

Direction, alignment, commitment: Toward a more integrative ontology of leadership

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ABSTRACT

This article argues that the current, widely accepted leadership ontology – leaders, followers, and shared goals – is becoming less useful for understanding leadership in contexts that are increasingly peer-like and collaborative. The further development of leadership theory calls for a corresponding development at the level of leadership ontology. Thus, an alternative leadership ontology is proposed: direction, alignment, and commitment. A theoretical framework based on such an ontology is sketched out. It is argued that such a framework can integrate emerging leadership research and ultimately stimulate the development of new leadership theory and practice.

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1. Introduction

The focus of this article is the ontology of leadership – the theory of the entities that are thought to be most basic and essential to any statement about leadership. After identifying and describing the widely accepted current ontology of leadership, we argue that further development of leadership theory and practice calls for a new and more integrative ontology. We then present a general leadership framework based on such an ontology and explore some implications of adopting this framework.

Leadership scholars often describe leadership theory as being highly diverse and lacking integration by quoting the observation of Stogdill (1974), repeated by Bass (1990) that “there are almost as many different definitions of leadership as there are persons who have attempted to define the concept” (p. 11). However, we believe that the manifest diversity of leadership theory and definition is actually unified and framed by an underlying ontology that is virtually beyond question within the field. That ontology has recently been articulated by one of the leading scholars in the field as follows: “In its simplest form [leadership] is a tripod—a leader or leaders, followers, and a common goal they want to achieve” (Bennis, 2007, p. 3). This is not a definition of leadership but something much more fundamental: It is an expression of commitment to the entities (leaders, followers, common goals) that are essential and indispensable to leadership and about which any theory of leadership must therefore speak. This ontological commitment means that talk of leadership necessarily involves talking about leaders and followers and their shared goals; likewise, the practice of leadership is essentially the practice of leaders and followers interacting around their shared goals.

We will refer to this ontological commitment as the *tripod*. We should clarify at the outset that in taking Bennis’s statement as an ontological statement (in his own words, this is leadership in its simplest form), and in order to make clear what we see as the limitations of this ontology, we are knowingly overlooking the fact that the vast majority of the leadership theory built on this ontology treats its three elements with the sophistication, nuance, and subtlety that comes from disciplined, well-considered theory and research. Even though it may thus appear that we are setting up the tripod ontology as a straw man, it is not our

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purpose to knock anything down. We fully expect that the tripod ontology will continue to provide a basis for leadership theory and research (not to mention practice) for an indefinite time in the future. Rather, our purpose in focusing at the very basic level of this ontological commitment is to provide a basis of comparison by which the usefulness of the alternative ontology we propose can be evaluated.

We believe that as the contexts calling for leadership become increasingly peer-like and collaborative, the tripod's ontology of leaders and followers will increasingly impose unnecessary limitations on leadership theory and practice. We will argue for an alternative ontology of leadership. To replace the tripod's entities — leaders, followers, and their shared goals — we propose an ontology in which the essential entities are three *leadership outcomes*: (1) *direction*: widespread agreement in a collective on overall goals, aims, and mission; (2) *alignment*: the organization and coordination of knowledge and work in a collective; and (3) *commitment*: the willingness of members of a collective to subsume their own interests and benefit within the collective interest and benefit. (A more detailed discussion of these outcomes is presented later.) Adopting such an ontology would mean that talk of leadership would no longer necessarily involve talk of leaders and followers and their shared goals, but would necessarily involve talk of direction, alignment, and commitment. Likewise, to practice leadership would no longer necessarily involve leaders, followers, and their shared goals but would necessarily involve the production of direction, alignment, and commitment (which may or may not involve leaders and followers). We are therefore advocating the idea that leadership theory and practice would be better served in the future by a development in leadership vocabulary at the most basic ontological level.

Direction, alignment, and commitment (DAC), as the basic vocabulary of leadership, are assumed to be the essential elements of leadership. Whereas with the tripod ontology it is the presence of leaders and followers interacting around their shared goals that marks the occurrence of leadership, with the DAC ontology, it is the presence of direction, alignment, and commitment (DAC) that marks the occurrence of leadership. The question of how such outcomes are produced must be approached carefully. If one presumes that such outcomes are produced by any particular social interaction or system, one runs the risk of making the process by which the outcomes are produced ontologically prior to the outcomes themselves. Thus, to treat the outcomes as the ontological foundation of leadership, one must frame their production in the most general terms possible. Since we do assume that leadership involves individuals working together, we will propose that people possess *beliefs about how to produce DAC*, and that those beliefs are the basis for the *social practices* by which DAC is actually produced. This begins to sketch out the rudiments of a leadership theory founded on the DAC ontology. A much fuller discussion of this framework is presented below (see *Overview of a leadership framework based on the DAC ontology* below).

A key question about an alternative ontology is what good is it. What is the value of a change in leadership vocabulary at the most basic and essential level? The answer is that with a new ontology, leadership theory would address new and different basic questions. With the tripod, the basic question for leadership theory is: Who are the leaders and how do they interact with followers to attain shared goals? With the tripod, leadership theory basically seeks to explain what characterizes leaders and how they influence followers. With the DAC ontology, leadership theory would seek to explain *how people who share work in collectives produce direction, alignment, and commitment*. Basic questions would address the nature and creation of shared direction, the creation, types, and uses of alignment, and the range of kinds of commitments as well as their development and renewal. In short, the value of a new ontological vocabulary is the creation of new basic questions (which of course does not mean that the old basic questions are no longer worth asking or answering).

Another key consideration lies in the fact that the ontology we are proposing is one of outcomes. It is a pragmatic, functionalist ontology. Pragmatism as a philosophical outlook is committed to the grounding of concepts in outcomes and effects. C.S. Peirce, an early proponent of pragmatism, formulated the key idea: One's conception of the *effects* of an object (that one is mentally constructing) is the *whole of one's conception of the object* (Peirce, 1878). In other words, one only conceives of a something (e.g. loyalty, genes, gravity) by conceiving of the effects or outcomes of that something (e.g. constancy, heritability, acceleration). This leads to what is probably the most commonly known idea of pragmatism, that if there are no differences in practice or outcomes, then differences in theories of practice or outcomes make no difference. Arguably, leadership theory under the ontology of the tripod has not paid much attention to leadership outcomes, lumping them together into goal attainment, and has focused attention on the structure and processes of leadership; this approach tends always to run the risk of differences in theory that make no difference to outcomes. The ontology we propose, on the other hand, would focus leadership theory at its most essential level on practical outcomes; theory would be tied to practice at the level of basic vocabulary.

The outcome (DAC) ontology we propose is also functionalist. Functionalist approaches to leadership theory are not common, and a functionalist approach has both benefits and limitations. The following discussion of the features of a functionalist approach is based on Morgeson and Hofmann (1999).

First, a key benefit of a functionalist approach is that a focus on outcomes has the potential to integrate across levels of analysis. Whether DAC is produced by an individual, a dyad, a group, an organization, or an organization of organizations, and no matter how the structure and process varies across those levels, those structures and processes can be integrated by a theory focused on outcomes. Second, the function of processes does not determine the structure of processes; outcomes can be realized in multiple ways. This enables a functionalist ontology to bridge across, for example, cultural differences in structure and process that result in similar outcomes. Third, a focus on outcomes entails less differentiation in the conception of the structures and processes themselves. Thus, whereas under the ontology of the tripod, leader–follower processes are quite differentiated from, say, organizational learning processes, under an outcome ontology they would be functionally equivalent in so far as they both result in DAC. We believe that this loss in differentiation of processes is compensated for by a gain in integration across levels, structures, and processes (including cultural differences). Fourth, a focus on functions and outcomes raises problems of causality: how would a researcher, for example, know that a certain process caused a given outcome? This problem is, of course, not new to the study of

leadership and the same standards of evidence would apply with a functionalist ontology as with the tripod. Finally, there are problems in identifying functions and outcomes per se: how does one tell one outcome from another and how does one differentiate outcomes from structures and processes that produce those outcomes? These five considerations point to the fact that the ontology we propose offers some advantages, but also brings along certain limitations, some of which are likely common to the study of leadership no matter the ontological basis.

On balance, we believe that the ontology of direction, alignment, and commitment offers a basic vocabulary for leadership theory and practice that has more integrative potential than the ontology of the tripod, and that this potential for greater integration balances the loss of differentiation around leadership processes. In any case, we see this loss as being temporary in as much as the development of theory based on the DAC ontology would involve reframing existing distinctions and categories into new configurations. In time new distinctions would take the place of current ones.

There are at least four ways in which an outcome ontology such as DAC acts as a more powerful integrative mechanism. (1) Such an outcome ontology integrates across levels of analysis. While the understanding of leadership as a leader–follower interaction is rooted in the dyad, the understanding of leadership in terms of its functions (outcomes) is not limited to any particular level. Organizations of organizations (or communities of communities) may produce leadership outcomes as well as leader–follower dyads, and may do so using many of the same structures and processes or widely divergent structures and processes. (2) Such an ontology integrates across cultures. Assuming that people everywhere require something very like direction, alignment, and commitment in order to pursue cooperation and shared work, it is likely that cultural differences arise in the structures and processes by which such outcomes are produced. An ontology of outcomes provides a common ground for understanding leadership in various local–cultural contexts, and perhaps for developing common practices across cultural differences. (3) An outcome ontology integrates newly emergent theory with existing theory. As new forms of practice emerge, and new conceptual schemes come along to account for new practices, an ontology of outcomes remains flexible and revisable. There is no need to account for shared leadership, for example, in terms of a leader–follower vocabulary (see *How emerging leadership theory reveals limits of the tripod* below). A theory of shared leadership based on an outcome ontology is free to develop whatever are the most appropriate ways of describing the structures and processes of shared leadership. (4) Such an ontology integrates theory and practice. Because the vocabulary of such an ontology does not anchor structures and processes (as the tripod anchors the vocabulary of leaders and followers), theories built around an outcome ontology are free to track changes and developments in practice (that is, in the structures and processes used to produce the outcomes). This brings theories ontologically related to outcomes into closer contact with any and all developments in practice, whereas theories related to the tripod are best at tracking changes in leader–follower practices. The integrative potential of the DAC ontology in comparison to the tripod ontology is summarized in Table 1.

