggested that charismatic leadership at the top can influence subsequent relationships both directly and indirectly through social contagion effects, thus cascading strategic influence across levels in terms of its impact on others. Building off of the work of Mischel (1973), Waldman et al. (2004) discussed how uncertain or weak contexts may make employees more receptive to change, which characterizes charismatic leadership. Charismatic leaders may prime all of their followers to take greater risks.

In sum, the emerging patterns in leadership research provide support for what John W. Gardner (1990) described over 15 years ago in his book *On Leadership*, in which he stated,

Leaders cannot be thought of apart from the historic context in which they arise, the setting in which they function (e.g., elective political office), and the system over which they preside (e.g., a particular city or state). They are an integral part of the system, subject to the forces that affect the system. (p. 1)

In line with Gardner's arguments, the main thrust of this article has been to promote a more integrative examination of leadership theory-building and research so as to lay the groundwork for a more full understanding of what constitutes the best and the worst forms of leadership and how those forms develop.

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A Systems Model of Leadership

WICS

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This article reviews a systems model of leadership. According to the model, effective leadership is a synthesis of wisdom, creativity, and intelligence (WICS). It is in large part a decision about how to marshal and deploy these resources. One needs creativity to generate ideas, academic (analytical) intelligence to evaluate whether the ideas are good, practical intelligence to implement the ideas and persuade others of their worth, and wisdom to balance the interests of all stakeholders and to ensure that the actions of the leader seek a common good. The article relates the current model to other extant models of leadership.

Keywords: leadership, WICS, wisdom, intelligence, creativity

systems model views leadership as a matter of how one formulates, makes, and acts on decisions (Sternberg, 2003a, 2003b, 2004, in press; Sternberg & Vroom, 2002). According to one such model, *WICS* (Sternberg, 2003a, 2003b), the three key components of leadership are *wisdom*, *intelligence*, and *creativity*, *synthesized*. The basic idea is that one needs these three components working together to be a highly effective leader.

One is not born a leader. In the framework of WICS, one can speak of traits of leadership (Bird, 1940; Mann, 1959; Stogdill, 1948; Zaccaro, 2007, this issue; Zaccaro, Kemp, & Bader, 2004), but, properly, they should be viewed as modifiable, flexible, and dynamic rather than as fixed, rigid, and static. Because the attributes discussed in this article with regard to WICS are viewed as modifiable, the term *trait*, which is generally associated only with nonmodifiable or weakly modifiable characteristics, is not used.

Wisdom, intelligence, and creativity are, to some extent, modifiable forms of developing expertise (Sternberg, 1998a, 1999b) that one can decide to use in leadership decisions. How one uses them depends in large part on the situations in which one finds oneself (see Vroom & Jago, 2007, this issue) and how these situations interact with one's own skills (Avolio, 2007, this issue; Vroom & Jago, 2007). The environment strongly influences the extent to which one is able to use and develop whatever genetic potentials one has (Grigorenko & Sternberg, 2001; Sternberg & Grigorenko, 1997, 2001).

Leadership involves both skills and dispositions (i.e., attitudes). The skills are developing expertise on the basis of how well one can execute certain functions of leadership. An example of a skill is one's knowing how to construct a decision tree listing possible options and their consequences. The dispositions are developing expertise on the basis of how one thinks about these functions. An example of a disposition is one's attitude that it is worthwhile to generate a decision tree in the first place. The dispositions are at least as important as the skills. One needs creative skills and dispositions to generate fresh and good ideas for leadership, intellectual skills and dispositions to decide whether they are good ideas as well as to implement the ideas and convince others of the value of the ideas, and wisdom-related skills and dispositions to assess the long- as well as short-term impacts of these ideas on other individuals and institutions as well as oneself. In the discussion that follows, I consider the elements of creativity, intelligence, and wisdom, in that order.

Creativity

Creativity refers to the skills and dispositions needed for generating ideas and products that are (a) relatively novel, (b) high in quality, and (c) appropriate for the task at hand (Sternberg & Lubart, 1995). Skills influence the quality of creative thought, dispositions, and the desire to engage in creativity in the first place. Creativity is important for leadership (Mumford & Connelly, 1991). It is the component whereby one generates the ideas that others will follow. A leader who lacks creativity may get along and get others to go along. But he or she may get others to go along with inferior or stale ideas.

WICS claims that creative skills and attitudes are related to leadership success. Experimental and correlational research projects show that an aspect of creative

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Robert J. Sternberg

intelligence and of creativity, divergent thinking, is indeed positively correlated with leadership success (Baehr, 1992; Mumford & Connelly, 1991; Mumford, Scott, Gaddis, & Strange, 2002). Case study research also suggests close ties between creative thinking and leadership success (Csikszentmihalyi, 1996; Gardner, 1993, 1995; Gruber, 1981), as does historiometric research (Simonton, 1988, 1994) and organizational research (Amabile, 1999).

Types of Creative Leadership

Creative leadership can take different forms (Sternberg, 1999c; Sternberg, Kaufman, & Pretz, 2003). Some of these forms accept current ways of doing things, others do not; still another attempts to integrate different current practices. The forms of leadership apply not just to managerial leadership but rather to any kind of leadership at all. What are these forms of leadership?

Conceptual replication. This type of leadership is an attempt to show that a field or organization is in the right place at the right time. The leader therefore attempts to maintain it in that place. The leader keeps the organization where it is rather than moving it. The view of the leader is that the organization is where it needs to be. The leader's role is to keep it there. This is a limiting case of creative leadership, requiring the leader only to apply in new circumstances techniques that have been used before. For example, a scholar may build a career largely on replicating the work of others or even of him- or herself.

Redefinition. This type of leadership is an attempt to show that a field or organization is in the right place but not for the reason(s) that others, including previous leaders, think it is. The current status of the organization thus is seen from a different point of view. Redefiners often end up taking credit for ideas of others because they

find a better reason to implement others' ideas or say they do. An example of a redefinition was the discovery that aspirin not only is a pain reliever but also can decrease the probability of a repetition of a heart attack in coronary patients.

Forward incrementation. This type of leadership is an attempt to lead a field or an organization forward in the direction it already is going. Most leadership is probably forward incrementation. In such leadership, one takes on the helm with the idea of advancing the leadership program of whomever one has succeeded. The promise is of progress through continuity. Creativity through forward incrementation is likely the kind that is most easily recognized and appreciated as creativity. Because it extends existing notions, it is seen as creative. Because it does not threaten the assumptions of such notions, it is not rejected as useless or even harmful. An example is a new leader of a technology company who embraces an existing product line and keeps upgrading without radically changing the products.

Advance forward incrementation. This type of leadership is an attempt to move an organization forward in the direction it is already going but by moving beyond where others are ready for it to go. The leader moves followers in an accelerated way beyond the expected rate of forward progression. Advance forward incrementations often are not successful at the time they are attempted. Followers in fields and organizations are not ready to go where the leader wants to lead, or significant portions of them may not wish to go to that point. In that case, they form an organized and sometimes successful source of resistance. An example was the invention of the Xerox Star system, which was in many ways the prototype for the Apple Macintosh but which was invented before users were ready for it and before Xerox managers were properly able to see the system's potential.

Redirection. This type of leadership is an attempt to redirect an organization, field, or product line from where it is headed toward a different direction. Redirective leaders need to match their style of leadership to their environmental circumstances to succeed (Sternberg & Vroom, 2002). If they do not have the luck to have matching environmental circumstances, their best intentions may go awry. An example is Lou Gerstner's redirection of IBM from a company that specializes in mainframe computers to a company that specializes in services.

Reconstruction and redirection. This type of creative leadership is an attempt to move a field, an organization, or a product line back to where it once was (a reconstruction of the past) so that it may move onward from that point but in a direction different from the one it took previously. An example is the recent renewed interest by some in psychoanalysis and their ensuing attempts to argue that this set of techniques was on the right track after all.

Reinitiation. This type of leadership is an attempt to move a field, an organization, or a product line to a different and as yet unreached starting point and then to move forward from that point. The leader takes followers

from a new starting point in a direction that is different from that the field, organization, or product line previously has pursued. An example is the transition from horse and buggy transportation in cities to transportation by taxi cabs. The goal is still locomotion, but the fundamental mechanism of the combustion engine is different from that of the horse.

Synthesis. In this type of creative leadership, the creator integrates two ideas that previously were seen as unrelated or even as opposed. What formerly were viewed as distinct ideas now are viewed as related and capable of being unified. Integration is a key means by which progress is attained in the sciences. It represents neither an acceptance nor a rejection of existing paradigms. Rather, it represents a merger of them. An example is the invention of the seaplane, which combines elements of both a boat and an airplane.

Extensive examples of these kinds of leadership and how they differ can be found in Sternberg, Kaufman, and Pretz, 2003.

Leadership as a Confluence of Skills and Dispositions

A confluence model of creativity (Amabile, 1996; Sternberg & Lubart, 1995, 1996) suggests that creative people show a variety of characteristics. These characteristics represent, in part, decisions and ways of making these decisions (Sternberg, 2000a). In other words, to a large extent, people decide to be creative. They exhibit a creative attitude toward leadership. For example, when they have a problem they cannot solve, they ask themselves whether there is some alternative way of defining the problem that is more conducive to solution. Of course, the creativity of the actual decisions depends not just on the disposition to be creative but also on the ability with which one formulates those decisions.

What are the elements of a creative attitude toward leadership? Research on creativity suggests a number of elements (see Sternberg, 1999a). These elements involve both skills in actually executing them and the dispositions to wish to execute them in the first place.

1. *Problem redefinition.* Creative leaders do not define a problem the way everyone else does, simply because everyone else defines the problem that way. They decide on the exact nature of the problem using their own judgment. Most important, they are willing to defy the crowd in defining a problem differently from the way others do (Getzels & Csikszentmihalyi, 1976; Sternberg, 2002a; Sternberg & Lubart, 1995).

2. *Problem and idea analysis*. They are willing to analyze whether their solution to the problem is the best one possible (Weisberg, 1993).

3. Selling their solution. They realize that creative ideas do not sell themselves. Rather, creators have to decide to persuade others of the value of their ideas. Then they need to decide to put an effort into doing so (Simonton, 1994).

4. Recognizing how knowledge can both help and hinder creative thinking. They realize that knowledge can

hinder as well as facilitate creative thinking (see also Adelson, 1984; Frensch & Sternberg, 1989; Sternberg, 1985). Sometimes leaders become entrenched and susceptible to tunnel vision, letting their expertise hinder rather than facilitate their exercise of leadership.

5. Willingness to take sensible risks. They recognize that they must decide to take sensible risks, which can lead them to success but also can lead them, from time to time, to fail (Barron, 1988; Lubart & Sternberg, 1995).

6. *Willingness to surmount obstacles*. They are willing to surmount the obstacles that confront anyone who decides to defy the crowd. Such obstacles result when those who accept paradigms confront those who do not (Kuhn, 1970; Sternberg & Lubart, 1995).

7. Belief in one's ability to accomplish the task at hand. This belief is sometimes referred to as self-efficacy (Bandura, 1996). The leader believes that he or she is able to do the job at hand. Without that belief, when the leader feels that he or she is not succeeding in a job, he or she is more susceptible to giving up.

8. *Willingness to tolerate ambiguity*. The leaders recognize that there may be long periods of uncertainty during which they cannot be certain that they are doing the right thing or that what they are doing will have the outcome they hope for (Barron, 1988).

9. Willingness to find extrinsic rewards for the things one is intrinsically motivated to do. Creative leaders almost always are intrinsically motivated for the work they do (Amabile, 1983, 1996). Creative leaders find environments in which they receive extrinsic rewards for the things they like to do anyway.

10. Continuing to grow intellectually rather than to stagnate. Effective leaders do not get stuck in their patterns of leadership. Their leadership evolves as they accumulate experience and expertise. They learn from experience rather than simply letting its lessons pass them by (Mumford, Marks, Connelly, Zaccaro, & Reiter-Palmon, 2000; Sternberg & Lubart, 1995).

Three additional important skills in creativity are selective encoding, selective comparison, and selective combination (Sternberg, 1985; Sternberg & Davidson, 1983). Consider each in turn.

Selective encoding involves distinguishing irrelevant from relevant information in one's field of experience. Everyone is barraged with much more information than can possibly be handled. An important task confronting everyone is to select the information that is important for one's purposes and to filter out the information that is not important. Selective encoding is the process by which this filtering is done. Consider, for example, a particularly significant example of selective encoding in science, the unusual means by which Sir Alexander Fleming discovered penicillin. Fleming was performing an experiment that involved growing bacteria in a petri dish, which is a little glass or plastic dish that contains a gelatin in which bacteria grow easily. Unfortunately, from some points of view, the culture was spoiled: A mold grew within the culture and killed the bacteria. A lesser scientist would have bemoaned the failure of the experiment and promised to do a better

job next time. Fleming, however, noticed that the mold had killed the bacteria and thereby provided the basis for his discovery of the important antibiotic penicillin.

Insights of *selective comparison* involve novel relating of new information to old information. Creative analogies fall into the domain of selective comparison. In important problems, people almost always need to bring old knowledge to bear on the solution of new problems and to relate new knowledge to old knowledge. Insights of selective comparison are the basis for this relating. A famous example of an insight of selective comparison is Kekulé's discovery of the structure of the benzene ring. Kekulé had been seeking this structure for some time but without success. One night, he dreamed that he was watching a snake dancing around and around. Finally, the snake bit its tail. When Kekulé arose, he realized that the image of the snake biting its tail formed the geometric shape for the structure of the benzene ring.

Insights of *selective combination* involve taking selectively encoded information and combining it in a novel but productive way. Often it is not enough just to identify the important information for solving a problem: One must also figure out how to put it together. Consider a famous example of what might be called a selective-combination insight, the formulation of the theory of evolution. The information on which Darwin drew to formulate this theory had been available to him and others for a long time. What had eluded Darwin and his contemporaries was how this information could be combined so as to account for observed changes in species. Darwin finally saw how to combine the available information and thus was born his theory of natural selection.

The relative importance of each of the various skills and dispositions involved in creativity depends in part on the kind of creative leadership that is exhibited. For example, problem redefinition is more important in the more radical forms of creative leadership (such as redirection and reinitiation) than in the less radical forms (such as conceptual replication and forward incrementation). Once a problem is redefined, though, one needs to analyze whether the redefinition is a good one. Successful intelligence is a basis for such analysis.