Before describing a general framework based on an ontology of outcomes, we will briefly review the evidence that the tripod is indeed the predominant (if not the only) ontological basis for current leadership theory.

2. Evidence in the literature for the ontology of the tripod

One need not look far in the leadership literature to encounter the ontology of the tripod. Most definitions and theories of leadership arrange and rearrange the entities of the tripod in various ways: “Leadership is a process whereby an individual influences a group of individuals to achieve a common goal” (Northouse, 2004, p. 3). “Leadership is the process of persuasion or example by which an individual (or leadership team) induces a group to pursue objectives held by the leader and shared by the leader and . . . followers” (Gardner, 1990, p. 1). “Leadership can be defined as the nature of the influencing process—and its resultant outcomes—that occurs between a leader and followers and how this influencing process is explained by the leader’s dispositional characteristics and behaviors, follower perceptions and attributions of the leader” (Antonakis, Cianciolo, & Sternberg; 2004, p. 5). “Leadership is an influence relationship among leaders and followers who intend real changes that reflect their mutual purpose” (Rost, 1991, p. 102). Martin Chemers (1997) states that a majority of theorists would accept leadership as “a process of social

Table 1
The increased integrative potential of the DAC ontology compared to the tripod ontology

	Tripod ontology	DAC ontology
Levels of analysis	The tripod is grounded at the level of the dyad – higher levels must aggregate dyadic interactions.	Outcomes are assumed to be produced at every level from dyad, to group and team, to organization, to inter-organization, and society overall.
Cultures	Leadership must be re-interpreted as one crosses cultures, because the meaning and use of the concept of leaders and followers differs across cultures.	DAC outcomes provide a culturally neutral basis for framing leadership while allowing beliefs and practices to vary by culture.
Emerging theory	Emerging leadership theory (e.g. shared leadership) must account for the phenomena it wishes to explain in terms of the leader–follower interaction, which limits the development of new theory.	The DAC ontology does not limit the processes and structures admitted into leadership theory and thus supports the development of new theory that purports to explain how people with shared work produce DAC.
Theory and practice	Emerging practices that cannot be described in terms of leader–follower interaction are not recognized as leadership and cannot easily be included in leadership theory.	New practices that produce DAC are not only recognized as leadership but may also be generative of new theory.

influence in which one person is able to enlist the aid and support of others in the accomplishment of some task" (p. 1). In discussing leadership concepts, Bass (1990) concludes that "defining effective leadership as successful influence by the leader that results in the attainment of goals by the influenced followers . . . is particularly useful" (p. 14). Thus, although there are numerous definitions of leadership, almost all of them share the ontological assumption that the concept of leadership deals with three entities: leaders, followers, and common goals.

The development of the three legs of the tripod has been a long process over the last century. Each leg has been the focus of theory building and empirical testing and represents an achievement in understanding. Early leadership theory focused on leaders as the possessors and source of leadership. The idea that leadership inheres in the action of leaders is so deeply engrained as to be virtually unquestioned in the leadership literature. The leader leg of the tripod comprises great man theories (Carlyle, 1849; Galton, 1869; Woods, 1913), trait theories (Bird, 1940; Jenkins, 1947; Kenny & Zaccaro, 1983; Mann, 1959; Stogdill, 1948; Zaccaro, Foti, & Kenny, 1991; Zaccaro, 2007), and leader behavior theories (Katz, Maccoby, Gurin, & Floor, 1951; Stogdill & Coons, 1957).

Followers became more than the passive object of the leader's influence with the introduction of vertical dyad linking theory (Dansereau, Graen, & Haga, 1975) and later leader–member exchange theory (Graen & Uhl-Bien, 1995; Uhl-Bien, Graen, & Scandura, 2000). Rost (1991) described leaders and followers as two sides of the same coin. Hollander (1993) emphasized the follower's role in legitimating leadership. A significant body of theory and research has been devoted to understanding the relationship of transformation between charismatic leaders and their followers (Bass, 1985, 1998; Bass & Avolio, 1988; Beyer & Browning, 1999; Burns, 1978; Conger & Kanungo, 1987; Ehrhart & Klein, 2001; Hater & Bass, 1988; House, 1977). A growing area of inquiry focuses specifically on followership, including the role of followers and characteristics of followers (Bjugstad, Thach, Thompson, & Morris, 2006; Collinson, 2006; Kelley, 1992; Lundin & Lancaster, 1990). Another perspective that brings followers into the tripod focuses on implicit leadership theories, that is, follower expectations and prototypes with respect to leaders (Lord, Foti, & De Vader, 1984; Lord, De Vader, & Alliger, 1986; Lord & Maher, 1993; Offerman, Kennedy, & Wirtz, 1994) as well as the effects of follower self-concept (Lord, Brown, & Freiberg, 1999).

The third leg of the tripod—goals held in common by the leader and followers—while playing a role in many if not most concepts of leadership, has not received the theoretical attention of the other two legs. In the context of leadership theory, there has been little study of the nature of goals, how goals emerge, and how they are achieved. Although path-goal theory (Evans, 1970; House, 1971) deals with the leader's role in managing the followers' path toward goals using various resources (such as managerial expectations and rewards), the focus is more on leader or supervisory behavior and its effect on followers than on the goals themselves or how they emerge and develop. Because theory has concentrated on the leader, goals have been conceived in terms of factors such as the leader's intuition (Barnard, 1938), imagination and vision (Hyman, 1954), cognitive competence (Jaques, 1976), or intuition backed up by large quantities of information (Simon, 1987). Transformational leadership theory (Bass, 1985; Burns, 1978) has been particularly concerned with how leaders create visions of what is possible and articulate those visions in ways that transform followers. As leadership theory has shifted to include the role of followers more fully, goals have been conceived more in terms of the mutual interests or benefits of leader and followers (Heifetz, 1994; Kelley, 1992; Rost, 1991).

As an aside, it is interesting to note how the pervasiveness of the tripod is demonstrated by the fact that even scholars who have questioned the role of leadership in determining organizational outcomes (e.g., Meindl & Ehrlich, 1987) have focused on the efficacy of the leader and on followers' attributions about the leader (Calder, 1977), thus accepting the assumptions of the tripod while questioning its implications. Also, in proposing that there are substitutes for leadership in an organizational or group setting, Kerr & Jermier (1978) conceived of factors in the context that substitute for the leader's behavior in producing certain outcomes for followers.

An important aspect of leadership theory, which lies outside the tripod ontology, is the leadership situation (Fiedler, 1978) or the context (e.g., Avolio, 2007; Johns, 2006; Osborn, Hunt, & Jauch, 2002). Context tends to lie outside the tripod because the terms of the tripod point to the influence interaction of individuals, who are generally assumed to have qualities and characteristics that are internally, and thus more or less independently, generated, such as personality or character. Leaders, followers, and their common goals can be, and often are, conceived independently from any particular setting. As a result, context is broadly understood as a separate variable that has certain effects on the leaders and followers who are embedded in it.

This tradition of the context as an independent force affecting the leadership interaction has a long history. Ayman (2004) traces an interest in the contextual aspects of leadership to the zeitgeist approach of Karl Marx, which framed a specific time and place as the context within which leadership played out. Situational approaches focused on aspects of the context such as how a leader emerges through communication patterns (Leavitt, 1951), how seating arrangements predispose people to think of a particular person as the leader (Howells & Becker, 1962), and how the behavior of a leader's boss determines the leader's behavior (Shartle, 1951). Contingency approaches share the idea that the effectiveness of a leader and the desirability of certain leader traits and behaviors come about through an interaction with the situation (Fiedler, 1978; Hersey & Blanchard, 1969; House, 1971; Hunt, 1991; Vroom & Yetton, 1973). Systems approaches to leadership theory (e.g. House & Aditya, 1997; Melcher, 1977) frame leaders as agents operating within a larger system that includes the organization, its structure, the environment, and technology.

The effect of the ontological commitment to the tripod can be gauged as scholars strive to fully contextualize leadership. For example, Osborn et al. (2002), in proposing a way to understand context that is significantly different from the way it is currently understood in the literature, argue that leadership is embedded in the context, that it is socially constructed, and that history matters. They go on to say: "The view expressed here explicitly seeks to go beyond the direct interpersonal influence attempts of the individual position holder. We strive to highlight the indirect influence of a system's top position holders individually and collectively and we want to highlight the dynamics of their collective influence." (pg. 804) Note the powerful effect of the tripod ontology here. The explicit attempt to go beyond the interpersonal influence of the leader on followers is quite naturally constrained by the ontology. From within the tripod, context becomes either a medium in which leaders and followers interact, or

in more broadly defining context, it becomes indirect influence of leaders individually and collectively. Another example of how context is framed by the tripod is how Avolio (2007) describes an integrative approach to leadership theory that brings in the context of individual and group behavior, conceived as the behavior of leaders and the perception of such behavior by followers; the historical context, framed as the factors in the past that affect what types of leader and follower behavior are considered acceptable; the proximal context, understood as what leaders and followers are embedded in; and the distal context, defined as the larger organizational and cultural context that affects leader and follower behavior and perceptions. None of this discussion should be interpreted as a criticism of the work on context; rather, the purpose is to point to the effects of ontology on theory. The tripod ontology's fundamental framing of leadership sets the terms by which leadership scholars have worked to understand the context of leadership. The alternative ontology we propose, on the other hand, fully integrates context as an inseparable part of leadership: there is no need to conceive of context as something separate from leadership in which leadership is embedded (see *The leadership context* below).