(Successful) Intelligence

Is intelligence always a good thing for leadership? If the conventional intelligence of a leader is too much higher than that of the people he or she leads, the leader may not connect with those people and become ineffective (Simonton, 1984; Williams & Sternberg, 1988). Intelligence, as conceived of here, is not just intelligence in its conventional narrow sense—some kind of general factor (g; Demetriou, 2002; Jensen, 1998, 2002; Spearman, 1927; see essays in Sternberg, 2000b; Sternberg & Grigorenko, 2002) or as IQ (Binet & Simon, 1905; Kaufman, 2000; Wechsler, 1939). Rather, it is conceived more broadly in terms of *successful intelligence* (Sternberg, 1997, 1999d, 2002b). Successful intelligence is defined as the skills and dispositions needed to succeed in life, given one's own conception of success, within one's sociocultural environment (Stern-

berg, 1997). Two particular aspects of the theory are especially relevant: academic (analytical) and practical intelligence (see also Neisser, 1979; Sternberg et al., 2000).

It is clear how intelligence would have aspects of skill. But how would it have aspects of a disposition? The main way is through the decision to apply it. Many leaders know better but do things they should not do anyway. Their minds tell them what they should be doing, but their motives—for power, for fame, for money, for sex, or whatever—lead them in different directions. Leaders often fail not because they are not smart enough but because they choose not to use the intelligence they have.

Academic Intelligence

Academic or analytical intelligence refers to the memory and analytical skills and dispositions that in combination largely constitute the conventional notion of intelligence the skills and dispositions needed to not only recall and recognize but also to analyze, evaluate, and judge information. Academic intelligence can be important outside the academy, in that analysis of various kinds is useful in many different kinds of job and family pursuits as well as in school.

These skills and dispositions matter for leadership. Leaders need to be able to retrieve information that is relevant to leadership decisions (memory) and to analyze and evaluate different courses of action, whether proposed by themselves or by others (analysis). But a good analyst is not necessarily a good leader.

WICS argues that there is a relation between intelligence as traditionally defined and leadership effectiveness. There does indeed seem to be a moderate correlation between intelligence and leadership effectiveness (Stogdill, 1948; see also Morrow & Stern, 1990; Riggio, Murphy, & Pirozzolo, 2002; Spreitzer, McCall, & Mahoney, 1997). This positive correlation appears in both laboratory and field studies and appears to be robust (Zaccaro et al., 2004). The correlation may be moderated by levels of stress and experience (Fiedler, 1978, 2002).

Practical Intelligence

The longtime primary emphasis on academic intelligence (IQ) in the literature relating intelligence to leadership perhaps has been unfortunate. Indeed, as mentioned above, recent theorists also have been emphasizing other aspects of intelligence, such as emotional intelligence (e.g., Caruso, Mayer, & Salovey, 2002; Goleman, 1998a, 1998b) or multiple intelligences (Gardner, 1995), in their theories.

In my work with my colleagues, we have emphasized practical intelligence (Hedlund et al., 2003; Sternberg et al., 2000; Sternberg & Hedlund, 2002), which has a somewhat different focus from that of emotional intelligence. Practical intelligence is a part of successful intelligence. Practical intelligence is the set of skills and dispositions used to solve everyday problems by applying knowledge gained from experience to purposefully adapt to, shape, and select environments. It thus involves changing oneself to suit the environment (adaptation), changing the environment to suit oneself (shaping), or finding a new environment within which to work (selection). One uses these skills to (a) manage oneself, (b) manage others, and (c) manage tasks.

Research suggests a relationship between practical intelligence and leadership (Hedlund et al., 2003). One aspect of practical intelligence is emotional intelligence. This aspect deals in particular with emotionally laden practical interactions. Research also suggests that emotional intelligence is a positive predictor of leadership (Caruso et al., 2002; Goleman, Boyatzis, & McKee, 2002; Sosik & Megerian, 1999; see also Zaccaro et al., 2004).

Different combinations of intellectual skills engender different types of leadership. Leaders vary in their memory skills, analytical skills, and practical skills. A leader who is particularly strong in memory skills but not in the other kinds of skills may have vast amounts of knowledge at his or her disposal but be unable to use the knowledge effectively. A leader who is particularly strong in analytical skills as well as memory skills may be able to retrieve information and analyze it effectively but unable to convince others that his or her analysis is correct. A leader who is strong in memory, analytical, and practical skills is most likely to be effective in influencing others. But, of course, there exist leaders who are strong in practical skills but not in memory and analytical skills (Sternberg, 1997; Sternberg et al., 2000). In conventional terms, they are shrewd but not smart. They may be effective in getting others to go along with them, but they may end up leading these others down garden paths.

An important part of practical intelligence is *tacit knowledge*, or having the procedural knowledge to handle everyday life situations that typically is not formally taught in schools or other institutions. The acquisition and use of tacit knowledge require both dispositions and skills. The disposition is in heeding one's experience as a source of tacit knowledge. It involves the realization that what is important for leadership is not experience per se but what one learns from it. The skill involves how well one acquires and uses this knowledge. Much of this skill is in watching and listening to one's stakeholders and then using what one has learned from such observations. But tacit knowledge can be used for a common good or merely one's own good. Wisdom helps ensure that it is used for the former rather than the latter.

Wisdom

There is no lack of leaders who, however creative and intelligent they may be, are unwise. Stalin was no doubt creative and smart, but he was not wise according to the definition presented here. Wisdom is defined here as the use of successful intelligence, creativity, and knowledge as mediated by values to (a) seek to reach a common good (b) by balancing intrapersonal (one's own), interpersonal (others'), and extrapersonal (organizational, institutional, and/or spiritual) interests (c) over the short and long term to (d) adapt to, shape, and select environments (Sternberg, 1998b, 2003b). Wisdom is in large part a decision to use one's intelligence, creativity, and knowledge for a common good. Thus, wisdom involves not only skills in the use of these elements but also the disposition to use them for the common good.

Leaders need wisdom. Staudinger, Smith, and Baltes (1992) showed that leading human services professionals outperformed a control group on wisdom-related tasks. Baltes, Staudinger, Maercker, and Smith (1995) found that older individuals nominated for their leading wisdom performed as well as did clinical psychologists on wisdomrelated tasks and better than younger individuals. The characteristics that Baltes and his colleagues (e.g., Baltes & Staudinger, 2000) have described as characterizing wise individuals are very similar to those that have been identified in successful leaders. Wisdom is reflected in these five components: (a) rich factual knowledge (general and specific knowledge about the conditions of life and its variations), (b) rich procedural knowledge (general and specific knowledge about strategies of judgment and advice concerning matters of life), (c) life span contextualism (knowledge about the contexts of life and their temporal [developmental] relationships), (d) relativism (knowledge about differences in values, goals, and priorities), and (e) uncertainty (knowledge about the relative indeterminacy and unpredictability of life and ways to manage).

Wise leaders skillfully balance the interests of all stakeholders, including their own interests, those of their followers, and those of the organization for which they are responsible. They also recognize that they need to align the interests of their group or organization with those of others groups or organizations because no group operates within a vacuum. Wise leaders realize that what may appear to be a prudent course of action over the short term does not necessarily appear so over the long term.

Leaders who have been less than fully successful often have been so because they have ignored one or another set of interests. For example, Richard Nixon and Bill Clinton both engaged in notable cover-ups. As a result, they not only failed to fulfill the interests of the country they led but also failed to fulfill their own interests, in that both were impeached by the House of Representatives. Their coverups ended up bogging down their administrations in scandals. The positive accomplishments they had hoped to make were consequently reduced. As another example, Freud was a great leader in the fields of psychiatry and psychology. But his insistence that his followers (disciples) conform quite exactly to his own system of psychoanalysis led him to lose those disciples and the support they might have continued to lend to his efforts. He was an expert in interpersonal interests in the abstract but not as applied to his own life. Napoleon lost sight of the extrapersonal interests that would have been best for his own country. His disastrous invasion of Russia, which appears to have been motivated more by hubris than by France's need to have Russia in its empire, partially destroyed his reputation as a successful military leader and paved the way for his later downfall.

Intelligence and creativity do not guarantee wisdom. Those leaders who are notably wise—for example, Abraham Lincoln, Nelson Mandela, Martin Luther King, Jr., Mahatma Gandhi, Winston Churchill, Mother Teresaleave an indelible mark on the people they lead and, potentially, on history. Wise leaders are usually charismatic. But charismatic leaders are not necessarily wise, as Hitler, Stalin, and many other charismatic leaders have demonstrated.

Unsuccessful leaders often show certain stereotyped fallacies in their thinking that reveal a lack of wisdom and, in extreme cases, foolishness. That is, they may be smart but foolish. Consider six such flaws (Sternberg, 2002a, 2002b). The first, the unrealistic-optimism fallacy, occurs when they think they are so smart and effective that they can do whatever they want. The second, the egocentrism fallacy, occurs when successful leaders start to think that they are the only ones that matter, not the people who rely on them for leadership. The third, the omniscience fallacy, occurs when leaders think that they know everything and lose sight of the limitations of their own knowledge. The fourth, the omnipotence fallacy, occurs when leaders think that they are all-powerful and can do whatever they want. The fifth, the invulnerability fallacy, occurs when leaders think that they can get away with anything because they are too clever to be caught and, even if they are caught, that they can get away with what they have done because of who they imagine themselves to be. The sixth, the *moral* disengagement fallacy, occurs when a leader ceases to view his or her leadership in moral terms but rather only in terms of what is expedient (cf. Bandura, 1999). Had leaders of companies such as Enron, WorldCom, and Arthur Andersen not fallen prey to such fallacies, their companies and stakeholders might have been spared the tragedies to which they were subjected.

Synthesis

Truly good leadership is relatively rare because it requires a synthesis of all of the elements described above. Leaders may have some of the elements but, lacking others, fail to fulfill their own aspirations and those of others. A leader who lacks adequate creativity may maintain an organization or be a presence in a field but is unlikely to be able to propel either into the future. Because of the rate at which the world is changing, an organization lacking creative leadership is unlikely to be prepared to face the challenges rapid change entails. It is possible that in the past, creativity was an optional feature of leadership. In today's world, with its staggering rate of change, it is no longer optional. Organizations that do not transform themselves risk stagnating and dying. A leader who lacks adequate analytical intelligence may come up with original ideas but then may be as likely to follow up on one of his or her bad ideas as on one of the good ones. No one, no matter how creative, always has good ideas. Analytical intelligence is essential to distinguish the wheat from the chaff. A leader may be creative and analytically intelligent but, in the absence of adequate practical intelligence, may fail in executing his or her ideas or in persuading others of their value. This type of leader is frustrated and frustrating, because either things do not get done or they get done but without the leader's followers, who could not be persuaded to get on the bandwagon. Finally, a leader may be creative and intelligent both analytically and practically, but, in the absence of wisdom, he or she may do things that benefit only him- or herself or the leader's preferred in-group.

Consider an example of the synthesis of the components of WICS. In the 1950s, the main way in which students were admitted to prestigious colleges was through their family wealth and social connections. Religious quotas were a fixture of some of the colleges, and women were not eligible for admission to many of them. A young dean of admissions at Yale University (during the years 1965-1969) recognized that times had changed and that the university was in a crisis, adhering to old ways in the face of a new world. R. Inslee Clark, Jr., in his brief tenure as dean, transformed the main basis for admissions from social connections to academic excellence, oversaw the removal of religious quotas from the admissions process, and fought to introduce coeducation to a university that had until then been a bastion of male dominance. Women were first admitted in 1969. Given the prevailing sentiments at the time against all of these moves, Clark demonstrated creativity in seeing a new vision of Yale that defied the old one; academic intelligence in recognizing that his ideas were good, whatever many alumni and others might have said; practical intelligence in actually implementing the ideas and persuading many (although certainly not all) others of the worth of his ideas; and wisdom in doing what eventually would be almost universally recognized as having been for the common good.

Many leaders will not have developed sufficient levels of all of these aspects of leadership to lead in the most effective manner possible. That is why teams are so important to leaders. They enable leaders to compensate for weaknesses. Others on such teams may have the skills and dispositions the leader does not have in sufficient amounts. By capitalizing on their strengths, the leader can compensate for his or her own weaknesses.

Relation of Systems Models to Other Models

The idea of a systems model is that it incorporates some aspects of other models. Thus, it is not surprising that other validated models of leadership overlap with the various aspects of WICS. WICS is not fully integrative of all these models but, rather, draws on some of their elements. Consider several different kinds of models in turn.

For example, Zaccaro et al. (2004) have proposed a model of attributes of leaders. The model comprises three distal attributes: personality, cognitive abilities, and motives and values, all three of which are viewed as overlapping with each other. The model also involves three proximal attributes: social-appraisal skills, problem-solving skills, and expertise or tacit knowledge. Cognitive abilities overlap highly with what I have referred to as successful intelligence, particularly the academic intellectual skills. Personality and motivation, as noted above, are part of creativity. And values are essential to wisdom. Socialappraisal skills and tacit knowledge are integral parts of practical intelligence in WICS. Problem-solving skills are part of intelligence. So WICS includes all of the elements of the Zaccaro et al. (2004) model and also has some other elements. It parses the elements in a somewhat different way from that of Zaccaro and his colleagues, however.

Behavioral theories are associated with mid-20th-century approaches developed at the University of Michigan and Ohio State University (e.g., Likert, 1961; Shartle, 1951). A typical view was that leadership involved two kinds of behaviors, those that were mission oriented and that led to productivity and those that were person oriented and that were sensitive to people's feelings. Leaders could initiate structure changes and show consideration to a greater or lesser degree (see, e.g., Blake & Mouton, 1964; Hersey & Blanchard, 1969; Stogdill & Coons, 1957). In WICS, both of these kinds of behaviors are aspects of practical intelligence-in particular, managing tasks and managing others. WICS also adds a third kind of behavior, namely, managing oneself. WICS emphasizes not just the behaviors but also the cognitions underlying and producing the behaviors. This kind of self-modification has been considered by researchers with a cognitive-behavioral orientation, such as Bandura (1969, 1996) and Taylor, Pham, Rivkin, and Armor (1998).