3. How emerging leadership theory reveals limits of the tripod

Bennis's (2007) articulation of the tripod describes leadership in its simplest form. As mentioned earlier, leadership theory itself deals with leadership well beyond its simplest form, and in this sense, all theory treats the elements of the tripod in a much more nuanced and subtle way than may have been suggested so far. Within the ontology of the tripod, leadership can be separated from power and authority; the role of leader traits, dispositions, and behaviors can be questioned; the part that followers play in legitimating and even creating leaders can be explored; the efficacy of leaders to affect organizational outcomes can be questioned; and concepts of shared leadership can be differentiated from individual leadership. There is no question that the dynamics of leadership described by the tripod are real and useful; there is no question that “we know with absolute certainty that a handful of people have changed millions of lives and reshaped the world” (Bennis, 2007, p. 3).

With all of this in mind, we propose that the *further development* of leadership theory calls for a corresponding development in leadership ontology: We believe that an ontology of leaders, followers, and their shared goals is too narrow to support emergent theory in the directions of development already underway within the field. Three emerging areas of leadership theory are especially illustrative of how the tripod is becoming too narrow: (1) shared and distributed leadership; (2) applications of complexity science; and (3) relational approaches. In this section, we will briefly examine each of these areas, paying attention to the ways in which each is pushing beyond the ontology of the tripod.

3.1. Shared/distributed leadership

An important and developing aspect of leadership theory in recent years has been the effort to conceptualize shared or distributed leadership. As discussed by Pearce & Conger (2003, pp. 6–9), even though precursor concepts have been around for nearly a century, including Mary Parker Follett's idea of the law of the situation (Follett, 1924) and Bowers & Seashore's (1966) empirical work on mutual leadership, the leadership field has only recently begun to take the idea seriously.

This relative neglect of the concept of shared leadership is no doubt partly due to the fact that throughout the 20th century there was not much need for such a concept in organizations operating with a “managerial paradigm characterized by single leaders in formal positions wielding power and influence over multiple followers who had relatively little influence on upper managers' decision making” (Seers, Keller, & Wilkerson, 2003, p. 77). Shared leadership was hardly imaginable in such contexts. However, another reason for the neglect may be put to the ontology of the tripod: To the extent that shared leadership does not fit well with the ontology of leaders and followers, the concept may lie outside of the field's central concerns.

As described by Cox, Pearce, & Perry (2003), shared leadership relies on an exchange of lateral influence among peers. The authors identify at least two sources of leadership influence in a team: The traditional vertical leader, whether appointed or emergent, is but one source; the other powerful source is the team itself. They use the term shared leadership to describe the condition in which teams collectively exert influence. In this sense, shared leadership is a “collaborative, emergent process of group interaction . . .” that might occur “through an unfolding series of fluid, situationally appropriate exchanges of lateral influence” or “as team members negotiate shared understandings about how to navigate decisions and exercise authority” (p. 53).

The perspective here pushes the concept of shared leadership beyond the ontology of the tripod. By identifying the team itself as a key source of influence, these authors point to a *system of inter-relating individuals* as a source of leadership; it is not only a leader or leaders, but also group interaction and negotiation of shared understanding that create leadership influence. Shared leadership is here conceived not as the parsing out or alternation of leader-based influence, where the leader role passes from one individual to another, but as a qualitatively different social process: interactive, collective influence. It is a social process that requires its own competencies, distinct from vertical leader competencies, including: engaging in lateral influence as an expectation of performance; accepting responsibility for providing and responding to leadership (influence) from peers; and therefore developing skills as both leader and follower (Pearce & Sims, 2000). These competencies significantly blur the leader–follower distinction that lies at the heart of the tripod; this concept of shared leadership comes close to eliminating the distinction altogether. As the leader–follower distinction becomes less useful in understanding and describing shared leadership, the ontology of the tripod is gradually rendered less useful as the foundation for understanding and describing leadership overall. Some ontology that includes both vertical leadership and shared leadership is being called forth.

Gronn (2002) points to the two dualisms of the leadership field, namely the leader–follower and the leadership–followership dualisms. Because these dualisms prescribe rather than describe the division of leadership labor, they do not support the

development of alternative ways of dividing up the leadership task, such as team-based organization or site-based management in school systems. Such dualism in the division of leadership labor is consistent with the ontological commitments of the tripod: The dualistic language of the tripod virtually forces descriptions of practice into a prescriptive leader-centric frame. Gronn proposes that the leader–follower dualism be treated as one end of a continuum (focused leadership), the other end of which is distributed leadership. He argues for distributed leadership as an additional unit of analysis and instantiates this idea by defining leadership as a “status ascribed to one individual, an aggregate of separate individuals, sets of small numbers of individuals acting in concert or larger plural-member organizational units. The basis of this ascription is the influence attributed voluntarily by organization members to one or the other of these focal units” (p. 428). Distributed leadership — as the other end of a continuum on which focused leadership means that only one individual is attributed with the status of leader — can be understood in a purely numerical sense as the aggregated leadership attributions of a group or organization, which even in its mere aggregation of individuals allows for the possibility that everyone in an organization may be a leader at some point. However, if distributed leadership is understood not just numerically but also holistically then “the conduct which comprises the unit of analysis is concertive action, rather than aggregated, individual acts” (p. 429). Gronn identifies three forms of such concertive action: spontaneous collaboration in the workplace; the intuitive understanding that develops among colleagues who work together closely; and institutional arrangements for regularizing distributed action (e.g. self-managing teams). Once leadership has been identified with a holistic concept such as concertive action the relative narrowness of the tripod ontology becomes more apparent.

3.2. Complexity leadership

Another approach that is pushing the tripod ontology beyond its limits is the application of complexity science to leadership theory (Lichtenstein et al., 2006; Marion & Uhl-Bien, 2001; Schneider & Somers, 2006; Uhl-Bien, Marion, & McKelvey, 2007).

Marion and Uhl-Bien (2001) point to the way in which most existing approaches to leadership theory “remain grounded in the premise that leadership is interpersonal influence” (p. 391). They relate this emphasis on influence to reductionism and determinism in the field: reductionism being the attempt to understand the whole (e.g., leadership as a social phenomenon) based on an understanding of the parts (e.g. leader influence on follower behavior), and determinism being the belief that a knowledge of preceding events (e.g., leader influence behavior) allows more or less certain prediction of succeeding events (e.g., goal achievement, motivation).

Complexity theory seeks to avoid both reductionism and determinism through holism. Holism is the doctrine (1) that the whole of any phenomenon is greater than the sum of its parts: thus, one cannot understand the whole through an exclusive focus on the parts; and (2) that there is an irreducible level of uncertainty in any complex system: thus, one cannot predict the future of a complex system with certainty. Applying these holistic principles to leadership results in framing the parts (e.g., the elements of the tripod) as only partly and uncertainly determinative of leadership. In other words, from a complexity perspective, leaders and followers and their shared goals do not add up to leadership: the behavior of leaders and the response of followers to that behavior does not predict with any certainty the outputs of a leadership system. This perspective tends to throw doubt on the clarity of the tripod ontology and raises the question of just what the essential elements of leadership may be apart from or in addition to leaders, followers, and shared goals.

Complexity theory as applied to leadership is still in its early stages, but its language and concepts are already well beyond the ontology of the tripod. For example, the Complexity leadership framework sees order in a system as emerging from interacting agents, making leadership not only a top down, but also a bottom up process, when interacting agents act as catalysts of bottom up emergent structures. Catalysts may be people, ideas, or behaviors, but are necessarily productive of action (e.g., increasing adaptive tension, fostering interdependence) that speeds complex dynamics (such as emergence). Emergent leadership is seen as interacting with administrative leadership in a process called “entanglement”. Theorists of Complexity leadership are asking new theoretical and empirical questions (Dooley et al., 2007), such as if we take leadership out of a formal managerial role, how do we identify what is leadership; how is entanglement best managed; how does top down leadership most effectively recognize and interact with bottom up leadership; and what are the contextual conditions that lead to emergent and productive collective action?

3.3. Relational approaches

A third area of leadership theory development that is pushing against the limits of the tripod is relational theory (Dachler & Hosking, 1995; Drath, 2001; Fletcher & Kaufer, 2003; Gergen, 1994, 1995; Hosking, 2007; McNamee & Gergen, 1999; Murrell, 1997; Ospina & Sorenson, 2006; Uhl-Bien, 2006). As a general concept, relational theory is grounded in a constructionist perspective, which holds that meaning is *generated and sustained* in the context of ongoing relationships (not just *communicated* in relationships) and is negotiated across time (Gergen, 1994). An immediate implication of this general relational idea is that the meaning of the terms leader, follower, and shared goals is not fixed; the meaning is continuously being framed and reframed from context to context and from one time to another. This puts a limit on any ontology at all, since the whole attempt to make some terms or constructs essential depends to some degree on the ability to fix the meaning of the terms. If meaning is a local–cultural agreement for a period of time, an ontology is also local and culturally–historically situated. At a basic level then, relational theory in general provides a perspective from which the tripod is called into question as a fixed ontology; the relational perspective throws into doubt the underlying assumption of the tripod that leaders and followers and their shared goals are *naturally-occurring kinds*, such that terms referring to them reflect an underlying reality about leadership and are thus essential to

leadership. From a relational perspective, any ontology is to be valued not because it reflects a fixed, underlying reality, but because it is useful with respect to some purpose. As the concept of leadership expands beyond the leader–follower duality, the tripod is becoming not less true, but less useful.

Relational theory as it is applied to leadership is complementary to the emerging concepts of shared and distributed leadership and to the approach from complexity science. Unlike individual psychology (a key discipline underlying the assumptions of the tripod), which frames knowledge as entities or processes within the mind and assumes that individuals are more or less autonomous knowers, relational theory locates knowledge not in the individual mind but in ongoing relationships. In relational theory, the individual is traced back not to an autonomous mind, but to participation in historically situated relationships. “Person and context are interrelated social constructions made in ongoing local–cultural–historical processes” (Uhl-Bien, 2006, p. 665).

Relational theory embraces holism with respect to the individual: Collectives are more than an aggregate of individuals; the individual–collective distinction is muted; collective knowledge and action does not reduce to the aggregate of individual knowledge and action; relationships and individuals are mutually constitutive. The person (as distinct from the biological entity) has no a priori existence outside of all his or her relationships. Individuals do not only enter into relationships, but are also brought into being by those relationships.