Contingency models of leadership assume that there is an interaction between a leader's traits and the situation in which he or she finds him- or herself (e.g., Fiedler, 1978, 2002; Fiedler & Link, 1994; House, 1971, 1996; Vroom & Jago, 1988; Vroom & Yetton, 1973; Yukl, 1998). There is some evidence that when a leader's cognitive skills are substantially greater than those of his or her followers, those higher levels of cognitive skills may actually work against the leader's effectiveness (Simonton, 1994; Williams & Sternberg, 1988).

WICS is contingency based in the sense that the optimality of actions depends on the situation in which the leader finds him- or herself. What is intelligent in one situation is not necessarily intelligent in another situation. Moreover, creativity is largely situationally determined. A course of action that was creative some years ago (e.g., an advance forward incrementation) might be at a later time only mildly creative (e.g., a small forward incrementation). Similarly, a wise course of action depends on who the stakeholders are, what their needs are, the environmental pressure under which they are operating, the state of the organization at the time, and so on.

Transformational approaches to leadership can be seen as originating in the work of Burns (1978), although they have been greatly developed since then (Avolio & Bass, 1995; Bass, 1985, 1998, 2002; Bass & Avolio, 1994; Bass, Avolio, & Atwater, 1996; Sashkin, 2004). Burns suggested that there are essentially two ways of performing leadership functions, transactional and transformational. In WICS, transactional leaders emphasize the adaptive function of practical intelligence. They modify their behavior to adapt to the environment. Transformational leaders emphasize the shaping function of practical intelligence. They modify the environment to suit their image of what it should be.

Situational approaches to leadership similarly emphasize the importance of situations in leadership (Ayman, 2004). Research has given some support to the situational view (Howells & Becker, 1962; Leavitt, 1951; Shartle, 1951). Situations clearly matter for leaders. Situational variables are incorporated into WICS in three different ways. First, recall that the contextual subtheory of WICS is wholly situationally determined. What is considered to be intelligent in one culture may not be considered to be intelligent in another (Sternberg, 2004). Second, one of the six facets of the investment model of creativity (Sternberg & Lubart, 1995) is the situation: People can be creative only to the extent that the situation allows them to be. A person might have all the internal attributes for creativity, but in the absence of a supportive environment, these attributes might never manifest themselves. Or they might manifest themselves in a way that results in the person's imprisonment or worse. Third, wisdom is always implemented in context, because the course of action that balances intrapersonal, interpersonal, and extrapersonal interests so as to achieve a common good can only be understood in the context in which the action takes place.

In sum, a systems view can provide a way of understanding leadership as a set of decision processes embodying wisdom, intelligence, and creativity, as well as other higher cognitive processes. One uses creativity to generate ideas, intelligence to analyze and implement the ideas, and wisdom to ensure that they represent a good common good.

Conclusion

WICS incorporates elements of many previous models of leadership. An effective leader needs creative skills and dispositions to come up with ideas, academic skills and dispositions to decide whether they are good ideas, practical skills and dispositions to make the ideas work and convince others of the value of the ideas, and wisdombased skills and dispositions to ensure that the ideas are in the service of the common good rather than just the good of the leader or perhaps some clique of family members or followers. A leader lacking in creativity will be unable to deal with novel and difficult situations, such as a new and unexpected source of hostility. A leader lacking in academic intelligence will not be able to decide whether his or her ideas are viable, and a leader lacking in practical intelligence will be unable to implement his or her ideas effectively. An unwise leader may succeed in implementing ideas but end up implementing ideas that are contrary to the best interests of the people he or she leads.

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Asking the Right Questions About Leadership

Discussion and Conclusions

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Five questions prompted by the articles in the American Psychologist special issue on leadership (January 2007, Vol. 62, No. 1) suggest some new directions for leadership research: (1) Not do leaders make a difference, but under what conditions does leadership matter? (2) Not what are the traits of leaders, but how do leaders' personal attributes interact with situational properties to shape outcomes? (3) Not do there exist common dimensions on which all leaders can be arrayed, but are good and poor leadership qualitatively different phenomena? (4) Not how do leaders and followers differ, but how can leadership models be reformulated so they treat all system members as both leaders and followers? (5) Not what should be taught in leadership courses, but how can leaders be helped to learn?

Keywords: leadership theory, leaders, followers, learning, traits

or all of the research that has been conducted on the topic of leadership, the field remains curiously unformed. Leadership scholars, including those who have written for this special issue, agree that leadership is extraordinarily important both as a social phenomenon and as a subject for scholarly research and theory. Yet, as both Bennis (2007, this issue) and Vroom and Jago (2007, this issue) have pointed out, there are no generally accepted definitions of what leadership is, no dominant paradigms for studying it, and little agreement about the best strategies for developing and exercising it.

Among the many possible reasons for this gloomy state of affairs is that leadership scholars over the years may have been asking questions that have no general answers, thereby adding complexity but not clarity to our understanding. The articles that comprise this special issue summarize a great deal of informative research about leadership, to be sure. But perhaps their greatest contribution is that they raise a number of questions the answers to which will help us develop knowledge about leadership that is interesting, useful, and cumulative. In answer to Bennis's (2007, this issue) plea that scholars use their creativity to identify and reframe the most important questions about leadership, we pose in this concluding essay five questions that were prompted by the articles in this issue. We hope that these questions may be somewhat more informative, or at least more tractable, than some that have historically been prominent in leadership research.

Question 1: Not do leaders make a difference, but under what conditions does leadership matter? As the authors of these articles have noted, the long-standing debate between leader-centric and structural or situational explanations of collective performance has never been resolved, and probably cannot be. The reason is that the debate is about the wrong question. The right question is to distinguish conceptually and empirically those circumstances in which leaders' actions are highly consequential for system performance from those in which leaders' behaviors and decisions make essentially no difference (Avolio, 2007, this issue; Chan & Brief, 2005; Hackman & Wageman, 2005; Vroom & Jago, 2007, this issue; Wasserman, Nohria, & Anand, 2001).

This question invites observers of leadership to swim upstream against strong attributional currents. Lay observers, as well as not a few leadership scholars, tend to view leaders as a dominant influence on system performance (see Bennis, 2007, this issue). But are leaders really a main, or the main, influence on what transpires in social systems? Or does our tendency to view them that way merely reflect what Meindl (1990) called the "romance" of leadership? Consider, for example, how we explain an athletic team that has winning season after winning season. "That John Wooden at UCLA!" we exclaim. "What a basketball coach he was!" Or reflect on a team that has had a few losing seasons: It is the coach who is fired. We refer to this tendency to identify the leader as the main cause of collective performance as the *leader attribution error*. The leader attribution error is understandable (both because of the high visibility of leaders and the relative invisibility to observers of structural or contextual factors that may be powerfully shaping outcomes), it is pervasive (it occurs for both favorable and unfavorable outcomes), and it is powerful (system members as well as observers are vulnerable to it) (Hackman, 2002, chap. 6; Hackman & Wageman, 2005).

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J. Richard Hackman

Under some conditions, of course, leaders' actions really do spell the difference between success and failure. In recent years, scholars have begun the conceptual and empirical work that will be needed to move beyond the old debates about how influential leaders are and to free us from the erroneous assumption that anyone in any leadership position has the opportunity to make a constructive difference. The study by Wasserman and his colleagues, for example, showed that chief executive officers of corporations have the greatest impact when organizational opportunities are scarce but slack resources are plentiful (Wasserman et al., 2001). And a conceptual analysis offered by Hackman and Wageman (2005) identified how constraints on team processes, including both those built into the team's structure and those that reside in the broader context, can significantly constrain leaders' autonomy and latitude to lead. Similar analyses of other social systemsranging from dyads to nation states-would appear to be worthwhile because they could focus the attention of both scholars and practitioners on leaders' behaviors in precisely those circumstances where what they do is most consequential for system outcomes.

Question 2: Not what are the traits of leaders, but how do leaders' personal attributes interact with situational properties to shape outcomes? Even though the authors of the articles in this issue differ in their reliance on traits as explanations of leader behavior (Zaccaro [2007, this issue] was the most sympathetic to trait-centric models; Sternberg [2007, this issue] emphasized the modifiability of leader traits; and Vroom and Jago [2007, this issue] gave greatest attention to situational features), they agree that neither trait nor situational attributes alone are sufficient to explain leader behavior and effectiveness. It is the *interaction* between traits and situations that counts. The interactionist position is entirely sensible and acknowledges what has been found in decades of research on leadership. Still, it is a mark of the pervasiveness and power of dispositional thinking that the authors, without exception, offered readers their own lists of the leader traits that they believe to be most important. Moreover, with the exception of Vroom and Jago (2007, this issue), they offered relatively few suggestions about what the key leadership-relevant attributes of situations might be.

Although it is indisputable that any robust model of leadership must address the interaction between personal and situational attributes, how should that interaction be framed? The generally accepted strategy is to deploy a contingency model (for a review of such models, see Avolio, 2007, this issue). That is, if the direct relationship between some leader attribute X and some outcome measure Y is insubstantial, or if its size or direction changes in different settings, then a situational variable Z is posited as a moderator of the X-Y relationship. Aside from the statistical difficulties of documenting moderating effects (Lubinski & Humphreys, 1990), contingency models necessarily become quite complex as research identifies increasing numbers of potential moderators. In that inevitability lies the rub: The more complete and complex a contingency model of leadership, the less conceptually elegant and practically useful it is. Moreover, if the contingency involves the actual behavior of a leader, as is the case for many of the models discussed in these articles, a level of online processing by the leader is required that can exceed human cognitive capabilities (Gigerenzer, 1999; Simon, 1990).

The systems theorists' notion of equifinality (Katz & Kahn, 1978, p. 30) offers one possible strategy for circumventing the inherent difficulties of contingency models. Equifinality posits that there are many different ways that an open system (such as a person, a group, or an organization) can behave and still achieve the same outcome. When applied to leadership, equifinality implies that different leaders can behave in their own quite idiosyncratic ways and still get key leadership tasks accomplished. Rather than try to tailor their behaviors or styles to some set of contingent prescriptions, then, excellent leaders know how they prefer to operate, what they are able to do easily and well, and what they can accomplish only with difficulty if at all. They may never have heard of the principle of equifinality, but they behave in accord with it. This approach, perhaps, could extract psychologists from overreliance on either fixed traits or complex contingencies in leadership studies—especially if scholars take seriously the proposal by Avolio (2007, this issue) that robust leadership theories must acknowledge the reality that leader behavior is shaped by multiple factors operating at different levels of analysis. Although scholars have not yet carried out the conceptual or empirical work that would be required to explore the application of the principle of equifinality to leader behavior, the effort just might generate nontrivial advances in how we construe, study, and practice leadership.



Ruth Wageman

Ouestion 3: Not do there exist common dimensions on which all leaders can be arrayed, but are good and poor leadership qualitatively different phenomena? As noted by the authors of the articles in this issue, leadership scholars have devoted considerable effort over the decades to identifying dimensions that reliably summarize and describe leader behavior and style. The most prominent of these, of course, are "Initiation of Structure" and "Consideration," which emerged from the Ohio State Studies (Fleishman, 1973). Any leader can be assigned a score in the two-dimensional space defined by these dimensions, on the basis of self-reports and/or the ratings of others. A great deal of research has been conducted using leaders' standing on these dimensions to assess both (a) the impact of leader behavior on subordinates and on unit performance and, more recently, (b) the impact of subordinate behavior and contextual conditions on leader behavior itself. The aspiration has been to identify those leadership behaviors and styles that are most appropriate and effective under various conditions.

The scores of leaders on such dimensions can range from "low" to "high" (in practice, of course, actual numerical scores are computed). But what if good and poor leadership actually were qualitatively different phenomena, if there were *no* single dimension on which both good and poor leaders could be meaningfully arrayed? That possibility is not as unlikely as it may seem. In fact, there are many social and psychological phenomena for which two different systems are required to distinguish one extreme from the other. Positive and negative affect, for example, appear to involve different neural systems. Rewards have qualitatively different effects on organisms than do punishments. The prospect of losing resources is qualitatively different from the prospect of a gain. And those who study human competencies compare excellent performers with average performers rather than with poor performers precisely because demonstrating competence invariably involves different processes than does behaving incompetently.

The same asymmetry may operate for leadership. Research by Ginnett (1993) on the leadership of airline captains, for example, showed that leaders who had been identified by their peers as excellent crew leaders used their authority to accomplish three generic functions (bounding the crew as a performing unit, helping the crew come to terms with its task, and establishing basic norms of conduct for the team). Leaders who had been identified as poor crew leaders, by contrast, did not merely fail to accomplish these three leadership functions; instead, they all exhibited some kind of difficulty with control issues (for example, being overcontrolling, or undercontrolling, or vacillating between the two). Poor leaders were not individuals with low scores on the same dimensions on which good leaders excelled; instead, they exhibited entirely different patterns of behavior.

As Bennis (2007, this issue) noted, there is increasing interest these days in the dynamics of "bad" leadership. What has been learned thus far is consistent with the possibility that good and bad leadership may be qualitatively different phenomena (Kellerman, 2004). That possibility is further reinforced by Sternberg's (2007, this issue) proposal that wisdom, defined as the leader's use of his or her intelligence, creativity, and knowledge to promote the common good, is a key ingredient of effective leadership. Unsuccessful leaders, Sternberg suggested, do not merely lack wisdom; they also fall victim to a series of cognitive fallacies that effective leaders do not. Further research on the special and separate dynamics that characterize good and poor leadership, each as contrasted with "average" leadership or with no leadership at all, may well bring to the surface insights about leadership that otherwise would remain unnoticed.

Question 4: Not how do leaders and followers differ, but how can leadership models be reframed so they treat all system members as both leaders and followers? The authors of several of the articles in this issue made the point that leaders must have followers. Although certainly correct, that assertion also implicitly reinforces the traditional view, discussed by Avolio (2007, this issue), that leaders act and followers mainly react. The opposite is true as well, however: Leaders also are followers, and followers also exhibit leadership.

There are few, if any, organizational or political leaders who have unchecked authority. Each boss also is a subordinate—even chief executives who lead entire organizations invariably report to some higher-standing person or group. This reality means that people who hold formal leadership positions must continuously chart a course between what essentially is a covert coup (acting as if one's own leader need not know what one is doing) and abdication (mindlessly passing on to one's subordinates whatever is received from above). It can take a good measure of skill and personal maturity to balance between one's simultaneous roles as leader and as follower, and the dynamics of managing that balance may deserve more research attention than they have thus far received.