Such relational approaches frame leadership in terms that go well beyond the leader–follower relationship, and open up the question of how leadership arises through the overall interactions and negotiation of the social order among organizational members (Uhl-Bien, 2006). Drath (2001) speculates that leadership in this sense of an interactive negotiated social order might develop over time in response to emergent challenges facing a collective. The collective practice of leadership might evolve from that of personal dominance (a social order based in a single dominant leader) to interpersonal influence (a social order based in exchanges of mutual influence) to relational dialogue (a social order based on mutual transformation). From this perspective, leaders and followers are framed not as essential elements but local–cultural ideas that are socially constructed for the purpose of providing a basis for social cooperation. As such, leaders and followers may become dispensable when the context bearing on social cooperation evolves.

Shared leadership, complexity science, and relational approaches each represent emergent ideas about leadership that move well beyond the ontology that frames leaders, followers, and their shared goals as essential, indispensable elements of leadership. A much broader and less essentialist ontology of leadership is being called forth, one that can accommodate theories in which leadership is seen as a socially constructed, evolving tool that adapts to suit emergent purposes. In the next section, we will describe our view of such an ontology.

4. Overview of a leadership framework based on the DAC ontology

For the purpose of comparing the usefulness of the tripod ontology with the DAC ontology, we will describe a general leadership framework based on the ontology of the tripod and an alternative leadership framework based on the DAC ontology. The description of the tripod framework will be necessarily rudimentary—obviously it could be elaborated far beyond what we will offer here based on the vast amount of theory development and empirical work that has been done within the tripod ontology. The DAC framework we offer will be correspondingly sketchy, since this is an initial move toward the realization of the DAC ontology in a framework.

The basic framework of the tripod ontology might be described in something like Fig. 1, which is similar to a depiction of leadership variables found in Yukl (2002, pg. 11).

Here we see the ontological elements of the tripod laid out in a rudimentary framework. The arrow connecting the leader to followers represents influence and shows how the leader is picked out by influencing followers more than he or she is influenced by followers (asymmetrical influence). The asymmetrical influence of leader on followers results in the attainment of shared goals. The nature of both the leader and the followers is set by their characteristics (leader characteristics in the case of leaders and follower characteristics including, for example, implicit leadership theories, in the case of followers) and by their behaviors. Leader and follower characteristics and behaviors interact to some degree (e.g. organizational or national cultural elements) outside of the

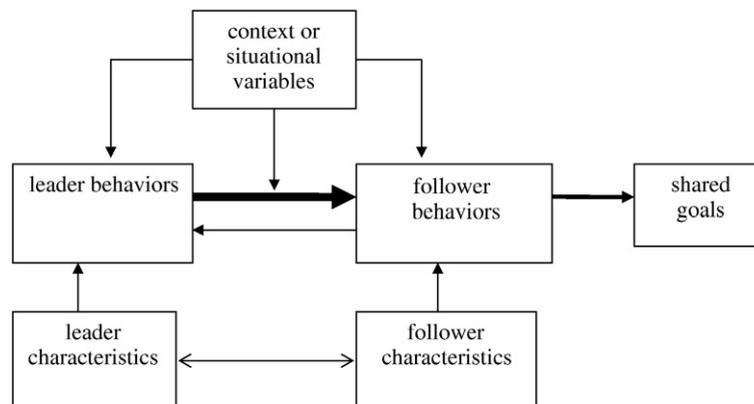


Fig. 1. A framework based on the tripod ontology.

asymmetrical influence relationship. Context is taken as a more or less independent element that affects leaders, followers, and their interactions. To repeat, this is a rudimentary framework based on the tripod. More developed and elaborated frameworks based on the tripod would lay things out differently and describe relationships in alternative ways, however the basic ontological elements of leaders, followers, and shared goals would be present.

The framework based on the DAC ontology is quite different (see Fig. 2).

Of course, the first thing to notice is that the essential terms of the tripod are missing: there is no reference to leaders, followers, or shared goals (except to the extent that shared goals are an aspect of direction). Instead, the focus is on the DAC outcomes and how those outcomes are produced in the most general sense. That is, no assumptions are made about the processes and structures by which DAC will be produced; they may or may not involve interpersonal influence, for example.

We will first present an overview of this framework before going on to describe its elements in more detail below. We will then discuss the implications of such a framework for leadership research, development, and practice.

This DAC framework assumes that people sharing work have (or soon develop) beliefs about how to produce DAC that lead to practices for producing DAC. Furthermore, individuals' beliefs are not purely individual but are connected to others' beliefs by both cultural similarity, affinity, and ongoing interaction. Thus, there are collective beliefs about how to produce DAC as well as individual beliefs. Such individual and collective beliefs are called *leadership beliefs*. Leadership beliefs are assumed to be the major determinant and justification for practices: Practices are the beliefs put into action. Practices aimed at producing DAC are called *leadership practices*. Leadership beliefs in the DAC framework are analogous to (but obviously not the same as) leader and follower characteristics in the rudimentary tripod framework above, while leadership practices in the DAC framework are analogous to (but not necessarily the same as) leader and follower behaviors in the tripod. In other words, leadership beliefs and practices account for the ontologically essential outcomes, just as characteristics and behaviors account for the ontologically essential leader and follower. The efficacy of leadership beliefs and practices in producing DAC provides feedback that may cause changes in practices or, more developmentally, changes in beliefs.

Because direction, alignment, and commitment are ontological elements in this framework, it is axiomatic that leadership has been enacted and exists wherever and whenever one finds a collective exhibiting direction, alignment, and commitment (just as it is axiomatic in the tripod that leadership exists whenever one finds that a leader has influenced followers with respect to shared goals). How such a collective came to produce DAC depends on its beliefs and practices, parallel to the way that leader and follower characteristics determine how influence plays out in the tripod framework. However, leadership beliefs and practices in the DAC framework may or may not involve leaders interacting with followers in various ways; the framework is open to alternative beliefs and practices (actual or merely possible) for producing DAC. Thus the criterion for the existence of leadership is DAC, not the presence and interaction of leaders and followers.

Another major difference between the tripod-based framework and the DAC framework is that the outcome of leadership in the tripod is the attainment of shared goals, while the outcome of leadership in the DAC framework is DAC — a *means* to attaining ends of various kinds. In the DAC framework, leadership is a necessary but not sufficient pre-condition for achieving the longer-term purposes and goals of a collective, such as adaptation, sustainability, the flourishing of certain values, the achievement of certain outcomes, or simply success. The production of DAC is therefore a shorter-term criterion for effective leadership. Goal attainment — the immediate outcome of leadership within the tripod — is in the DAC framework one of a number of possible longer-term outcomes that leadership plays only a part in attaining. Because DAC is not an end in itself, but a means to the longer-term outcomes, the phrase, used throughout this paper, “producing DAC” should be understood to mean not just producing DAC once and for all but also reproducing DAC, developing DAC, and re-creating DAC in ways that contribute to the longer-term outcomes.

As mentioned earlier, direction, alignment, and commitment are elements of an interrelated whole that enables cooperation and shared work in a collective. They also represent a distillation of outcome themes in the leadership literature, although, as seen from within the tripod, these outcomes are understood as products of leader and follower interaction. For example, Gardner (1990) describes the tasks leaders perform, including envisioning goals and affirming values (direction); managing and achieving a

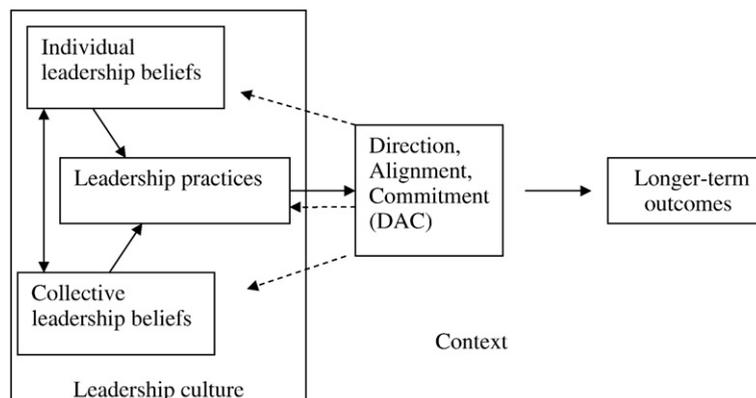


Fig. 2. A framework based on the DAC ontology.

workable unity (alignment); and motivating and renewing (commitment). Likewise, Kouzes & Posner (1987) speak of inspiring a shared vision (direction); modeling the way (alignment); and encouraging the heart (commitment). Bass (1985) describes leadership in terms of inspirational motivation (direction and commitment) and contingent reward and management by exception (alignment). Kotter (1990) speaks of setting direction (direction), aligning people (alignment), and motivating people (commitment). DAC as the outcomes of leadership should be understood as abstract categories into which real-world outcomes can be usefully sorted.

The framework treats all of the behaviors, interactions, and systems in a collective aimed at producing DAC as aspects of leadership practice. This means that the framework applies the term *leadership* to ways of producing DAC that may not have been traditionally thought of as leadership or to which the term is not applied in a given context or culture: This includes, for example, teamwork, organizational learning, the operation of some systems in a collective, dialogue, and even intentional culture change. This is one result of a functionalist approach, as discussed above; its benefit is its increased integrative power; its drawback is that it does not always differentiate well among structures and practices that produce DAC.

This can lead to the apparent conclusion that anything could be leadership. However, this is more apparent than real. While it is true that the DAC ontology results in a greater range of social interaction being seen as leadership, it does not mean that any and all social interactions comprise leadership. *Only that which aims to produce DAC* is leadership. This brings in some, but not all, aspects of teamwork, organizational learning, systems, culture, and so forth. The key idea is that an interaction *aims or intends* to produce DAC. For example, the articulation of a team charter is intended to produce an agreed on direction, whereas the effort to acquire needed resources is usually aimed at just that and not at DAC. One could also argue that within the tripod ontology, any influence behavior (especially by a person in a position of authority) is considered leadership. Importantly, the DAC ontology may actually exclude some instances of leader influence to the extent that, for example, some influence interactions aim selfishly at the reduction or destruction of DAC for personal gain.

It is true that the gain in integrative potential comes at a cost: the framework tends to blur some distinctions currently made clear by the tripod between leadership and such disciplines as organization development, organizational learning, and team development. However, the DAC framework does not include the whole of these other disciplines, but only the associated beliefs and practices that produce DAC. In other words, the framework encourages seeing the DAC-producing aspects of, for example, organizational learning as leadership itself, not just as aspects *motivated by* leaders interacting with followers. Although this may not be an advantage to those primarily interested in understanding, for example, organizational learning or team formation, it offers the possibility of significantly increasing our understanding of leadership.

As discussed earlier, the aim of theory development that builds on the DAC ontology would be to reframe current distinctions and categories into newly useful configurations. There is a trade-off between the clarity of the tripod around structures and processes of leader–follower influence and the functionalist integration of a wide variety of structures and processes intended to produce DAC. But this does not mean that the clarity of the tripod is lost — its clarity still operates within the limits of the beliefs and practices for producing DAC that involve leader–follower interactions.

This brings up the important point that the DAC ontology *transcends and includes* the tripod ontology. Part of the power of an outcome ontology is that it puts all of the social and organizational interactions that produce DAC on the same continuum and sees them as structures and processes at least partly related by their capacity for producing DAC. DAC goes significantly beyond considerations of leader and follower characteristics and behaviors while always fully *including* leader and follower characteristics and behavior; thus, asymmetrical influence processes become *one way* of producing DAC. The rich literature on leadership that the field has produced is not left behind by the alternative ontology we propose, rather it is reframed as knowledge concerning how people in roles of leader and follower may interact to produce DAC. Table 2 summarizes how the DAC ontology transcends and includes the tripod ontology.

5. The key elements of the DAC framework

In the following sections, each aspect of the DAC framework laid out in Fig. 2 is described in more detail. The purpose of this section is not to lay out a fully-developed theory, but to sketch the broad outlines of a way of thinking and talking about leadership based on a basic vocabulary of outcomes.

5.1. Leadership beliefs

Instead of talk of leader and follower characteristics and qualities, as is common with the tripod, the DAC framework speaks of beliefs. Taking beliefs as an essential element of leadership has advantages. First, beliefs have the advantage of being sentential: unlike

Table 2
How the DAC ontology transcends and includes the tripod ontology

Tripod ontology	DAC ontology
Characteristics of leaders and followers	<i>Leadership beliefs transcend</i> leader and follower characteristics because leadership beliefs can be about any aspect of how to produce DAC, but leadership beliefs also <i>include</i> beliefs about leader and follower characteristics.
Behaviors of leaders and followers	<i>Leadership practices transcend</i> leader and follower behaviors to involve the total pattern of interactions and systems that produce DAC, but leadership practices <i>include</i> the leader–follower interaction.

qualities or characteristics (intelligence, charisma), an individual's beliefs can be expressed in sentences (Rorty, 1990). This makes beliefs more amenable to description than qualities or characteristics. This could have important implications for studying leadership. Second, although belief is often conceptualized as a state of mind (e.g., feeling confident that something is true), it is more useful here to think of a belief as a *disposition to behave*, including a disposition to make certain statements (Quine & Ullian, 1978). This links beliefs tightly to practices: a belief is a disposition to behave; a practice is the playing out of that disposition. Thus, observable practices can be assumed to be the instantiation of some belief or beliefs.

The framework assumes that individuals hold beliefs about how to produce DAC (i.e., are disposed to behave in certain ways to produce DAC). For example, an individual could believe that direction comes from a leader's vision; or that people in a work group can align themselves through mutual adjustment; or that commitment is best generated by shared goals. An individual may hold many such beliefs or only a few and be aware of these beliefs to varying degrees. The framework also assumes that when individuals work with others in a collective, they act on the basis of at least some of their beliefs and expect that others will do the same. Thus, some beliefs about how to produce DAC become consequential and make a difference in how DAC is produced.

Some of the beliefs held by individuals about how to produce DAC are also held by other individuals in the collective. Over time, individuals learn about one another's beliefs and influence one another in the beliefs they hold. Thus, individually held beliefs interact with beliefs held in common. Some beliefs may become widely shared, forming collective beliefs. Some beliefs may be held by individuals with power and authority and may be accorded more status, and thus be more likely to be instantiated in practices, than beliefs held by individuals with less power and authority. Newcomers to a collective may bring new beliefs with them; as people leave they may take old beliefs away. The individual and collective beliefs about how to produce DAC comprise a shared resource for producing DAC. From the perspective of the DAC framework, leadership beliefs as a shared resource for producing DAC is a basic and necessary element of leadership, analogous to the basic nature of individual leader and follower characteristics in the tripod ontology.

Leadership beliefs might be usefully divided into three overlapping categories: (1) beliefs about the value of or need for DAC, such as the belief that a shared goal is essential to team effectiveness; (2) beliefs about the characteristics and behaviors of individuals that enhance or hinder the production of DAC (including but not limited to the characteristics and behaviors of people seen as leaders and followers), such as the belief that people on a team need to be unselfish or the belief that a leader is a person who can take charge in a crisis; and (3) beliefs about the practices that produce DAC, such as the belief that it is a duty to obey the legal commands of a superior officer, the belief that decisions affecting everyone should be made by consensus, or the belief that strategy should be set by top managers.

The concept of leadership beliefs—beliefs about why and how to produce DAC—is broader than but also includes the concept of *implicit leadership theories* (Lord et al., 1984; Lord, 1985; Lord et al., 1986; Lord & Maher, 1993; Offerman et al., 1994; Lord & Emrich, 2000). ILTs are prototypes that, from the perspective of the tripod ontology, describe the traits and behaviors of the ideal leader (Epitropaki & Martin, 2005). Thus an ILT is a set of beliefs in the second category listed above: beliefs about the characteristics of individuals in relation to the production of DAC. The effect of the tripod ontology is evident in the fact that implicit theories about leaders are identified as implicit theories about *leadership*, so close is the assumed connection in the tripod between leader behavior and leadership.

This brings up a key point concerning the integrative potential of the DAC framework. Since leadership beliefs are framed as beliefs about how to produce DAC, a person could hold beliefs of this kind without having any overall implicit or explicit concept of leadership as framed by the tripod. For example, a hunting party may share a belief such as “The older hunters know the best places to try for a kill,” and this belief may play a vital role in producing direction, without there being among them any concept differentiating individuals as leaders from individuals as followers (Boehm, 2001).

A single belief does not stand on its own. Each belief is supported and justified by other beliefs (Quine & Ullian, 1978; Rorty, 1990). Even a seemingly simple belief about facts, such as “Meryl is a member of this team,” requires other beliefs to support it, such as “Others think of her as a member of this team” and “Members of this team know who its members are.” More complex beliefs, such as “This team makes its best decisions through dialogue” are supported and justified by a large number of other beliefs. When one is presented with a possible new belief, the likelihood of accepting the new belief as true depends critically on the extent to which the new belief fits into and coheres with one's existing beliefs. Likewise, when one is confronted with the possible falsity of an existing belief, the degree to which the existing belief coheres with other existing beliefs helps determine how likely it is that one will dispense with or hold onto that belief. For this reason, beliefs can be thought of as occurring in webs of mutual support and justification (Drath & Van Velsor, 2006; Quine & Ullian, 1978). This means that beliefs in general resist being changed without compelling reasons, since changing one belief usually means changing many others as well. Changing a single belief may call for a comprehensive reordering or reweaving of a significant portion of the web of beliefs (Rorty, 1990). If the DAC framework were used as a basis for leadership theory, such considerations might produce the conjecture that collectives are characterized by a relatively stable web of common beliefs about how to produce DAC, beliefs that are mutually acknowledged and understood by members of the collective.

The concept presented here as webs of belief is similar to concepts articulated in the literature on organizational cognition. As summarized in a comprehensive review of this literature (Walsh, 1995), these concepts include: cognitive maps (Axelrod, 1976); interpretive schemes (Bartunek, 1984); folk theories (Borman, 1987); screens (Cyert & March, 1963); frames of reference (March & Simon, 1958; Shrivastava & Mitroff, 1983); shared perspectives (Ginter & White, 1982); team mental models (Klimoski & Mohammed, 1994); organizational schemas (Poole, Gioia, & Gray, 1989); tacit understanding (Schön, 1983); and belief structures (Walsh, 1988). How is the concept of web of belief different from this already profusely articulated idea? What value does it add?

The concepts in the organizational cognition literature are based on an information processing model (Walsh, 1995). The various ideas about maps, schemas, frames, and so forth address the need people have to be selective about what they take in and

pay attention to in the information environment. These concepts articulate the way that people impose a template or filter on what they know. The concept of a web of belief is more general; a web of belief would include such maps, schemas, and frames of reference (for example, in the form of what a person believes is important to pay attention to) but would also include beliefs as guides and rules for action (for example in the form of beliefs about what to do to gain commitment from others). Beliefs can be further generalized to include desires (beliefs about what is desirable), values (beliefs about what is right or good), and motives (beliefs about reasons for action). Thus the concept of the web of belief is an approach to framing human psychology in general (Rorty, 1990); of course, only a very small portion of an individual's complete web of belief would bear on the issue of how to produce DAC. Finally, as discussed earlier with reference to the capacity of a functionalist ontology to integrate multiple levels of analysis, the concept of the web of belief can be extended from the individual to include collectives and cultures (see *Leadership Culture* below).

5.2. Leadership practices

The DAC framework assumes that some leadership beliefs are instantiated in practice; although not all leadership beliefs may be instantiated by practices (some remain merely potential practices), all practices reflect some leadership belief (or beliefs) held individually or collectively. A leadership practice is a pattern in the behavior of a collective aimed at producing DAC. Practices are analogous to leader and follower behaviors in the tripod ontology. The key difference in the concept of leadership practices is that practices are understood as *collective enactments* such as patterns of conversation or organizational routines that include and transcend individual behavior.