Moreover, as Bennis (2007, this issue) noted, every follower is, at least potentially, also a leader. This fact was empirically illustrated in our recent study of analytic teams in the U.S. intelligence community (Hackman & O'Connor, 2004). Data about the time allocation of the teams' leaders showed that they spent most of their time structuring the work, running external interference, and coaching individual employees. Of all the leader activities we assessed, working directly with their teams received the least attention. That fact opened up many opportunities for peer leadership among rank-and-file team members. And it turned out that the amount of peer coaching members provided one another correlated more strongly with our criterion of team effectiveness (r = .82) than did any other variable we measured. Clearly, most of the hands-on leadership these teams received was provided by members themselves-and to good effect.

To the extent that leadership and followership are inextricably bound up with one another, the distinction between leaders and followers becomes blurred and the whole idea of "shared leadership" takes on a new meaning. In this view, shared leadership is far more than just a partnership or the use of a "participative" style. Instead, it raises the possibility, first suggested decades ago by McGrath (1962), that anyone who fulfills critical system functions, or who arranges for them to be fulfilled, is exhibiting leadership. The functional approach to leadership is the one that we find most intellectually agreeable, and we have written at some length about its implications for the leading of task-performing teams (Hackman, 2002; Hackman & Wageman, 2005; Wageman & Mannix, 1998). It remains to be seen whether the functional approach also is useful in understanding the leadership of larger and more complex entities such as whole organizations or nations.

As the authors of several articles in this issue have noted, psychologists devoted considerable attention in the early decades of leadership research to identifying the attributes that distinguish leaders from nonleaders (i.e., followers). Indeed, Zaccaro (2007, this issue) argued that the same traits that differentiate leaders and followers also contribute to a person's effectiveness in enacting the leadership role. We concur that much is known about who is likely to become a leader, but we suggest that it was not psychologists who were mainly responsible for generating this knowledge-it was, instead, our friends from one level up, the sociologists. If one wants to know who is likely to occupy a position of formal leadership, there is no better place to look than the opportunity structure of society. Or, to put it more colloquially: If you want to be king, your best bet is to be the son of a king or queen.

Although people who occupy leadership roles certainly have more latitude to lead than do followers, one does not have to be in a leadership position to be in a position to provide leadership. Indeed, among the most interesting, and occasionally inspiring, varieties of leadership we have observed is that provided by followers, especially followers who are unlikely ever to be selected for formal leadership positions.

Question 5: Not what should be taught in leadership courses, but how can leaders be helped to learn? The articles in this section document that all leaders have mental models that guide their actions. Because these models are abstracted gradually over time from observations, experience, and trial and error, they risk overfocusing on especially salient features of the leadership situation. Thus, the behavior of another leader one has observed, or especially vivid personal episodes, or the dispositions of a particularly difficult boss or subordinate, may become more central in a leader's mental model than is actually warranted.

Ideally, leaders would be motivated to behave in ways that foster their own continuous learning from their experiences. Sternberg (2007, this issue) proposed that such learning is far more readily accomplished than would be suggested by leadership models that emphasize the importance of fixed traits or capabilities. Yet, as Sternberg also noted, continuous learning almost always requires that leaders overcome inherently self-limiting aspects of their existing mental models. Because such models become so well learned that they are virtually automatic, leaders may not even be aware of the degree to which their models are shaping their leadership behaviors. For this reason, Vroom and Jago (2007, this issue) suggested that leadership training must both bring to the surface trainees' own preferred leadership strategies and then explore the conditions under which those strategies are and are not appropriate.

Any personal leadership model is certain to be flawed or incomplete in some significant way and therefore certain to spawn occasional errors or failures. Since *implicit* models are not recognized as having contributed to the failure, however, a leader's response is more likely to be defensive (e.g., blaming chance or others for what happened) than learning oriented (e.g., inspecting the assumptions that guided the behavior that generated the failure).

Avolio (2007, this issue) suggested that new research is needed to fully understand how leaders learn from their experiences, especially when they are coping with crises. We go further and suggest that error and failure provide far more opportunities for learning than do success and achievement, precisely because failures generate data that can be mined for insight into how one's assumptions and models of action might be improved. Overcoming the impulse to reason defensively, however, can be a significant personal challenge. It necessarily involves asking anxiety-arousing questions (e.g., about the validity of deeply held assumptions or about personal flaws in diagnosis or execution), gathering data that can help answer those questions, and then altering one's mental models and behavioral routines. As Argyris (1991) has shown, such activities are neither natural nor comfortable. Moreover, they are likely to be especially challenging for senior leaders, who precisely because they have track records of leadership success, may have limited experience in learning how to learn from error and failure.

Leading well, therefore, may require a considerable degree of emotional maturity in dealing with one's own and others' anxieties. Emotionally mature leaders are willing and able to move toward anxiety-arousing states of affairs in the interest of learning about them, rather than moving away from them to get anxieties reduced as quickly as possible. Moreover, such leaders are able to inhibit impulses to act (e.g., to correct an emerging problem or to exploit a suddenly appearing opportunity) until more data have appeared or until system members become open to the contemplated intervention. Sometimes it is even necessary for leaders to engage in actions that temporarily *raise* anxieties, including their own, to lay the groundwork for subsequent interventions that seek to foster learning or change.

Unlike the cognitive and behavioral leadership challenges addressed in the articles in this issue, emotional maturity may be better viewed as a long-term developmental task than as something that can be systematically taught. Emotional learning cannot take place in the abstract or by analyzing a case of someone else's failure. Instead, it involves working on real problems in safe environments with the explicit support of others. Only to the extent that leader development programs take on the considerable challenge of providing such settings are they likely to be helpful to leaders both in developing their own learning habits and in providing models for those they lead to pursue their own continuous learning.

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OBITUARIES

John J. Conger (1921–2006)



John Janeway Conger was both an extraordinary human being and an extraordinary psychologist. He died peacefully at the age of 85 on June 24, 2006, in Denver, Colorado, after a remarkable career that spanned five and a half decades and extended far beyond the pioneering work that he was known for in developmental and clinical psychology. He successfully took on many other important roles, both scholarly and administrative, yet remained a warm, caring and generous person, a combination all too rarely found in one individual.

John was born in New Brunswick, New Jersey, in 1921. He attended the Ashville School for Boys and completed his bachelor of arts degree at Amherst College, graduating magna cum laude in 1943. He was class poet, a fine jazz drummer, and a member of the Amherst diving team. He did not dive in his later years, but drumming was always in his blood. In Chinese restaurants, his chopsticks invariably became drumsticks. He wrote poetry throughout his life. His yearly Christmas–New Year's cards always included one of his poems, which were full of John's observant reflections on the world around him. In 1993, John published a collection of his poetry called *The Shape of the Tree: Selected Poems* (Denver: Equinox Mountain Press).

World War II was still being fought both in the Pacific and in Europe when John graduated from Amherst. He left his hometown of New Brunswick and headed to New York City, where an old World War I ship was tied up at a dock in the Hudson River. There he signed on with the Navy. His father had been a naval officer in World War I aboard the USS Missouri. Father and son shared a love of the sea. As an apprentice seaman, John was assigned to midshipman school at Columbia University, where, in three months, he was transformed into a line (deck) officer, one of those known as "90-day wonders." His Navy career was a harbinger of things to come. He marched up the line, first serving on a Navy training boat, then as a submarine warfare officer aboard a destroyer escort, and then becoming commanding officer, at the age of 23, of the destroyer escort USS Tweedy. His rapid rise from seaman to commanding officer foreshadowed his illustrious career in psychology. The Navy, however, was not done with him. He was called up during the Korean War to be the first chief psychologist at the U.S. Naval Academy.

There was one important event during his naval career that had a lifelong and powerful impact on John. In late 1943, a friend set up a blind date for him. After several phone calls with his date-to-be, they agreed to have their first meeting at a popular location, under the clock at the Biltmore Hotel in New York City. She would be wearing a black cocktail dress, and he would be in his dress uniform. It turned out that there were dozens of other couples dressed similarly, but they managed to find each other. His blind date was an aspiring actress by the name of Trista Kline, who later became a successful playwright. After a three-month whirlwind romance, they were married on January 1, 1944. It was the beginning of a loving and intensely caring marriage of 62 years.

Upon his discharge from the Navy in 1946, John entered Yale University, where he earned a doctorate in psychology in three years under his major professor, John Dollard, and his dissertation supervisor, Neal Miller. After graduating, John accepted an assistant professorship in the Department of Psychology at Indiana University at Bloomington. As if this were not enough of a challenge for a new doctorate holder, John added to his faculty appointment the directorship of psychiatric research in the Department of Psychiatry at the Indiana University School of Medicine in Indianapolis. In addition, he was also chief psychologist at the Indianapolis Veterans Administration Hospital for one year.

During the summer of 1952, John visited a close friend and fellow Yale graduate student, Paul Mussen, who was on the Ohio State University faculty. They were both teaching courses in child psychology, and both thought that the current texts were totally inadequate—limited in coverage and with no theoretical orientation. John and Paul decided at this meeting that they could do a better job creating a text with a broader and more integrated approach.

The first edition of *Child Development and Personality* by Mussen and Conger was published by Harper in 1956. It differed sharply from the existing texts of the time by providing a theoretical framework with a major focus on personality development and psychological, biological, and social aspects of growth. It was an instant success. Jerome Kagan joined the two initial authors in a revised edition. *Child Development and Personality* by Mussen, Conger, and Kagan became the most widely adopted child development text in the country. It was published in six editions over the next 30 years, each containing significant revisions. Althea Huston was added as a fourth author in the sixth edition. The book was translated into 10 languages, among them Japanese, German, Russian, Portuguese, Greek, and Italian. John also authored several other books.

In 1953, John and Trista bought a house in a new development near Indianapolis. On the day they were moving in, it was raining buckets. The area around the house had not yet been planted, and as John was carrying furniture through the mud, the chair of the Department of Psychiatry of the University of Indiana Medical School stopped by and invited John to join him at the University of Colorado Medical School, where he was going to head the Department of Psychiatry. John immediately accepted, and so the Congers moved to Denver, where John was appointed professor of clinical psychology and head of the Division of Clinical Psychology four years after receiving his doctorate. He was not only a 90-day wonder in the Navy but a four-year wonder in psychology, rising from new doctorate holder to full professor of clinical psychology at a major medical school.

John's rapid career advancement continued. Eight years after arriving in Colorado, he was appointed associate dean of the Medical School. Two years later, despite the fact that he was a psychologist, he became dean of the Medical School and vice president for medical affairs. The Medical School deanship included the schools of nursing and pharmacy as well. During his tenure, he oversaw the development and completion of the new, large, modern University of Colorado Hospital. Five years later he was able to separate the two positions he held, dean and vice president. This led to each entity having its own dean, despite objections from some medical school department chairs, who sought continuing control over all that was medically related. When that separation became effective, John continued in the vice presidency. During the seven years that he held these positions, he maintained a close and warm relationship with his successor as head of the Division of Clinical Psychology.

Seven years in major administrative roles was enough for John. He stepped down from the vice presidency, resuming his appointment as professor of clinical psychology. Many of the older members of the faculty still speak warmly and admiringly of the Conger deanship. On his return to the Division of Clinical Psychology, John asked to be treated no differently than any other faculty member. However, when problems arose that threatened psychology's role or status, he was always willing to help in finding a solution to them.

Recognition of John's scholarly and administrative accomplishments took several forms. He became a member of the National Academy of Sciences, Institute of Medicine; served as a member of the United Nations Educational, Scientific, and Cultural Organization (UNESCO); and was elected president of the American Psychological Association. He was appointed vice president for mental health at the John D. and Catherine T. MacArthur Foundation. He also received honorary Doctor of Science degrees from Ohio University, Amherst College, and the University of Colorado, as well as the Award for Distinguished Contributions to Public Policy for Children by the Society for Research in Child Development. He was a fellow at the Center for Advanced Study in the Behavioral Sciences at Stanford University and a visiting scholar for one year at the Institute of Human Development at the University of California, Berkeley.

John's abiding passion for the integration of child development with public policy found a voice when he served on the President's Commission for Mental Health. There he developed close ties to Rosalynn and Jimmy Carter. He served on two other presidential commissions. He was a member of the National Advisory Board of the Hogg Foundation for Mental Health. In 1987, he received the American Psychological Association's Lifetime Award for Distinguished Contributions to Psychology in the Public Interest.

John Conger, an eminent scholar, was also a warm, gentle, down-to-earth person, always supportive of students and colleagues alike. His sense of humor never left him, even when he was quite ill. He will be remembered not only for being a most remarkable medical school dean and vice president but also, and even more importantly, for his contributions to developmental and clinical psychology.

He will be greatly missed by his wife Trista, his sons David and Steven and their wives Harriett and Mary Catherine, his granddaughters Chloe and Eleanor, his sister Mary, his nephew Christopher Kline and his wife Linnet, and by all of us who were enriched by his presence.

His scholarly and academic accomplishments, awards, and honors, although great, were only a part of the man. He lived his whole life as a concerned, caring, compassionate person determined to help all those he could while viewing life with the eye of an artist and the soul of a poet.

"The Shape of the Tree"

by John Janeway Conger

The maples' leaves turn quickly now, Bright orange, red, and gold; No longer do the warm mists rise To meet the morning cold.

As randomly in windless air The leaves begin to fall, Summer seems lost in a waking dream Almost beyond recall.

Although the days grow shorter, still The heart must not despair; Only when the last leaf falls Is the shape of the tree laid bare.

> Carl N. Zimet University of Colorado Health Sciences Center

Although he was a prolific scholar, George Michael Pressley was not an armchair professor. His favorite place to be was in K–12 schools, working to improve schooling in America by studying outstanding practice. His work in schools served as the catalyst for his most important scholarly contributions. These spanned a broad range of topics, including children's memory development, the characteristics of highly effective students, reading assessment and instruction, the attributes of exemplary teachers and schools, and the interplay between motivation and learning. Michael made basic theoretical contributions in each of these fields, but in keeping with his passion to improve education, he devoted much of his time to identifying effective instructional practices in each area. Many of these practices have been adopted by schools, incorporated into educational materials, and integrated into teacher preparation programs.

Born in Sewickly, Pennsylvania, on April 25, 1951, Michael attended schools in the West Allegheny School District, and this early background provided the springboard for his interest in research. He conducted his first experiment while still in high school. In 1973, he graduated from Northwestern University with honors in psychology. Four years later, he obtained his doctorate in child psychology from the University of Minnesota. Several people had a particularly strong influence on Mike's thinking in these early years, including John Flavell, Joel Levin, Jim Turnure, and Allan Paivio.

Before taking his last academic position at Michigan State University, Michael held an endowed chair at Notre Dame University (the Notre Dame Professor in Catholic Education). Throughout his career, Michael was committed to social justice, and this was evident in his work at Notre Dame. While there, he founded the Master of Education program in the Alliance for Catholic Education. An essential feature of this program was that participating graduate students were required to work in schools in some of the most impoverished areas in the United States.

Upon moving to Michigan State University, Michael began an important new line of work, one that reflected his commitment to social justice. This involved creating detailed descriptions of leadership, curriculum, and instruction in urban schools that were successful in educating minority students. His research resulted in a theory describing how these schools produce high levels of reading and writing achievement for their students.

Michael's involvement in shaping the educational landscape extended beyond his research and teacher preparation activities. For example, while at Michigan State University, he chaired the panel that revised the content standards for English language arts education in the state of Michigan, and this work was considered a model for the rest of the nation. He also co-authored the "Open Court" elementary reading program, a comprehensive instructional approach to early literacy that has been successful in improving the achievement scores of children in urban school districts. He consulted with the White House, Congress, and the U.S. Department of Education. In the process, he helped to increase the scientific grounding and overall quality of the policies guiding reading and literacy instruction in the nation's schools. Often, he served as the counterpoint to Reid Lyon, education advisor to President Bush. For instance, in his last public address, delivered at the 2005 International Reading Association Conference, Michael was highly critical of several government educational policies, including "No Child Left Behind" and "Reading First." This was consistent with his commitment to social justice. He never wavered from confronting popular educational policy that he believed was inequitable or from criticizing what he saw as a misuse of public funds. For example, he was critical of the "What Works Clearinghouse" (WWC), established in 2002 by the U.S. Department of Education Institute of Education Sciences to recommend interventions based on the "best scientific evidence." After spending millions of dollars, this review panel identified only a few interventions that met the narrow criteria established for scientific evidence. Mike believed that some of the research studies and interventions ultimately chosen by WWC were questionable.

Starting with his first publication in 1976, which examined the role of mental imagery in reading, Michael began an exceptionally productive and influential career. He became one of the most respected intellectual leaders in the fields of educational psychology and literacy education. The impact of his work extended beyond these two fields, however, as his research influenced scholars in a variety of areas, including special education, second language learning, mathematics instruction, and early childhood education. He produced more than 350 articles and chapters and over 25 books on learning, memory, and cognition in children, focusing on strategies for self-regulated learning in general and regulation of one's reading comprehension in particular. In the process, his work broadened from laboratory studies of primarily psychological questions to include multimethod research on primarily educational questions, particularly methods of teaching elementary and middle-school students strategies for monitoring and regulating their reading comprehension in ways to help them learn more efficiently from text.

Michael's publications include definitive textbooks in learning, cognition, advanced educational psychology, and literacy instruction. His writings on reading and literacy instruction were especially influential, as they played an important and much needed function by pushing researchers and policymakers beyond the "reading wars." He showed that a complete and well-balanced reading program includes both instruction in phonics and word attack skills as well as instruction in story appreciation, inferring meaning from context, and other more holistic strategies (along with good instruction in listening, speaking, and writing). He is among the most widely cited researchers on reading comprehension and literacy instruction, with well over 3,000 citations.

Michael's work spans psychology and education, and he received prestigious awards for leadership and accomplishment from the leading scientific organizations in both of these fields. The American Psychological Association recognized Michael's contributions by honoring him with an Early Career Contribution Award in Educational Psychology (Division 15) and, later, in 2004, with the E. L. Thorndike Award for Distinguished Contributions to Educational Psychology; by elevating him to fellow status in the organization; and by appointing him to serve as editor (from 1996 through 2002) of the *Journal of Educational Psychology*. As editor of this journal, he promoted the publication of studies using a broader range of methodologies, including qualitative research. Besides being editor of the *Journal of Educational Psychology*, Mike also served as co-editor of the *Journal of Reading Behavior*, one of the leading reading journals.

Michael achieved comparable prominence in the field of education. The American Educational Research Association presented Michael with the Sylvia Scribner Award for his contributions to research on learning and instruction. Within the more specific area of reading, Michael was honored by the two leading research organizations—the International Reading Association and the National Reading Conference. The former organization recognized Michael's contributions by presenting him with the Albert B. Harris Award, and the latter organization presented him with the Oscar Causey Award.

In 2005, Mike was named university distinguished professor at Michigan State University, the highest academic honor within the university. In the spring of 2006, he received the Distinguished Alumni Award from the University of Minnesota. What is unique about Michael's history of international and national awards is their diversity. All of these rewards represent the most prestigious recognitions that the respective organizations bestow on major contributors to their fields.

On a more personal note, Michael loved books. When he moved to Michigan State University, he looked for a home with enough space to house them all. He ended up building a library in his basement—the most extensive home library that we have ever seen. He loved poetry and spiritual philosophy. He had a whole wall in his library of poetry, and another wall contained bibles and books on spirituality. He especially liked Joseph Campbell. One of Mike's favorite quotes, from *A Joseph Campbell Companion: Reflections on the Art of Living* (HarperCollins, 1991), captured something of the spirit of Mike's life. The quote is advice given to a young Native American at the time of his initiation:

"As you go the way of life, you will see a great chasm. Jump. It is not as wide as you think."

Mike was a creative and adventurous person who took many leaps in his life—he changed universities six times. In addition to Michigan State University and the University of Notre Dame, he served on the faculties of the University of Wisconsin—Madison (postdoctoral studies and visiting assistant professor); California State University, Fullerton; University of Western Ontario; University of Maryland College Park; and University at Albany, State University of New York. Mike showed a phenomenal ability to be open to the world and encouraged others to take risks as well. When students or colleagues were uncertain, he would look them straight in the eye and say, "You'll do great."

One of Michael's most enduring legacies involves his role as a mentor. He collaborated with more than 100 people on books and articles. Many of these collaborators were beginning scholars whom he met at professional conferences. They often sought Michael out for help or advice, which he gave generously. Over time, these contacts expanded to a large network of colleagues from many fields, who Michael advised, mentored, and supported.

Michael was especially adept at mentoring students. He graduated 16 doctoral students, many of whom developed productive careers in education and psychology. His approach to advising involved first exploring with students their interests and then helping them shape a research program that would carry them through the tenure process. The focus was not on following his interests, but on developing theirs. This personal touch extended beyond the campus, as students were always in and out of his house, visiting, attending seminars in his home library, and being fed by his wife. His mentoring approach may explain why all of his doctoral advisees at the University of Notre Dame followed him to Michigan State University.

Having faced cancer several times, beginning in his twenties, Michael felt fortunate and grateful to be alive. He showed that it is possible to carry on, and carry on productively, under difficult circumstances, with grace and dignity. Michael's most impressive accomplishment was the way he faced death. He had an incredibly positive attitude, a strong will to live, and a desire to continue contributing to this world. He kept working until the end, even e-mailing and conversing with colleagues on the night he died.

What is truly amazing about Michael is how a person so committed and so honored in multiple fields could also be so committed to the people he loved most. He never lost sight of what *really* mattered to him. Family came first in Michael's life. He built one of his more important research programs around his son, Tim. Michael was frustrated with the "whole language" approach his son's teacher used when Tim was in first grade and thought there must be a better approach to beginning literacy. So he studied engaging, effective primary grade teachers, and this led to a research program of discovering effective classroom practices.

Michael and his wife, Donna Forrest-Pressley, had a very special relationship. They met at the Annual Conference of the American Educational Research Association and decided to skip a day of the conference to go to Disneyland, where they had their first date. Donna knew then that she would marry Michael, and they were together for 25 years.

Michael lived life to the fullest, professionally and personally. He was grateful for each day, having lived with cancer for 30 years, with the disease and treatments slowing him down occasionally. He died at home in his favorite armchair in his office, on May 23, 2006, from complications due to his fourth bout with cancer.

> Mary Lundeberg Michigan State University

> > Steve Graham Vanderbilt University

Gilbert Gottlieb (1929–2006)

Developmental science lost an outstanding, innovative investigator and theoretician on July 13, 2006, with the passing of Gilbert Gottlieb at his home in Raleigh, North Carolina. Born in Brooklyn, New York, on October 22, 1929, Gilbert spent most of his youth in Ft. Lauderdale, Florida. His father was a businessman, an occupation that Gilbert felt might have been his own destiny but one for which he had no passion. In search of a satisfying career, he dabbled in several occupations ranging from liquor store employee to professional boxer (under a pseudonym to conceal this pursuit from his mother).

He became interested in psychology during the Korean War, when he was drafted into the U.S. Army's Counterintelligence Corps and sent to Austria from 1951 to 1953 to work with people who had been displaced from their homes in Eastern Europe, many of whom had held exalted positions in their native lands. He observed that some were able to adapt well to their new situations, while others were not, and he felt that psychology held the key to understanding such varying reactions.

After the war, he enrolled at the University of Miami, where he received his bachelor's (1955) and master's (1956) degrees. He completed his doctorate in clinical psychology at Duke University in 1960, and he was also the first graduate student in Duke's joint psychology–zoology graduate training program, which spawned his interest in imprinting in waterfowl. Ultimately, imprinting prevailed and became the subject of his doctoral dissertation.

While finishing his dissertation in 1959, Gilbert worked as a clinical psychologist at Dorothea Dix Hospital in Raleigh, North Carolina, where, for one day a week, he was allowed to pursue his imprinting research. In 1961, he was hired as a research scientist by the newly formed Research Division of the North Carolina Division of Mental Health, at which time he gave up his clinical work, founded the Psychology Laboratory (located on the grounds of Dorothea Dix Hospital), and pursued full time his research on the acoustic basis of species identification in ducklings.

The Research Division ultimately fell prey to state budgetary cutbacks and, in 1982, Gilbert became head of the Psychology Department at the University of North Carolina at Greensboro, where he also held an honorary Excellence Foundation Professorship. Upon stepping down as department head in 1986, Gilbert continued his research at Greensboro until his retirement from academia in 1995. He did not, however, retire from research. In 1995, he became a research professor in the Psychology Department and the Center for Developmental Science at the University of North Carolina at Chapel Hill, where he remained until his death in 2006.

During his career, Gilbert had a profound influence on many students, including postdoctoral students. As one of Gilbert's "postdocs," I have fond memories of our lively theoretical discussions and the many times he allowed me to explore my own empirical paths while still working on our collaborative investigations. Gilbert provided all of his students and associates with intellectual opportunities; it was up to us to decide whether or not to pursue them. Other individuals who Gilbert mentored, and who have gone on to make important contributions in developmental science because of those opportunities, include Lincoln Gray, Timothy D. Johnston, and Robert Lickliter.

Gilbert considered his most important empirical contribution to developmental science to be his research on the effects of nonlinear, prenatal experience on the development of species-typical postnatal behavior—research that was greatly influenced by the writings of Zing-Yang Kuo and T. C. Schneirla, both of whom supported his self-proclaimed "offthe-beaten-track" ideas. As Gilbert explained, scientists are often schooled to look for linear effects of early experience, for example, A leading to B. But development often follows a nonlinear path, such that A might lead to C, which in turn leads to B. Failing to look for C might obscure our understanding of developmental processes. He provided an influential conceptual framework to aid in understanding how linear and nonlinear experiences might maintain, facilitate, or induce development.

In a somewhat understated manner, Gilbert sometimes referred to his theoretical perspective as "the developmental point of view." As an undergraduate, one of his professors introduced him to John Dewey and Arthur F. Bentley's 1949 book Knowing and the Known. Gilbert was enthralled by their concept of "trans-action," which implied a bidirectional (rather than a unidirectional) flow of energy. This transactional approach became an integral part of Gilbert's bidirectional concept of probabilistic epigenesis and his conceptualization of development as a dynamic bidirectional exchange of energy across different levels of organization (i.e., genetic, neural, behavioral, environmental). In a paper published in 2007 as a chapter in B. C. Jones and P. Mormède's edited book Neurobehavioral Genetics: Methods and Applications (Boca Raton, FL: Taylor & Francis), Gilbert extended and elaborated his theory to encompass developmental neurobehavioral genetics, which he regarded as his most important contribution to developmental science.

Having learned about his failing health, I visited Gilbert a month before his death and recorded an audio interview with him. In a parting thought, Gilbert remarked that it is important for researchers to "follow their nose" and pursue research questions and theoretical approaches, even if those ideas are "off the beaten track." He went on to explain that "at the end of the trail, discoveries will be made." He made many that will influence scientists for generations to come.

Gilbert's passion for scientific excellence was matched only by the passion he had for his loving family who survive him—his wife, Nora Lee Willis Gottlieb, and their sons, Jonathan B. Gottlieb, Aaron L. Gottlieb, and Marc S. Gottlieb. He was predeceased by his son David H. Gottlieb.

> David B. Miller University of Connecticut

Estefania Aldaba-Lim (1917–2006)

Psychology mourns the loss of one of its most distinguished colleagues. Estefania (Fanny) Aldaba-Lim died on March 7, 2006, at her home in Manila, Philippines, at age 89. A lifelong advocate for mental health, responsible parenthood, and improving the lives of women and children, she rose to rare stature in her country and internationally, reaching well beyond psychology into public service.