Mirroring the weblike structure of leadership beliefs, leadership practices are also structured in webs of mutual support and justification and resist being changed for the same reason: the successful introduction and assimilation of a new practice requires some significant portion of the web of practices (and the web of beliefs) to be rewoven, as it were, changing other practices (and beliefs) in perhaps significant ways.

In general, and especially with respect to leadership practices, the DAC framework is relational (Drath, 2001; Drath & Palus, 1994; Fletcher & Kaufert, 2003; Gergen, 1994; Hosking, 2007; McNamee & Gergen, 1999; Murrell, 1997; Palus & Drath, 1995; Uhl-Bien, 2006). This means that the behavior and action of an individual member of a collective is always interpreted in light of its place and significance within the larger web of leadership beliefs and practices and the relations that sustain those beliefs and practices. Because this relational perspective is a key feature of the framework, a simple example will be helpful in driving home this point.

Take the case of issuing commands, as might be found in a military organization. If A gives B a command and B has reason to do what A says just because A said so, having a reason to obey is on equal footing in the DAC framework with issuing the command. B must hold the belief that she has a justified reason and even an obligation to obey just because A said so. The relationalism of the framework means that B's holding a belief that gives her a reason to obey is every bit as constitutive of producing DAC as A's command. With DAC, issuing commands (and every other practice aimed at producing DAC) is framed as a relational practice; every member of a collective is understood as a participant in leadership practices and is thus an integral contributor to the production of DAC.

Thus, the complete description of the leadership practice in the preceding example is not just issuing commands, it is issuing *and receiving* commands. Individualized roles (commander, follower) are understood to depend on the relations inherent in the practice. More is involved than followers legitimizing the leader (Hollander, 1993), which assumes that the roles of leader and follower exist prior to the relations of practice in which they are realized. From a relational perspective, it is the interrelations—the ongoing pattern of human interaction—that is seen as being prior and as the ground for individual identity and role (Gergen, 1994). In other words, it is the beliefs and practices out of which commanding and receiving commands emerge that bring into being the possibility of there being commanders and those who are commanded.

Framed in this relational way, all leadership practices are seen as collective enactments. It is the overall pattern of behavior that matters, not just the behavior of certain individuals. In the previous example, the overall pattern of behavior is more than the issuing of commands by a commander; it also includes the receiving and responding to commands and the reaction of commanders to how their commands are received: this is what Weick called a double interact (Weick, 1979); it is a jointly produced behavior pattern lying *between* the individuals involved (Morgeson & Hofmann, 1999). The total context is inextricably bound up with leadership in this sense: A useful description of the pattern may extend back into the history of commanding and receiving commands (e.g., the tradition of military discipline) and forward into the future (e.g., possible changes in the expectations for commanding and receiving commands).

To underscore the increased integrative potential of the DAC framework, understanding leadership practices as the overall pattern of behavior aimed at producing DAC makes it possible to conceive of leadership practices independent of the conception of individual roles such as leader and follower. A leadership practice may or may not involve individuals in such roles. For example, if a collective is able to produce DAC through peer collaboration, then the overall pattern of the behavior that comprises such collaboration in that collective is a leadership practice. Thus, processes broadly characterized as organizational learning, teaming, and dialogue—if they aim at producing DAC—can be described and understood as leadership practices.

Finally, a leadership practice is picked out from the matrix of collective behavior by reference to outcomes: That which aims to produce DAC is a leadership practice. Unlike the tripod, which tends to pick out leadership behaviors from other behaviors by the structure of the behavior (e.g., by the fact that someone in a position of authority or someone with influence over others behaved in certain leader-like ways), the DAC framework picks out leadership practices by their intended outcome without reference to the

structure of the behavior (although as discussed earlier, this does not imply that any and all interactions are leadership). Indeed, the list of practices in a collective that might aim at producing DAC is open-ended; the framework accommodates all current practices and the development of future innovations—the introduction of new leadership practices aimed at producing DAC does not require a revision to the framework. As discussed earlier, another way in which this framework offers increased integrative potential is that the further development of shared and distributed practices, whatever they might be, are fully accommodated by the DAC framework, whereas trying to account for such practices with the vocabulary of leaders and followers may limit their further development.

5.3. Leadership culture

Beliefs about how to produce DAC are instantiated in practices aimed at producing DAC; the efficacy of the practices in producing DAC shapes and reshapes current and future belief (see *Feedback loops* below). The web of belief interacts with the web of practice, in time producing a relatively stable system of belief-and-practice. This system of belief about how to produce DAC and the linked practices aimed at producing DAC can be thought of as the *leadership culture* of a collective. A leadership culture is a more or less stable pattern in a collective's approach to the production of DAC. Because beliefs and practices cohere in webs with other beliefs and practices that support and justify one another, it seems reasonable to conjecture that such webs, and thus leadership cultures, may occur in distinctive patterns that can be typed or classified. A full-blown theory based on the DAC ontology might include types or classes of such leadership cultures. Such a theory might also deal with the possibility that such cultures develop over time, following predictable patterns of increasing complexity (McCauley et al., 2008; Torbert, 2004).

The concept of a leadership culture fits with Schein's (1992) definition of the culture of a group: A culture comprises the "pattern of shared basic assumptions that the group learned as it solved its problems of external adaptation and internal integration, that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems" (p. 12).

The concept of leadership culture also supports a relational understanding of leadership. By locating the source of leadership in a culture comprising individual and collective beliefs and shared practices, the DAC framework supports an analysis of leadership as an achievement of the whole collective that is realized on multiple levels from dyad, through group and team, right up to whole organizations, and even organizations of organizations. As a product of a culture of beliefs and practices, leadership is seen as a collective activity even when it manifests in highly directive individual leaders. Top-down or directive practices for producing DAC are analyzed in the framework as relational processes in which the beliefs of the directing individuals and those being directed are taken to be necessary co-constituting elements of the process. The idea of a leadership culture locates the source of leadership (that is, the source of the processes for producing DAC) not in individual minds but in the interaction of beliefs and practices at the collective level (Drath, 2001; Drath & Palus, 1994; Hosking, 2007; Uhl-Bien, 2006).

In addition, identifying leadership beliefs broadly to include all beliefs bearing on the production of DAC provides a way to conceptualize leadership as a shared and distributed process without assuming that what is being shared and distributed is *leader* (and thus follower) behavior. The framework's relationalism means that, in essence, all leadership (even when it is highly leader-driven) is shared leadership. This has the potential for opening up the conceptualization and development of distributed and shared leadership by directing it toward forms of practice outside of the ontology of the tripod.

A key implication of the concept that the source of leadership is cultural is that changes in the process of leadership, including changes that can be characterized as leadership development, imply cultural changes. From the perspective of the DAC framework, changing the beliefs and behaviors of people in positions of authority is necessary but not sufficient to bring about changes in leadership. It is equally important to change the beliefs and behaviors of *everyone* who thinks and acts in ways that sustain the culture. This is the only way to change the overall web of belief and practice that comprises leadership culture. (see *The framework applied to leadership development* below.)

5.4. The leadership context

Leadership within the tripod ontology is identified with an influence interaction between leader and followers. It is not necessary (although it may be useful and desirable) to know the situation in which the influence interaction is taking place to decide that it is leadership. As discussed above, context from the tripod's ontological perspective is often conceived as a more or less independent variable which affects the fundamental influence interaction. The role of context within the DAC ontology is significantly different. Since the production of DAC is the mark of leadership (and not any particular process by which such outcomes are produced), the context plays a *constitutive or generative* role in leadership. As discussed above, leadership beliefs and the practices that instantiate those beliefs exist not in isolation from one another but in mutually supportive and justifying webs. Individual webs of belief reflect larger collective webs, which in turn reflect still larger tribal, regional, ethnic, or national cultural webs. The production of DAC—leadership—is thus inextricably bound up in webs within webs of belief and practice that do not just have an *effect* on the production of DAC but *generate and justify* the beliefs and practices by which DAC is produced (including interpersonal influence interactions). From the perspective of the DAC ontology, context and leadership are seen as mutually interacting interdependent elements, not relatively independent elements. Aspects of the context such as organizational design, technology, values, competition, and the historically situated moment are *constitutive sources* of the beliefs and practices by which people with shared work aim to produce DAC. Thus, the tripod's ontological influence interaction between leader and follower, which is framed as the product of leader and follower characteristics and behaviors, is reframed within the DAC ontology as a

contextually generated practice (e.g., as discussed earlier, commanding and *being commanded*) in which the leader and the follower participate to the same degree: follower beliefs and practices constitute leadership every bit as much as leader beliefs and practices. The individual aspects of such an interaction (the individual qualities and behaviors of the leader and the follower) are interpreted holistically as products not just of the individual mind but also of the contextualized relations.

This difference between the concept of context in the tripod and DAC ontologies is represented in Figs. 1 and 2. In Fig. 1, depicting the tripod ontology, context is represented by boxes whose arrows point to leader and follower behaviors and to their interactions. This represents the way context is often framed within the tripod as an independent influencing factor. In Fig. 2, representing the DAC ontology, context is represented by a ground that subtends the entire figure, representing the way in which context is a constituting element of DAC, leadership beliefs, leadership practices, leadership culture and the longer-term outcomes. The constitutive role of context in the DAC ontology is another aspect that contributes to its greater integrative and holistic perspective on leadership. Just as DAC integrates the understanding of leadership across levels, processes, and cultures, it also integrates leadership across contexts.

5.5. DAC: the leadership outcome

As we have seen, DAC comprises three independent (though interrelated) outcomes. The framework assumes that each outcome can be produced on its own without the others and that the outcomes can be produced with varying degrees of effectiveness. Thus, there can be direction without alignment or commitment, as when a collective agrees on its aims but cannot organize itself or gain commitment to those ends. There can be alignment without direction or commitment, as in the Abilene paradox, in which a group pursues collective ends not sought by any individual in the group (Harvey, 1996). There can be commitment without direction or alignment, as when members of a collective are passionate in their desire to act but cannot agree on a shared outcome to aim for and cannot organize themselves. Overall, the criterion of effectiveness for DAC (and the short-term criterion for the effectiveness of leadership) is assumed to be the extent to which all three elements of DAC are produced and function together in a synthesis. In the following description of these outcomes, bear in mind that this framework aspires to be useful in understanding leadership in virtually all contexts and in relation to virtually all kinds of collectives with shared work, from a corporate board room in Tokyo, to an aboriginal hunting party; from a volunteer organization in Chicago, to a community project in Bangalore; from a social movement, to a family on vacation.

Direction is shorthand for shared direction. It refers to a reasonable level of agreement in the collective about the aim, mission, vision, or goal of the collective's shared work. Agreement about direction means more than knowing and understanding the collective's mission or goals. It also means assenting to the value of the direction. In a collective in which members have produced direction, there is a shared understanding of what is aimed at and broad agreement on the value of that aim. The concept of direction here is not limited to unified or concerted direction; the possibility that direction may be variously conceived and understood in a collective, consisting of a cluster of interrelated agreements on aims and goals, is left open, as is the possibility that direction is continuously being transformed.

Alignment refers to the organization and coordination of knowledge and work. In a large formal organization, alignment is often achieved through structure and many of the aspects of shared work usually categorized as management, such as planning, budgeting, supervisory controls, performance management, and reward systems. In smaller informal collectives, alignment may be produced through mutual adjustment in face-to-face conditions. In a collective that has produced alignment, the work of individuals and groups is generally coherent with the work of other individuals and groups. The concept of alignment here is not limited to tight or close alignment and, as with direction, the possibility that alignment might be loose, flexible, or subject to continuous change is left open.

Commitment is shorthand for mutual commitment. It refers to the willingness of individual members to subsume their own efforts and benefits within the collective effort and benefit. Depending on context, what members of a collective commit to may range from social causes, to organizational success, to familial love. In a collective that has produced commitment, members allow others to make demands on their time and energy (Farley, 1986). This concept of commitment includes but is not limited to undivided loyalty or extra effort and includes the reality of competing commitments. The concept of subsuming personal effort and benefits within the collective may also include oppositional or transformative stances toward the shared work.

As mentioned earlier, producing DAC cannot be assumed to be a one-time effort. Often (if not always) DAC is a moving target, ever changing in response to the changing requirements of the environment in which the collective works and the changing conditions it faces with respect to its ultimate goals. In the majority of cases, leadership must aim at not just producing DAC, but continually re-creating, reframing, and developing DAC.

5.6. Feedback loops

The production of DAC (or the failure to produce it) is taken to be an opportunity for learning in the collective and for possible changes in beliefs and practices. The feedback loop from DAC directly to practices (see Fig. 2) represents single-loop learning (Argyris & Schön, 1974). That is, when a collective attempts to redress problems in producing DAC by implementing existing practices more skillfully, or by engaging in a different practice based on the same leadership beliefs, it is treating its current use of the practices as the linear and immediate cause of the outcomes, without examining the structure of belief underlying the practices. When a collective goes beyond improving its existing practices by questioning the practices themselves, double-loop transformational learning becomes possible (Argyris & Schön, 1974). Since the practices are based on the beliefs, which are

assumed to be more or less stable and to form taken-for-granted realities about leadership, changing leadership practices ultimately calls for transformational change at the level of leadership beliefs. Thus the feedback loop from DAC to the underlying beliefs is assumed to be the key to developing leadership practice. (see *The framework applied to leadership development* below.)

5.7. Longer-term outcomes

The outcome of leadership (DAC) can be framed as an end in itself when considered in the light of its contribution to the coherence, clarity, rationality, intentionality, community, and shared sense-making of a collective. The framework assumes that the effectiveness of leadership can be assessed in the shorter-term by reference to the degree of DAC produced. The longer-term criteria for effective leadership is the attainment of the purposes and longer-range goals of the collective. The extent to which a collective is successful in attaining its longer-term outcomes depends on more than DAC. Context is a pervasive factor, subtending every aspect of the framework (see Fig. 2). Thus aspects of the context such as technologies, competitors, social changes, and historical events also bear directly on longer-term outcomes. As pointed out above, in this framework DAC is a necessary aspect of attaining longer-term outcomes but is not sufficient for attaining those outcomes.

A full leadership theory founded on the DAC ontological framework might hypothesize that such contextual factors outside the production of DAC interact with the production of DAC. For example, more complex longer-term outcomes may require more complex DAC outcomes. The complexity of DAC outcomes could be framed in terms of the degree to which the three elements are differentiated and integrated in a synthesis. For example, a relatively simple approach to DAC may be produced by a coach working with a group of young people just beginning to understand playing basketball together: win as a team (D), make at least two passes before you shoot (A), show up for all the practices and games (C). The team's longer-term goal of winning may not require more complexity than that. On the other hand, a group of community members coalescing around the longer-term outcome of enriched cultural resources for their small city is likely to be called on to produce DAC that integrates any number of different conceptions of direction, that organizes a large number of people flexibly and responsively, and that calls for personal commitment that survives disagreement, conflict, and confusion.

A general class of complex longer-term outcomes consists of outcomes that aim at adaptation. Such social adaptation (as distinct from biological adaptation) is a value-laden process in which some purposes and values are privileged above others (Heifetz, 1994). Social adaptation means more than merely coping and surviving. It also involves the human capacity for re-imagining realities and altering environments; it calls forth the need for values to evolve, ends to be questioned, and people to change their beliefs. Thus, as a general class of longer-term outcomes, those that aim at adaptation might be assumed to require a high degree of complexity in DAC.

6. Applying the DAC framework to the study of leadership

The basic question being asked by research programs framed by the ontology of the tripod is something like, how do leaders and followers interact to attain their shared goals? The key feature of this basic question is the way it assumes that leaders and followers (or leader and follower roles) exist prior to goal attainment (i.e., leaders and followers are prior to leadership; leadership proceeds from the interaction of leaders and followers). Because the DAC framework does not make this assumption, the basic question about leadership with the DAC ontology becomes, what beliefs and practices enable people in collectives with shared work to produce DAC? The priority of leaders and followers is not presumed by this basic question.

The basic question of the DAC framework is therefore more general than the basic question of the tripod. The DAC framework includes all of the questions asked about leadership from the perspective of the tripod, because all of those questions are special cases of the DAC framework's more general question. This is another area of increased integrative potential with the DAC framework, because all of the research questions being pursued within the tripod are also questions within the DAC ontology.

The DAC ontology, however, also opens up many other questions. A key value of the DAC ontology for future leadership research is the potential it has for broadening research attention beyond the focus of the tripod to also include the emergence, design, dynamics, and development of leadership beliefs and practices.

For example, there is the question of how such beliefs and practices emerge. One answer, of course, is that leaders inculcate beliefs in followers and initiate practices through their behaviors and attitudes. This answer accords with the assumptions of the tripod. Such an answer frames research centered on leader beliefs (attitudes and perspectives), follower beliefs (implicit theories and schemas), the process of leaders inculcating beliefs in followers (influence and motivation), and so forth. The DAC framework reframes this agenda by conceiving of beliefs and practices as products of a cultural matrix: Beliefs are seen less as individual mental entities and more as social and relational co-constructions. In this sense, if a leader inculcates a belief in followers, the whole cultural system that instantiates leaders, followers, and a process of inculcation is implicated. In other words, even if empirically there is leader inculcation of beliefs and practices, the matter does not end there. The further question is raised of how such a cultural system arose, what sustains it, what limitations it may face, and how it might transform. In addition to reframing questions posed within the tripod ontology, the DAC framework can entertain questions of how beliefs and practices emerge and spread in a collective without presuming the existence of leaders and followers. For example, how do beliefs and practices come into being and become widely used in contexts of peer-like professionals, self-managed teams, or cross-boundary collaborations that may not exhibit marked leader–follower dynamics?

A number of other questions related to leadership beliefs and practices can also be posed and would presumably be the kinds of questions posed in a fully-developed theory of leadership based on the DAC ontology: How do leadership beliefs and practices

change and develop over time? What contributes to or limits the effectiveness of leadership practices in producing DAC? How do people in positions of power and authority participate in various leadership practices? Does such participation change as leadership beliefs and practices develop? What kinds of challenges tend to call forth the development of the leadership beliefs and practices of a leadership culture? How does achieving DAC contribute to adaptation? These questions and others enlarge the conceptual space in which leadership is studied.

An example of this enlarged conceptual space for studying leadership will help make this point clearer. The study of leadership across cultures is an area of continuing interest (Den Hartog & Dickson, 2004). A challenge confronted by such studies is that the concept of leadership and the language in which those concepts is articulated is culturally shaded (Drenth & Den Hartog, 1998). Thus, for example, in a massive study of leadership in 62 societies (House, Hanges, Javidan, Dorfman, & Gupta, 2004) a key question was, “To what extent do cultural forces influence the expectations that individuals have for leaders and their behavior?” (House et al., 2004: p. 9; emphasis added). A key finding was that expectations for leaders and their behaviors are in many ways similar from culture to culture. However, this finding of broad cultural similarity in expectations of leader behavior may obscure cultural differences in *how collectives produce DAC*. We argue that although various cultures may all have expectations for leader behavior, and even if these expectations are similar, differing cultures may approach the production of DAC in ways that have little or nothing to do with the entities countenanced by the tripod. In other words, where a cross-cultural study based on the tripod finds cultural similarities, a cross-cultural study based on DAC may find cultural differences.

This framework assumes that DAC is pervasively valued across contexts and cultures as a necessary condition for the effective sharing of work in a collective. The pervasive valuing of DAC provides a common starting point for studying leadership construed as the production of DAC. Such a common starting point makes it unnecessary to provide a common definition or understanding of leadership across cultures as a pre-condition for its study, such as was implicitly provided in the study cited above (House et al., 2004). Study of leadership as construed in the DAC framework can proceed even in cultures that have no concept of leadership in line with the tripod ontology.