Fanny Aldaba was the fifth of 14 children born into a patrician family in Malolos, an old pueblo (municipality), now about one hour from Manila. Her father was provincial treasurer of Malolos. Her mother, Estefania (after whom she was named), was a housewife. After graduating with a Bachelor of Education degree from Philippine Women's University (PWU) in1936, Fanny obtained a master of arts in psychology from the University of the Philippines in 1939. Awarded the Levi Barbour Scholarship for Oriental Women at the University of Michigan, she became, in1942, the first Filipina to earn a doctoral degree in clinical psychology, attaining her goal in three years rather than the (then) usual four. Among her mentors were professors Walter Pillsbury and Norman R. F. Maier. Upon graduation, caught by World War II, Fanny Aldaba accepted a position as a research assistant with the U.S. Public Health Service in Bethesda, Maryland. She lived in the same Washington apartment building as officials of the Philippine government in exile and was befriended by President and Mrs. Quezon. On November 26, 1944, she married Luis Lim, a recent graduate of MIT and the scion of a privileged Philippine family.

After returning to Manila in 1948, Fanny Aldaba-Lim embarked on a career path that eventually spanned the world. The founding spirit and first director of the Institute for Human Relations at PWU, she obtained a license to establish and head a branch of the New York-based Psychological Corporation, adapting its many assessment instruments to the Philippines. She went on to become a founding member and president of the Philippine Association of Psychologists and of the Philippine Mental Health Association. In 1956, she joined with Margaret Mead in organizing the First International Conference on Student Mental Health, sponsored by the World Federation for Mental Health at Princeton University. Later she was elected president of the Girl Scouts and helped establish the Children's International Summer Village in the Philippines. She published several books and wrote more than 100 scientific research articles. In 1962, tragically, Luis Lim died in an airplane crash. Fanny raised their six children, all of whom pursued successful careers.

Fanny Aldaba-Lim distinguished herself in many fields. She was an active board member of the World Federation for Mental Health in Geneva, Switzerland, always graceful and supportive, and was later elected its president (1983–1985). She served as Cultural and Welfare Advisor to Imelda Marcos (1966–1971), became her country's first woman cabinet member as Secretary of the Department of Social Services and Development (1971–1977), and chaired the Population Commission, advocating responsible parenthood, reproductive health, and access to all methods of family planning.

Fanny Aldaba-Lim left government service in 1979 to accept appointment as the United Nations (UN) Special Representative for the International Year of the Child, with the rank of assistant secretary general. Working under the aegis of UNICEF (United Nations Children's Fund), she organized activities around the world, met with leaders in 71 countries, and constantly sought support for improving services for children with special needs. She was awarded the UN Peace Medal in 1979.

During her long career, Fanny Aldaba-Lim was part of official delegations to numerous international conferences, ranging from the first UN Conference on Population and Development (Bucharest, 1974) to the UN's Fourth World Conference on Women (Beijing, 1996). In later years she was especially proud of her activities as founding president of the Museo Pambata, her country's first children's museum (1994). Her last project was to contribute funds in 2005 to a nongovernmental organization for the building of 50 homes for the homeless and marginalized. She named the area Aldaba Hills in honor of her parents. The village is located in Bulacan, in the province where she was born. Her children intend to build an additional 20 homes there.

Estefania Aldaba-Lim was a rare leader who fostered and enjoyed teamwork and collaboration. A visionary, she was realistic in problem solving, encouraging a "bottom up" approach that strengthened self-reliance, rather than a "topdown" approach that fostered dependence. A dedicated feminist, she was the most feminine of women, especially on those occasions when she danced in her traditional Philippine butterfly gown. She enlivened many a social gathering.

Joining the American Psychological Association (APA) in 1949, Estefania Aldaba-Lim served on the Committee on International Relations in Psychology (1980– 1982) and gave an invited address as the International Year of the Child representative. She was also on the Board of the International Social Science Council and active in the International Council of Psychologists. On the occasion of APA's Centennial in 1992, she was awarded the Centennial Citation for Distinguished International Service in Psychology in the Area of Public Interest. In later years, Fanny was a generous donor to the American Psychological Foundation, helping psychology to respond to national and international disasters. Survived by six children and 17 grandchildren, she will be remembered with great affection for her energy, dedication, and warmth.

Henry P. David Transnational Family Research Institute, Bethesda, MD

> Imelda V. G. Villar Manila, Philippines

Florence L. Denmark Pace University

John E. Exner Jr. (1928-2006)

Many psychologists bounce around a bit before they lock in on the specialty that becomes the focus of their professional life. That was not the case with John Exner. He first laid hands on a set of blots from the Rorschach Inkblot Test in 1953, and his fascination with the instrument anchored his career from then on. Through five decades, 14 books, more than 60 journal articles, and countless workshop and conference presentations, John Exner and the Rorschach became synonymous.

John Ernest Exner Jr. was born in Syracuse, New York, on April 18, 1928. After military service, he received bachelor's and master's degrees from Trinity University and a doctorate in clinical psychology from Cornell University in 1958. He was a faculty member at DePauw University and department chair at Bowling Green State University before moving to Long Island University (LIU) as director of clinical training in 1969. In 1968 he took a year's leave of absence from Bowling Green to serve as a regional director of the Peace Corps Office of Selection. After retiring from LIU as a professor emeritus in 1984, he moved Rorschach Workshops, the independent research, publishing, and continuing education foundation he had established, to Asheville, North Carolina, where he served as its executive director until his death.

As a faculty member, John combined dedication to his research with commitment to his students, who responded in kind. When he informed LIU that he was contemplating retirement, he was persuaded to stay on for one more course before leaving. The semester course was called "An Afternoon with Exner," and it was oversubscribed by students eager to have this last opportunity to learn from and share ideas with him.

Intrigued by the Rorschach Inkblot Test during his own years as a graduate student, John arranged summer internships for himself with two of the instrument's early systematizers, Samuel Beck and Bruno Klopfer. Another of the systematizers, David Rapaport, had encouraged him to "know all the Rorschach," and he maintained ongoing connections with Beck and Klopfer as well as with two other Rorschach pioneers, Marguerite Hertz and Zygmunt Piotrowski. These relationships were profoundly important for John, and the affection in which he held these "Rorschach giants" was palpable whenever he spoke about the time he had spent with each of them.

John's 1969 book *The Rorschach Systems* was a descriptive survey of the five systems but did not compare them in terms of their empirical sturdiness. Encouraged by Beck and Klopfer to take this next step, John found that each of the systems had significant strengths as well as serious weaknesses. Concluding that "integration of the best of each approach was not only wise, but necessary if the integrity of Rorschach's test was to be established" (*The Rorschach: A Comprehensive System*, Vol. 1, p. 16), John set about creating the Comprehensive System. Introduced in 1974, its

goal was to combine "the best of the Rorschach" (p. x) into a system that met psychometric standards of reliability and validity while providing a "useful description of the uniqueness of the person" (p. ix).

John thought that the 1974 publication, The Rorschach: A Comprehensive System, which merged the empirically defensible components of the earlier systems into a standard format, would pretty much bring the project to a close. He soon found otherwise. New reliability and validity studies, fine-tuning of administration and coding guidelines, additional clinical data, and development of a child and adolescent sample resulted in Volumes 2 and 3 in 1978 and 1982, respectively, and when John updated Volume 1 with a second edition in 1986, he wrote that "no one could have foreseen the extended research odyssey that has evolved" (p. ix). It was an odyssey that continued without pause for the next two decades. The fourth edition of Volume 1 was published in 2003, an update of Volume 2 came out in 2005, and John was at his desk analyzing data until a few weeks before his death in February 2006.

Early on, John realized that the Rorschach's survival depended not just on good science but also on making his findings available to practitioners in ways that supported their day-to-day work. Through the continuing education arm of Rorschach Workshops and his active and generous involvement with student and professional groups nationally and internationally, John ensured that the instrument remained in the clinical and research mainstream. He served as president of the Society for Personality Assessment and of the International Rorschach Society, and he was the founding curator of the Hermann Rorschach Museum and Archives in Bern, Switzerland.

John Exner died on February 20, 2006, at age 77, after a courageous fight with leukemia. He is survived by his wife of 55 years, Doris, five children, and 10 grandchildren. Doris was the administrator of Rorschach Workshops since its inception. John chronicled their lifelong love in a series of poems in the dedication section for many of his books.

An American Psychological Assciation Award for Distinguished Professional Contributions to Applied Research that John received in 1998 noted that he exemplified the scientist-practitioner tradition. That was an understatement. Those who worked with John can attest that he was unyielding in his insistence on stringently rigorous methodology, but he was even more unyielding in his respect for the uniqueness of every individual. He leaves behind a worldwide group of devoted practitioners and researchers whose continuation of his 50-year odyssey is perhaps the best memorial of all.

> Philip Erdberg Corte Madera, California

Irving B. Weiner University of South Florida

Kenneth E. Moyer (1919–2006)

Before becoming an internationally known expert in the field of aggressive behavior, Kenneth Evan (Keck) Moyer held jobs as an acrobat, a physical therapist, and a farmer. He served as a marine in World War II and was a consultant to the Norwegian government. The range of his life experiences amazed his friends, who wondered how he could have done all these things and still have acquired such a breadth of scholarly knowledge. Throughout his life, his scholarly pursuits had practical applications, and his practical endeavors had a scholarly basis.

Keck was born in Chippewa Falls, Wisconsin, on November 19, 1919, and grew up in St. Louis, Missouri. His college education began at Saint Louis University, but he had to take a two-year break to raise funds to continue. He completed his undergraduate work in 1943 at Park College in Missouri and married his childhood sweetheart, Doris (Dusty) Johnson, soon after. He then joined the Marines, serving in combat as an ordnance officer in Saipan, Okinawa, and China. After the war, he and his brother-in-law bought a farm in Mississippi. He thought owning a farm would protect him and his family from the hardship he had witnessed during the Great Depression. But the practical life of a farmer did not satisfy his range of interests, so he accepted a position as an instructor in psychology and physical education at Pearl River College in Poplarville, Mississippi.

His interest in psychology brought Keck back to St. Louis, where he entered the graduate program at Washington University, completing his doctorate under Marion Bunch in 1951. Carnegie Institute of Technology hired Keck as an instructor in 1949 while he was still working on his dissertation. In 1954, he took a leave of absence to serve as a consultant on higher education to the government of Norway, but otherwise he remained at "Tech," through its name change to Carnegie-Mellon University in 1966, until his retirement in 1984.

Moyer's early research career was as an applied developmental psychologist. On the basis of his research, he invented toys to address children's developmental needs at specific stages. His work was featured in a story in *Life* magazine. But Keck had his greatest influence on graduate students and on the discipline as a physiological psychologist. He developed a large laboratory and obtained federal grants for research in psychoendocrinology, specifically, the effects of adrenal function on emotional behavior in rats.

Although Moyer was never one to seek glory, he did want his research to have an impact on important issues. So he made the decision to devote the remainder of his research career to the study of aggressive behavior. In his systematic, exhaustive way, he mastered the literature in this area, began an extensive research program, and obtained federal funding.

In a 1968 article ("Kinds of Aggression and Their Physiological Basis"), Moyer proposed a system for clas-

sifying aggressive behavior on the basis of the eliciting stimuli and the response topography. He posited seven types of aggressive behavior and reviewed the literature regarding the physiological bases of each. On the whole, Moyer's classification scheme has held up well, especially with regard to the uniqueness of predatory aggression and the distinction between instrumental and other kinds of aggression. The article continues to be cited frequently; there have been over 400 citations since 1995. Consistent with his concern for practical implications, Moyer followed with an article titled "Brain Research Must Contribute to World Peace." While his students continued to produce data, Moyer traveled the world describing research on aggression and the implications of that research. He wrote five books on aggression as well as a neuroanatomy textbook and a book on parenting.

The study of aggression eventually became a major specialty, leading to the founding of the International Society for the Study of Aggression. In 1974, the founders of the Society selected Moyer to be the first editor of their journal, *Aggressive Behavior*. He also served on the Council of the Society from 1976 to 1980.

Keck was a great teacher—he won a Carnegie Foundation award in 1954. We and many others learned about teaching by observing him. He was a master lecturer who spoke with few notes, but he memorized his lectures by reciting them out loud in the woods of western Pennsylvania.

With his retirement to Lillian, Alabama, Keck had the time to continue his wide reading, his artwork, and his visits to family. Dusty Moyer died in December 2000. Keck continued with his study of a variety of topics, including terrorism, and with his artistic pursuits.

Keck died May 18, 2006, of an apparent heart attack. He was found in his workshop, where he was probably working on his latest creation. His son, Robert S. Moyer, a psychologist who recently retired from the faculty of Bates College, and his daughter, Cathy Noblick, a marriage and family counselor in New Jersey, survive him. Also surviving are five grandchildren and four great grandchildren. He was devoted to all of them and to children he supported through international programs.

When anyone told Keck how impressive his record was, he would say, "If you have lived a long time, you will have done a lot." But many long lives have been empty. Keck lived a full life, and he gave his family, friends, and students an education in the best sense—filled with ideas and values. He called it wisdom. His research and clear thinking left an intellectual legacy to the understanding of the psychology of aggressive behavior. He also left behind many grateful students who continue to be his beneficiaries.

> James H. Korn and Judith L. Gibbons Saint Louis University

Allan G. Barclay (1930–2006)

Allan G. Barclay, the consummate professional psychologist, was born in Masonville, Iowa, on December 22, 1930, and died at his home in St. Louis, Missouri, on February 2, 2006. He was predeceased by his second wife, Audrey Thaman. He is survived by his first wife, Betty Barclay, and by their two children, Lisa and Allan Barclay.

Allan completed his elementary and secondary education in Iowa public schools. After serving in the U.S. Army during the Korean conflict, he pursued his undergraduate degree in psychology at the University of Tulsa, graduating cum laude in 1955. He completed his graduate work at Washington University in St. Louis, receiving his doctorate in psychology in 1960.

He joined the faculty of St. Louis University in 1960, where he attained the rank of professor of psychology and pediatrics in 1965. During his 19-year tenure there, he served in many capacities, including chief of the Psychology Service at Cardinal Glennon Memorial Hospital for Children, director of the Child Development Clinic for Mentally Retarded Children, and associate university research administrator. During this period, he also served as a consultant to President Kennedy's Committee on Mental Retardation, to the United States Children's Bureau, and to the White House Conference on Children.

In 1979, Allan became the associate dean for academic affairs in the School of Professional Psychology at Wright State University. His job was to assist in forming this newly chartered school, as authorized by the Ohio legislature. During his tenure, he served as vice president of faculty and was also a consultant to the U.S. Air Force. In 1985, Allan submitted the original proposal to the Department of Defense for establishing a demonstration program for training military psychologists to prescribe psychotropic medications, and he began negotiations with the Surgeon General of the U.S. Army to implement the program. The program ultimately graduated military psychologists with prescribing privileges in the Department of Defense.