Because its ontology focuses on the outcomes of leadership, the framework remains open to a wide variety of particular cultural beliefs and practices for producing DAC. So long as DAC can be taken to be required for the attainment of longer-term outcomes, the beliefs and practices employed in a given culture to produce DAC can be labeled (by us Western theorists) as leadership—even if the beliefs and practices are not so labeled in the culture itself. Thus, DAC provides the basis for an etic (outsider) account of emic (insider) descriptions by local actors (Morey & Luthens, 1984; Morey & Luthans, 1985). Focusing on DAC and how it is produced in various cultures and contexts may lead to new discoveries about how human beings cooperate and coordinate their work. In time, the (perhaps thoroughly Western) concept of the tripod may be seen as a ladder we have climbed up and can now throw away, as more culturally and contextually comprehensive theories of how people produce DAC are advanced.

Finally, as mentioned above, a key area for study in the DAC framework is the relationship between the production of DAC and the attainment of longer-term outcomes. Given all of the factors that must be assumed to enter into the attainment of such outcomes, what is the role of DAC? This question touches on issues raised within the tripod and framed as the romance of leadership (Meindl & Ehrlich, 1987) and substitutes for leadership (Kerr & Jermier, 1978). Both of these perspectives, in different ways, question the confidence placed in leadership (that is, in leaders interacting with followers) as the primary determinant of organizational and group outcomes. One feature of the DAC framework is that it detaches this argument from its focus on leaders acting on followers and addresses the more general question of how human efforts to produce DAC produce longer-term outcomes. The question is more than how a high degree of DAC is connected to longer-term outcomes, but also whether there are differing approaches to DAC and different concepts of DAC that may have more or less effect on such outcomes.

6.1. DAC applied to leadership development

Leadership development from the perspective of the DAC framework is framed as the development of existing beliefs and practices for producing DAC (that is, the further development of leadership culture). This includes but is not limited to developing individuals in roles such as leader and follower. Thus the DAC framework supports a distinction between leader development and leadership development (Day, 2000; Iles & Preece, 2006; O'Connor & Quinn, 2004; Van Velsor & McCauley, 2004). Leader development is understood as the growth of an individual's skills, abilities, and knowledge with respect to being a leader or taking on a leader role. The critical question of leader development is well known: How can individuals develop the requisite skills, knowledge, and behavior to influence and lead others? The theory and practice of leader development is a highly elaborated field of knowledge (e.g., Day, Zaccaro, & Halpin, 2004). From the perspective of the tripod and when leadership is taken to be identical with the behavior of a leader, such individual development is often referred to as leadership development. From the perspective of the DAC framework, however, this is seen as a conflation of two distinct processes. Within the DAC framework, the term leadership development refers to developmental processes in which the whole of a collective engages: the development of the beliefs and practices that are used to produce DAC—that is, the development of the leadership culture.

Leader development and leadership development are distinct because each can occur without the other. Leader development can be pursued (and often is) without any concurrent development of the leadership culture; again, the ontological commitments of the tripod show up here. But leadership development could be pursued without leader development in contexts in which the beliefs and practices for producing DAC do not call for individuals to take leader or follower roles, such as in peer-like settings of self-managing teams or cross-boundary collaboration.

This is not the same as saying that leadership development can take place without *individual* development. Because leadership culture comprises webs of relatively stable and mutually supporting beliefs and practices, developing leadership in the sense of

developing leadership culture requires the acquisition of new competencies and skills by individuals (although these may not be leader skills) as well as new competencies and skills at the collective level: such skills as manifest themselves, for example, in the overall discipline of the military or in the capacity for a collective to create shared commitment, learn from its own conflicts, and engage in dialogue (e.g., Kegan & Lahey, 2001). The development of such individual and collective capacities may involve the questioning of current beliefs and practices and the exploration of new beliefs and experimentation with new practices (Palus & Drath, 1995). To create a greater capacity to produce DAC (which may be required by new challenges), portions of the underlying webs of belief must be rewoven and new interrelated practices emerge. Facilitating and supporting such development of leadership culture therefore calls for new models that go beyond individual development and integrate individual-level with collective-level development. Leadership development in this sense takes on aspects of team development, network development, community development, and organization development.

What does it mean to say that development calls for the reweaving of webs of belief? The metaphor conjures an image of the web losing its internal consistency by the questioning of old beliefs and being reconfigured to accommodate new beliefs. To think of this as development is to think of it as an enlargement of the web such that it contains the old beliefs as objects examined in the light of a more comprehensive set of beliefs better adapted to critical conditions. This metaphor flows from constructive-developmental theory (Drath & Van Velsor, 2006; Kegan, 1994; Kegan & Lahey, 2001; McCauley, Drath, Palus, O'Connor, & Baker, 2006; Torbert, 2004). Webs of belief can be described in terms of qualitatively different patterns, each characterized by a central organizing principle; the development of webs of belief can be understood as a change in the organizing principle which marginalizes some old beliefs and centralizes new ones. If a rational and empirical basis can be laid for claiming that webs of beliefs and practices undergo such qualitative changes in their structure, leadership development can be framed as a process in which the beliefs and practices for producing DAC become more adequate for addressing increasingly complex challenges (e.g., McCauley et al., 2008). This way of thinking about leadership development as the development of the organizing patterns of the leadership culture connects development directly to the overall practice of a collective in producing DAC. It therefore offers the possibility of addressing a persistent problem challenging practitioners of leadership development: creating (and demonstrating) the connection between leadership development and the overall performance of the group, team, organization, or community (Hannum, Martineau, & Reinelt, 2007).

By this rather circuitous route, the DAC framework informs leader development, that is, the development of individuals as leaders or in leader roles. By framing and understanding the behavior of an individual acting as a leader in terms of the individual's participation in webs of belief and practice aimed at producing DAC, new insights about how to assess, challenge, and support the development of such individuals may be discovered.

6.2. DAC applied to peer contexts

A final potential for the DAC framework is that it can provide the basic vocabulary for a theory of leadership in peer contexts—contexts in which individuals do not exert significant asymmetrical influence. The DAC framework provides the basic elements for an exploration of the question of how leaderships works (if indeed it does) in a collective made up of peers. As discussed earlier, most of the literature on leadership in such situations is moving well beyond the limits of the ontology of the tripod, and we believe the DAC ontology will provide support for the further development of such theory (e.g., Ensley, Hmielski, & Pearce, 2006; Ernst & Yip, *in press*; Klein, Ziegert, Knight & Xiao, 2006; Pearce & Conger, 2003; Seers et al., 2003). From the perspective of the tripod, what distinguishes a leader from followers is not necessarily differences in authority or power, or even differences in traits, so much as it is asymmetrical influence. A person asymmetrically influencing others is understood to be acting as a leader, or to be taking on a leader role, no matter how briefly. The capacity for a team to enact shared leadership is understood as its capacity to smoothly switch the leader and follower roles among team members in response to changing conditions (Hooker & Csikszentmihalyi, 2003). Leadership is understood to track the flow of influence, even when that flow is rapid. But if the dynamics of a collective do not exhibit any asymmetry of influence—for example when individuals are not open to the influence of others (during conflicted negotiations) or when they aim at shared exploration and reflection rather than influence (during some approaches to dialogue)—the ontology of the tripod can only describe these contexts as leaderless and therefore lacking what is essential to leadership.

From the perspective of the DAC framework, a rapid alternation of influence from individual to individual is taken as a peer context, since on balance there is no asymmetrical influence. In such a context it may no longer make sense to speak of influence or even mutual influence; it may make more sense to speak of mutual adjustment, shared sense-making, collective learning, or mutual transformation. The question asked by the DAC framework—and this seems to be a question that cannot be asked from the ontology of the tripod—is how do individuals in peer contexts create DAC? In other words, how does leadership happen without leaders or followers? The examples of such contexts mentioned above are examples of contexts in which no one is, at least initially, in charge. It is possible that an individual or set of individuals will emerge in such contexts and create asymmetrical influence. Possibly a dance of coordinated influence could be managed such that shared leadership as conceived within the tripod would be possible. But most often, we believe, the individuals in such contexts will act as peers without the asymmetrical influence assumed by the tripod. We offer the DAC framework as an approach to understanding such contexts (which we believe will increasingly characterize shared work) as *contexts of leadership*: as contexts in which people with shared work produce DAC.

7. Conclusion

The DAC framework offers a more integrative vocabulary upon which theories of leadership can be built that transcend and include the tripod ontology of leaders, followers, and their common goals. The more general DAC ontology of outcomes (along with

the beliefs and practices that produce them) supports a view of leadership that encompasses the full range of human activity whose purpose is to bring members of a working collective (people with shared work) into the conditions required for the achievement of their mutual long-term goals. Much of that activity—perhaps even most of it—currently depends on people taking leader roles in relation to others who take follower roles. The tripod ontology reflects this current condition. It also limits future development by grounding leadership in leaders and followers. The purpose of proposing an alternative ontology of leadership is to create the potential for new leadership beliefs and practices that do not depend on the leader–follower interaction. Such new leadership beliefs and practices are called forth by the increasing importance of shared and distributed leadership and peer contexts—contexts in which influence is mutual and therefore contexts in which the ontology of leaders and followers fails to account for all of the phenomena.

The tripod ontology supports a view of leadership as commanding, telling, persuading, influencing, motivating—conceived as activities in which there is a point of origin (leaders) and a point of reception (followers). The DAC ontology supports a view of leadership as dialogue and sense-making—conceived as activities in which individuals meet one another in the middle in mutual transformation (Palus & Drath, 2001). The DAC framework reframes the tripod ontology in such dialogical terms by taking a fully relational view of leader–follower relations in which such activities as commanding and influencing are re-conceptualized as mutually constituted social achievements—less the achievement of a leader in relation to a follower and more the joint achievement of leaders and followers. This re-conceptualization frames the leader–follower interaction and thus the tripod as a special case, a particular set of leadership beliefs and practices which produce DAC under some but not all conditions. Clearly, this special case has been studied deeply and is well understood. The hope for the DAC ontology is that it will raise new questions for exploration and advance the theoretical understanding and everyday practice of leadership.

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