In 1990, Allan returned to St. Louis University as emeritus professor and as an adjunct professor of psychology and psychiatry. He was also appointed clinical research professor at the Missouri Institute of Mental Health, and he remained an active teacher, clinician, and consultant up to the time of his death.

Allan's life is a model of dedication to the profession of psychology. He served as president of three American Psychological Association (APA) divisions—Clinical Psychology, Mental Retardation, and Consulting Psychology. In addition, he served on numerous APA boards and committees, including the Board of Professional Affairs, the Policy and Planning Board, the Finance Committee, and the Continuing Education Committee.

At the state level, Allan served as president of the Missouri Psychological Association three times. He also worked for years as a liaison to the Missouri General Assembly, attempting to establish a licensing law for Missouri psychologists, which was accomplished in 1977. In appreciation of his efforts, Allan was granted the first psychology license in Missouri.

Allan received a number of APA honors and awards, including the Award for Distinguished Professional Contribu-

tions to Public Service (now known as the Award for Distinguished Professional Contributions to Practice in the Public Sector), the Karl F. Heiser APA Presidential Award for Advocacy, the APA State Leadership Award, and the Distinguished Contributions to Clinical Psychology Award from the Division of Clinical Psychology. Additional awards included the Distinguished Practitioner Medal from the National Academy of Practice and the Distinguished Lifetime Contribution Award from the Missouri Psychological Association.

Allan was always a popular teacher with a large contingent of students, as evidenced by the more than 60 dissertations and theses that he directed, many of which were supported by the 30 or so research and training grants he received. He also established the Barclay Scholars Award at St. Louis University, which provides \$500 each year to outstanding doctoral students. In addition, he served two terms as president of Psi Chi, the National Honor Society of Psychology.

As immersed as he was in service and administration, Allan still found time to be an active researcher. His publications (journal articles, book chapters, and book reviews) totaled more than 100. He presented more than 35 papers at APA and other meetings, and he either chaired or participated in more than 30 symposia. He was a diplomate in clinical psychology of the American Board of Professional Psychology and a fellow in APA, the Association for the Advancement of Science, the International Council of Psychologists, and the Royal Society of Health. Allan was a consulting editor for several journals, and in 1976, he was appointed the founding editor of *Professional Psychology: Research and Practice*.

When Allan received his APA Distinguished Professional Contributions Award in 2000, he was honored for

his lifelong advocacy for the mentally retarded and developmentally disabled, his years of service as a child clinical psychologist, and his efforts on behalf of the profession of psychology at local, state, national, and international levels. Over four decades, Allan G. Barclay has worked to advance human welfare by establishing public policies and practices that promote humane and meaningful assessment and treatment for children with developmental disabilities. (*American Psychologist*, 2000, *55*, p. 1313)

On a personal note, Allan was a big, lovable guy with a quick wit and a calm, relaxed demeanor that served him well as a teacher, clinician, and administrator. He was openminded, nonjudgmental, easy to talk with, and never inclined to berate or denigrate others. He enjoyed gardening, driving sports cars, and reading Shakespeare and Sherlock Holmes stories. Allan G. Barclay was a special person who had considerable impact upon all who knew him. He will be sorely missed by his family, friends, colleagues, and students.

> Fred J. Thumin Washington University in St. Louis

> > Ray A. Craddick Georgia State University

Comment

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Grand Theories of Personality Cannot Be Integrated

Alex Wood University of Warwick

Stephen Joseph University of Nottingham

McAdams and Pals (April 2006) presented a new model to integrate the field of personality psychology. Cultural and evolutionary factors interact with an individual's basic traits, characteristic adaptations, and life narratives, which in turn are linked to roles, demands, and behaviors. We welcome McAdams and Pals's (2006) model for providing a way to integrate much of the previously disparate empirical findings in personality psychology. However, we also think that McAdams and Pals (2006) overstated the inclusiveness of the model, and more generally, we would dispute their assertion that the grand theories of personality can be integrated within a single model.

McAdams and Pals (2006) began their article by commenting critically on the grand theorist type of textbook. These are the books that provide a "parade of alternative grand theories, beginning with Freud" (p. 205) and moving on through other grand theorists such as Maslow, Skinner, and Rogers. McAdams and Pals (2006) pointed out that this kind of textbook is highly prevalent and has been around for generations, and they cited examples written by some of the most respected experts in the field.

They criticized this kind of textbook for providing the "implicit message . . . that personality psychology offers a plethora of irreconcilable frameworks for making sense of persons, and the reader should pick his or her favourite" (p. 205). Clearly McAdams and Pals's (2006) view is that the grand theories are not necessarily mutually exclusive but can be integrated, if only such a framework were available. They were also critical of the work of the grand theorists themselves, considering the theories of Freud, Maslow, and Rogers as low on detail regarding basic human nature: "[F]irst principles were typically taken as matters of faith-unquestioned assumptions about what human beings are fundamentally like" (p. 205). Although their model is successful in many respects in providing an integrative perspective, we believe that a detailed reading of the grand theorists reveals in-depth conceptions of human nature that are fundamentally irreconcilable, and although they are fundamental assumptions, they cannot be dismissed because of their inescapable influence on therapeutic practice.

McAdams and Pals's (2006) model proposes that human nature partially determines culture, and together human nature and culture lead to dispositional traits, life narratives, and characteristic adaptations. This would be of no surprise to the grand theorists, and indeed, how human nature interacts with culture is the defining feature of most grand theories. However, this is also the area where grand theorists most sharply disagree. We suspect that Fromm (1973), Rogers (1951), Maslow (1970), and Freud (1923/ 1927) would all agree in broad terms with McAdams and Pals (2006) that evolution has provided the basis of human nature, but that they would diverge sharply in their interpretation of the evolutionary evidence. For Freud, at the most basic level, people have animalistic instincts (the 'id'). Through a complex interaction with culture, people develop an incestuous love for their mother, a murderous hatred of their father, and a host of defense mechanisms to avoid these desires becoming conscious knowledge. In contrast, Maslow (1970) posited a very specific evolution-based hierarchy of needs, ranging from physiological needs, through safety needs, belonging needs, and esteem needs, to self-actualization needs. The interaction of these needs with culture results in the needs being either met or thwarted, with resulting consequences for the well-being of the individual. At a broad level of generalization Rogers (1951) and Fromm (1973) both viewed human nature as essentially "good," and would find support in the evolutionary evidence showing the presence of altruism and cooperation.

In short, whilst McAdams and Pals's (2006) model provides a framework for comparing and contrasting these models, it fails to provide an integration. Rather, their model sidesteps the question of fundamental human nature, except to point to the significance of evolutionary forces in its development. But proponents of each grand theory have never disputed that culture and evolution interact to determine personality. However, they will differentially interpret evidence regarding (a) the characteristics that people have been endowed with through evolution, (b) the nature of the interaction of human nature and culture, and (c) which characteristics are the product of human nature and which are the result of culture. These are the fundamental disagreements that are the hallmarks of the grand theories. No framework can reconcile these views, as they are metatheoretical perspectives largely beyond empirical verification at the present.

If these fundamental assumptions are beyond present empirical verification, it could be argued that they be dropped from the study of psychology and that as psychologists we proceed purely on the basis of scientific evidence. There is considerable merit in this suggestion, certainly as an academic discipline. However, the perspectives of the grand theorists underpin various ways of working therapeutically, and we argue that it is an escapable truth of clinical work that how we decide to interact with another person rests on our deep-seated understanding of the nature of people, whether they are essentially animalistic as Freud would have it, motivated by learned behavior as Skinner would propose, or essentially motivated toward socially constructive behavior as Rogers would suggest. Thus, it is not possible to take the grand theories out of psychology, because at the most fundamental level, the practice of psychology is an inevitable expression of a philosophy of human nature, that is, whether one views people's problems in living from an illness ideology or some other conception (Joseph & Linley, 2006; Maddux, Snyder, & Lopez, 2004) and thus whether people seeking help are, for example, to be controlled, empowered, or educated. It is not possible to engage therapeutically with another person without that engagement being an expression of fundamental assumptions.

Thus, although models such as that of McAdams and Pals (2006) can provide useful ways in which to highlight the differences between the grand theorists, we believe that textbooks will always have to consider the grand theorists separately, simply because they are fundamentally incompatible, and ultimately, insofar as theories of personality are also theories of helping, one does have to choose one's favorite.

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Personality Theories Facilitate Integrating the Five Principles and Deducing Hypotheses for Testing

Salvatore R. Maddi University of California, Irvine

In presenting their view of personality science, McAdams and Pals (April 2006) elaborated the importance of five principles for building an integrated science of personality. These principles are stances on evolution and human nature, dispositional signatures, characteristic adaptations, life narratives, and the differential role of culture. Their main emphasis involved differentiating these principles and indicating that they are all relevant to understanding personality. The discussion by McAdams and Pals certainly illuminates the various aspects of personality, but it also cries out for some greater, more systematic integration of the five principles into particular kinds of personality. It is not yet possible, in their approach, to identify different types of personality orientation and to evaluate the relative effectiveness of these orientations. As presented, their approach may be considered a start but hardly a finish.

Let me suggest that the metatheory of personality theories that I have proposed (Maddi, 1969/1996) could accelerate the needed integration of the five proposed principles. The metatheory indicates that, regardless of their specific content, theories of personality include core, developmental, peripheral, and data statements. At the core level, assumptions are made about specific, unlearned characteristics all people bring into life that express the overall purpose of human living. Whether or not particular personality theories explicitly express it, the core level is considered relevant to meeting evolutionary pressures. Like core statements in other areas (in social, biological, and physical sciences), those in personality are never, and probably never can be, tested in any direct, empirical fashion. The main utility of core statements is that they help tie together the other, more concrete statements that are also part of the theory.

The *developmental statement* is where personality theories conceptualize the early interactions between a person and significant others that have a formative influence on learned aspects of personality. The young person acts initially out of the core tendency, and those around him or her react supportively or punitively. Supportive reactions facilitate full expression of the core in the person's functioning, whereas punitive reactions stifle and twist expression of the core. In their relevant discussion of "characteristic adaptations" (pp. 208–209), McAdams and Pals (2006) did not go this far, though personality theories do.

The end result of this learning process is depicted in the *peripheral statement* of a personality theory. This concerns the habitual, learned modes of functioning, such as motives, traits, or defenses, that are readily apparent in the person as he or she becomes an adult. Perhaps this is what McAdams and Pals (2006) called the "dispositional signature" (p. 207), but it would be helpful to be more precise. In this regard, personality theories typically specify personality types, which are telltale combinations of motives, traits, and defenses. One personality type is identified as the fullest expression of the core tendency, whereas the others are more limited, more twisted, or less fulfilling expressions.

The data statement of personality theories involves the concrete, everyday expressions in living (e.g., actions, reactions, descriptions of self and of living) of the peripheral characteristics contained in the personality types. This is something like what McAdams and Pals (2006) called "life narratives" (p. 209), but they made the useful addition of the role of culture. Although personality theories have not tended to do this explicitly, it is reasonable to regard one's sense of who one is and what life is all about as one of the options presented by one's culture. Once again, personality theories would regard the life expressions of the ideal personality type as far more fulfilling and evolutionarily valuable than those characteristic of nonideal personality types.

Hopefully, working with the metatheory of personality theories I have identified (Maddi, 1969/1996) will tie together the categories of functioning identified by McAdams and Pals (2006). Rather than just identifying the existence of "characteristic adaptations," it is more precise to conceptualize how the particular interaction between the youngster acting out of unlearned (core) characteristics and the significant others reacting out of cultural exigencies and their own developed personalities—can lead to a specific personality type that fulfills or stifles the core tendency.

This conceptual precision also facilitates empirical evaluation of personality theories by permitting hypotheses to be deduced from the integrated assumptions of each theory and tested. For example, Freud's (1925a, 1925b) theory specifies how we decide to interact with another person rests on our deep-seated understanding of the nature of people, whether they are essentially animalistic as Freud would have it, motivated by learned behavior as Skinner would propose, or essentially motivated toward socially constructive behavior as Rogers would suggest. Thus, it is not possible to take the grand theories out of psychology, because at the most fundamental level, the practice of psychology is an inevitable expression of a philosophy of human nature, that is, whether one views people's problems in living from an illness ideology or some other conception (Joseph & Linley, 2006; Maddux, Snyder, & Lopez, 2004) and thus whether people seeking help are, for example, to be controlled, empowered, or educated. It is not possible to engage therapeutically with another person without that engagement being an expression of fundamental assumptions.

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This conceptual precision also facilitates empirical evaluation of personality theories by permitting hypotheses to be deduced from the integrated assumptions of each theory and tested. For example, Freud's (1925a, 1925b) theory specifies that the core tendency is to maximize expression of our inherently selfish and antisocial sexual instinct while simultaneously minimizing the frustrating punishment and guilt that will result if we and others know about our selfish natures. Ideal development is when parents balance their support and love of the child with control of his or her selfishness. This leads to the ideal, or genital, character type, in which there is much expression of selfish needs but in a manner (through socially acceptable forms of selfishness, and personal defenses) that appears admirable to self and others. But in development, if parents are either too punitive or too indulgent, one or another of the nonideal personality types (oral, anal, phallic) occurs, and this stifles expression of selfish, sexual urges, or leads to massive guilt, or both. Needless to say, the "characteristic adaptations" and "life narratives" attendant on the ideal and nonideal personality types will differ sharply.

As another example, Rogers (1961) specified the actualizing of inherent potentialities as the core tendency. Developmentally, as long as significant others support and accept the person's expressions of his or her core, there is continual openness, defenselessness, and fulfillment. What is learned from this is the ideal personality, called the fully functioning person. In contrast, if others react punitively, conditions of worth and defenses ensue, and the nonideal, learned personality type of maladjustment ensues. Once again, the "characteristic adaptations" and "life narratives" of these two types will differ greatly.

The value of taking the metatheory of personality theories seriously is that it results not only in conceptual clarity but facilitation of empirical testing as well. Within any theory of personality, one can test whether the measurable traits, motives, and defenses fit together as would be expected in the conceptualized personality types, and whether the proposed ideal type leads to a better life than do the nonideal types. This is probably as close to actually testing the evolutionary implications of the theory as one will ever get, as the ideal type best expresses the core tendency, and one can see what kind of life this leads to in comparison with that produced by the nonideal types. This level of theoretical specificity also facilitates empirical comparison of the various personality theories in terms of the relative effectiveness and ineffectiveness of living that ensue from their ideal and nonideal personality types, respectively.

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Problems With McAdams and Pals's (2006) Proposal of a Framework for an Integrative Theory of Personality

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I begin with a critique of McAdams and Pals's (April 2006) five principles for a framework for an integrative theory of personality. I next comment on their statements about the person-situation debate and the failure of personality psychologists to produce an integrative theory.

A Critique of McAdams and Pals's (2006) Five Principles

The importance of evolution. McAdams & Pals's (2006, p. 205) statement that "Most of the grand theories are faith-based systems whose first principles are untested and untestable" is inaccurate. The most fundamental first principle of all, the hedonic principle, was incorporated in one form or another (e.g., the "pleasure principle" of Freud) in almost all personality theories and is supported by extensive research with both humans and nonhuman animals. Its evolutionary significance is self-evident. Three other fundamental principles proposed by grand theories are the need to maintain a stable and coherent conceptual system (e.g., Lecky: Payloy: Rogers: Snygg & Combs), the need for relatedness (e.g., Bowlby; Kohut; Sullivan), and the need to maintain and enhance self-esteem (e.g., Allport; Rogers; Kohut). All are supported by research, and the first two of these have clear evolutionary significance. Another important omission with important evolutionary significance is the development of human speech, which has obvious implications for consciousness and therefore for the unconscious.

The Big Five traits as the fundamental large-unit constructs in an integrative theory of personality. As no more than descriptive attributes, the Big Five are unable to account for the dynamic operation and interactions of personality systems. Rather than explaining behavior, they themselves require explaining. Second, as stable dispositions, traits are unsuitable for examining intra-individual variation over situations and occasions, which is essential for capturing the organization and operation of individual personalities. As I previously discussed and demonstrated (Epstein, 1979a, 1979b, 1983), a full analysis of personality data requires an integrated idiographic-nomothetic design. Motivational, emotional, and cognitive, but not trait, variables are well suited for such a design. Third, the Big Five model fails to take into account unconscious cognitions and motives despite widespread agreement that most information processing occurs outside of awareness.

Characteristic adaptations as the smaller-unit constructs. In the absence of any specification of the motives, cognitions, and situational variables that the smaller units comprise, this recommendation is obviously not very informative. Surprisingly, McAdams and Pals (2006) did not mention Henry Murray, although he provided a list of just such variables. A lack of coherence in McAdams and Pals's framework is indicated by the fact that their large units, unlike their smaller units, are unnecessarily restricted to descriptive attributes because they do not include, for example, the basic needs of the grand theories.

Narrative constructions as among the most fundamental constructs in an integrative personality theory. The importance of narrative constructions does not necessarily qualify them to be one of the most fundamental principles. No justification is provided for why narrative constructions are more fundamental than alternative possibilities such as automatic learning from experience; associative, imagistic, and creative thinking; and nonanalytical intuitive, religious, and superstitious beliefs. An overall system that encompasses all of these in addition to narrative constructions would obviously be more fundamental than any that the core tendency is to maximize expression of our inherently selfish and antisocial sexual instinct while simultaneously minimizing the frustrating punishment and guilt that will result if we and others know about our selfish natures. Ideal development is when parents balance their support and love of the child with control of his or her selfishness. This leads to the ideal, or genital, character type, in which there is much expression of selfish needs but in a manner (through socially acceptable forms of selfishness, and personal defenses) that appears admirable to self and others. But in development, if parents are either too punitive or too indulgent, one or another of the nonideal personality types (oral, anal, phallic) occurs, and this stifles expression of selfish, sexual urges, or leads to massive guilt, or both. Needless to say, the "characteristic adaptations" and "life narratives" attendant on the ideal and nonideal personality types will differ sharply.

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The importance of culture. Explicit references to the influence of culture, as with evolution, can contribute to the construct validity of a theory of personality, but they are not essential for a viable theory. What is essential is that the theory be consistent with cultural influences and information about culture. Thus, I have no quarrel with anything that McAdams and Pals (2006) said regarding culture, with the possible exception of whether it should be included among the very most fundamental principles in preference to other principles.

The Person-Situation Debate

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On Grandiosity in Personality Psychology

Dan P. McAdams Northwestern University

All three of the responses to our article on "the new Big Five" (McAdams & Pals, April 2006) objected to our characterization of the grand theories of personality provided by Freud, Jung, Rogers, and other luminaries from the first half of the 20th century. Wood and Joseph (2007, this issue) contended that psychology will never be able to rid itself of the grand theories and that the theories cannot be seamlessly integrated within the framework we proposed in our article. Each of these theories sets forth its own unique assumptions regarding human nature, Wood and Joseph pointed out, and these assumptions shape clinical practice. Similarly, Maddi (2007, this issue) argued that each of the grand theories provides broad statements concerning "core" tendencies in human functioning. Personality theories spell out how core tendencies are translated through child rearing and other developmental experiences into ideal (and not so ideal) "types." Epstein (2007, this issue) objected to our claim that many of the grand personality theories are "faith-based" rather than grounded in evolutionary principles. But Epstein had a much bigger point to make: Personality psychology already has a grand theory that solves all its problems. It is Epstein's theory.

Although Jennifer Pals and I (McAdams & Pals, 2006) described our new model as "integrative," we did not propose that *all* the grand theories of personality developed in the first half of the 20th century could be readily integrated within it. Wood and Joseph (2007) could not be more right when they said, "[W]e believe that a detailed reading of the grand theorists reveals in-depth conceptions of human nature that are fundamentally irreconcilable" (p. 57). I do believe, however, that the model Pals and I have developed helps to situate some of the best theories (classic and contemporary) and the best research being conducted on psychological individuality (i.e., personality) today. I believe that the model helps students, researchers, and clinicians organize and understand many of the different theoretical and empirical trends that run through contemporary personality psychology and related fields, as spelled out in much more detail in the fourth edition of my personality textbook (McAdams, 2006). The textbook finds a great deal of inspiration in the best ideas from the grand theories of personality. I love the grand theories! I believe students should read extensively in them, ideally from original sources, and they should think deeply about them. But not every idea in Freud and (especially) Jung is worth celebrating, or integrating! And although I appreciate Wood and Joseph's quasi-Kuhnian perspective that sees each theory as a deep and abiding paradigm unto itself, I do not believe that the science of personality is well served by textbooks that equate, say, Wilhelm Reich with Charles Darwin.

one of them. Just such a system that operates by a common set of principles has been proposed in cognitive-experiential self-theory (CEST; Epstein, 2003).

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One of the great textbooks in the history of personality psychology is Salvatore Maddi's (1968) volume Personality Theories: A Comparative Analysis, in which he distinguished between "core" and "peripheral" aspects of psychological individuality. In a sense, the model that Pals and I proposed (McAdams & Pals, 2006) begins with that same distinction. Evolutionary theory provides an understanding of the core principles of human nature, out of which individual differences (what Maddi calls "peripheral" characteristics) develop. But like most evolutionary psychologists today, I depart from Maddi's (and Epstein's) implicit assumption that evolutionary theory sets forth a small number of broad, domain-general core tendencies for human life-tendencies such as "self-actualization" (Rogers) or "the hedonic principle" (Epstein). On the contemporary scene, evolutionary approaches to psychological individuality tend to emphasize domain specificity, or the idea that human beings evolved to solve many different adaptational problems (e.g., protecting infants from predators, detecting cheating in social interactions, securing mates for reproduction). Human nature is in the details of these many different adaptations, I believe. This is not to say that broad principles might not be discerned across different adaptations and modules. For example, Robert Hogan (1982) made a compelling argument for the evolutionary significance for human beings of "getting along" and "getting ahead" in social groups. Hogan showed that scientifically generative statements about human nature need to be carefully couched and considered in terms of evolutionary principles. Just asserting, as Maddi (2007) and Epstein (2007) did, that many of the grand theorists happened to make claims that were not necessarily at variance with evolutionary theory is a weak substitute.

But core tendencies are not really what personality psychology is (or ever was) mainly about, if truth be told. Most of the research and theory in our field is about *individual differences*. Personality psychology is unique, in my view, in its unswerving focus on psychological individuality. As Epstein (2007) correctly noted, this means that a full understanding of personality requires "an integrated idiographicnomothetic design" (p. 59). It also means that personality psychologists need a wide range of constructs at multiple levels to account for the exquisite complexity of variability in human functioning. The integrative model that Pals and I have developed (McAdams & Pals, 2006) leaves ample space for three different kinds of constructs-broad individual-difference dispositional traits (to sketch the outline of psychological individuality), more specific and contextualized characteristic adaptations (filling in many of the details of psychological individuality), and integrative life stories (speaking to what individual lives mean in culture). Maddi (2007) suggested instead that broader "types" should be considered the prime individual-difference constructs in personality. In principle, I have no objection to types, whether they be collections of traits; cross-cutting developmental structures or stages; or combinations of traits, adaptations, and accompanying life stories. But Maddi must certainly know that personality researchers have long searched for the holy grail of empirically grounded typologies, and the results of the search have been pretty meager. The empirical problem with types is that they are just too neat and pat to be true. Research in personality psychology consistently shows that people are too complex and too inconsistent to fit neatly into the elegant typologies that some personality psychologists love to imagine.

In Seymour Epstein's (2007) view, the corpus of his own substantial work in personality psychology has successfully addressed all the questions Pals and I raised in our article (McAdams & Pals, 2006). It is beyond dispute that Epstein made a seminal contribution to the person–situation debate of the 1970s in showing how the simple principle of aggregation can reveal robust relationships between trait scores and observed behavior. Indeed, his articles helped to reinvigorate trait psychology. It is somewhat ironic, therefore, that he should take Pals and me to task for leaving room in our framework for the five-factor model of traits! Pals and I are actually agnostic when it comes to the preferred model for dispositional traits—be it twofactor, five-factor, or whatever. The point is that you need *some* model of basic dispositional traits to sketch out the broad outlines of psychological individuality, for both descriptive and explanatory purposes.

Epstein has made other important contributions to the field of personality psychology, not the least of which is his cognitive-experiential self-theory. The clearest evidence, however, that this important theory does *not* solve all our problems is the continued proliferation of exciting new research programs and theoretical agendas across the field of personality psychology today (see McAdams, 2006). Many of these developments have, with all due respect, no meaningful connection to cognitive-experiential self-theory.

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On the Cover

Portions of the following are based on an interview with Margarete Bagshaw on June 29, 2006.

Margarete Bagshaw grew up surrounded by art and by the Pueblo Indian culture of the Southwest, which was her heritage and history. She is third in a motherline of artists. Perhaps not unexpectedly, she rebelled against art for a long time. She remembers as a child going to the Santa Fe Indian Market, an annual gathering of Native American artists on the plaza in Santa Fe, New Mexico, where her mother and grandmother each had a booth. They would set up their displays by 6 a.m. and be sold out by 7 a.m., and then they would watch the thousands of people who came to see the best of the best.

Bagshaw is a modern expressionist and considers herself self-taught. She was an accomplished potter in high school but found the highly structured art classes at the University of New Mexico stifling. Realizing she wanted a looser approach to art, she gave up on art training per se at that time. After graduation, she tried various occupations but found 9-to-5 jobs empty and unfulfilling. She married and established a framing business with her husband, which put her back into the art community. When pregnant with her second child, she had trouble sleeping and found herself wanting to draw. She felt that her inner self was being fed by the art and realized that this was what she "should have been doing in the first place."

When Margarete started painting, she was already familiar with European modern art. At the same time, she was influenced by Native American artists such as John Nieto, who, when he moved to Dallas, gave her several large blank canvases, which she says gave her a larger arena in which to grow. Her grandmother and mother were strong influences as well. Her grandmother, Pablita Valarde, documented Santa Clara Pueblo life with her traditional approach to art. Bagshaw's mother, Helen Hardin, began painting representational images such as ceremonies and family scenes, and over time, her figures became more abstract, although still identifiable. She painted with a definite plan and used native imagery, pattern, and symbolism. Kate Donohue, a San Francisco Jungian psychiatrist, explored the life of Bagshaw's mother with an emphasis on her relationship with her mother and daughter. Donohue reported that Bagshaw feels that "her most poignant inheritance from her mother is her spiritual vision. Helen is her spiritual heroine" (Donohue, 2001). However, Bagshaw needed to emerge from the large shadow cast by her grandmother and mother to feel like an artist in her own right.

Bagshaw's work begins as an unplanned experience. Her approach to painting is first to lay down blocks of color and then random lines. The lines and color begin to make order out of the chaos. Some motifs are abstracted from early traditional pottery. Color harmony is always in the back of her mind. She says that for her, some colors are spiritually harmonious, and she stays in tune with that while working. The key is making sure that elements of the entire piece work together—form, composition, and texture. For that reason, she enjoys working in oils because they give her the texture she likes as well as transparency and a glaze effect.

Museums have purchased some of Bagshaw's works, including a Sun Bird she did in pastels at the beginning of her artistic career. History tells us that the Pueblo people needed a name for the lovely macaws that the Indians from Mexico brought north with them for trade. Even though these birds look very much like parrots, there was no Tewa word for parrot. So they called them sun birds for their brilliant colors. The Sun Bird on the cover of this issue (Than'si'deh) was done in oils. The bird form with its piercing eye, wing shapes, head, and body is more identifiable than most of Bagshaw's work. She says that if feathers look like feathers to the viewer, it is because they began to look like feathers to her as she was painting and she just went with it. More typically, her large canvases are "juxtapositions of abstract shapes and thoughtful placements of stylized Puebloesque designs and motifs. Bold colors applied unsparingly with the twists and turns in her abstract paintings are hallmarks of her style" (Ventana Fine Art. n.d., para. 1).

At this point, Bagshaw feels that she is entering a new phase in her life and that her artwork will begin reflecting that. But—in keeping with the loose style she prefers nothing is planned, so viewers will have to wait to see how it all turns out.

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