Meaning Management: A Framework for Leadership Ontology

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Abstract

*Leadership is a multifaceted and complex subject of research and demands a sound ontological stance that guides studies for the development of more integrative leadership theories. In this paper, I propose the leadership ontology PVA (**perception** formation – **value** creation – **achievement** realization) and associate it with the two existing leadership ontologies: TRIPOD (leader – member – shared goals) and DAC (direction – alignment – commitment). The leadership ontology PVA, based on a new theory called "meaning management," consists of three circularly supporting functions: cognitive function to form perception, creative function to generate value, and communicative function to realize higher levels of achievement. The PVA is an epistemology-laden ontology since the meaning management theory allows one to make propositions that explicitly link its three functions with the leadership outcomes: perception, value, and achievement. Moreover, the PVA leadership ontology transcends and includes both the conventional TRIPOD ontology and the DAC ontology.*

Introduction

Any research paradigm intended for organization studies, implicitly or explicitly, entails four sets of assumptions: ontological, epistemological, methodological, and axiological. Since the "reality" is a phenomenon not knowable entirely and absolutely, researchers convert and/or transform it into a "perceived reality" through a series of ontological assumptions made about the "reality." The purpose is here to identify or define a "right" problem domain within the "perceived reality." Epistemological assumptions are for building a "right" theory for the "right" research problem defined previously. Methodological assumptions serve to develop a "right" model/method that corresponds to the "right" theory built beforehand. Given these statements, we can presume that ontology guides epistemology, and epistemology directs methodology. Researchers, therefore, need to be cautious and prudent enough about making ontological assumptions not to end up with contestable theories and questionable models. Axiological assumptions, on the other hand, are for ensuring that ethics and aesthetics observed during the processes of problem defining, theory building, and model developing.

This article is mainly about the ontology of leadership and proposes a new one in association with the two existing leadership ontologies: namely, the tripod ontology (leader-follower-common goals) and the DAC ontology (direction-alignment-commitment). The proposed ontology is based on a new theory called "meaning management" and its leadership

essentials are *Perception* formation – *Value* creation – *Achievement* realization," or shortly (**P**erception-**V**alue-**A**chievement), and hence the "PVA Ontology."

In very general terms, ontology is the theory about the nature of things that are of study interest (such as existence, reality, being, becoming, preoccupation, issue, phenomenon, etc.). The ontology of leadership is to identify the essentials pertaining to leadership and the conceptualizing the relations between such essentials. Drath *et al.* (2008) define the leadership ontology as "the theory of 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 – the tripod ontology, they argue that a more integrative ontology needed and therefore they propose the DAC ontology to deal with the issues not satisfactorily handled with the tripod ontology.
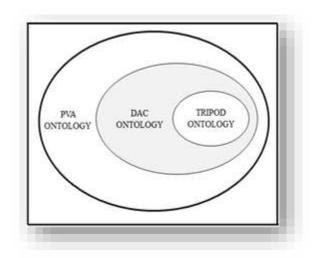
Figure 1: Leadership Ontologies and Their Connections

The PVA ontology I propose in this paper transcends and includes both the DAC ontology and the widely accepted tripod ontology (as depicted in *Figure 1*) through a series of propositions made. While doing so, however, I will not offer a specific definition of leadership. There are two reasons for that. First, the ontological reason – the PVA framework provides the needed flexibility to define a leadership that fits to any given context. Second, the pragmatic reason is not to add another definition to the already existing plethora of others, complying with the observation of others (Bass, 1990, p.11).

An Overview of Leadership Ontologies
As a prologue to the PVA leadership ontology and its implication for leadership theory, I first provide overviews of both the tripod and the DAC ontologies.

An Overview of the Tripod Ontology
There are several schools of leadership theory, ranging from great-man theories (Woods, 1903); the trait approach (Zaccora, 2007); the skills approach (Mumford *et al.,* 2000); the leadership style or behavioral approach (Stogdill, 1974; Boyatzis, 2009; Conger & Kanungo,

1987); the contingency approach (Fiedler, 1995); the path-goal theory (Evans, 1996; House, 1996) to the more recent leader-member exchange (LMX) theory (Graen & Uhl-Bien, 1995; Schriesheim, Castro, & Cogliser, 1999; Harris, Li, & Kirkman, 2014; Wilson, Sin, & Conlon, 2010) and its two variations, i.e., the multidimensional leader-follower exchange (LMD-MDM) and the leader-member social exchange (LMSX) as advanced by Boyatzis *et al.,*(2012) as well as the implicit theories of leadership (Junker & Van Dick, 2014).

There are also many definitions of leadership reflecting the schools of thought on the subject. As Stogdill (1974, p.7) and later Bass (1990, p.11) discovered through a review of research on leadership that "there are almost as many different definitions of leadership as there are researchers who have tried to define the concept." Some classical examples are stated as follows:

> *Leadership is realized in the process whereby one or more individuals succeed in attempting to frame and define reality of others (Smircich & Morgan, 1982).*

> *Leadership is the ability and willingness to influence others so that they respond voluntarily (Clawson, 2006, p.44).*

> *Leadership is an influence relationship among leaders and followers who intend real changes and outcomes that reflect their shared purpose (Daft, 2005, p.5).*

> *Leadership is a process whereby an individual influences a group of individuals to achieve a common goal (Northouse, 2007, p.3).*

> *Leadership is the process of influencing others to understand and agree about what needs to be done and how to do it, and the process of facilitating individual and collective effort to accomplish shared objectives (Yukl, 2010, p.8)*

The above definitions, albeit different in some minor details, include three central components or essentials of leadership: *leader, follower,* and *common goals* connected to one another through a *process of influence.* The *process of influence* refers to a transactional event that occurs between leaders and followers around common goals; leadership is thereby an interactive phenomenon and is concerned with how leaders affect followers. *Followers* are a group where leadership takes place. Leaders and followers are inseparable from one another in that leaders need followers for action and followers need leaders for guidance. *Common goals* mean that leadership guides a group of individuals toward accomplishing a vision through the organization's stated mission and values.

I concur with the observation of Drath *et al.* (2008) that although we have currently an apparent diversity of leadership definitions, they all unified under the tripod ontology – leader, follower, common goals. Bennis (2007) is the one who used the term "tripod" for the first time to underline the basic entities of leadership theory in association with an ontological concept of leadership. This tripod ontology has been widely confirmed by the vast majority of the leadership literature and the three essentials treated with different levels of sophistication, details, nuance, subtlety, and care (Drath *et al.,* 2008). There is no doubt that the tripod ontology will continue to maintain its strong presence in leadership theory and practice for a long time in the future simply because one cannot ignore the dominating and uncontested role of the triad "leader-followers-common goals" in any leadership process. However, the first

leg of the tripod, leader, has been the number one priority in the leadership literature followed by the second leg, followers and then the third leg, common goals.

The effects of ontology on epistemology and therefore on theory building are quite apparent in the case of the tripod ontology. There are certain issues like complexity, shared leadership, and relational concepts that researchers need to deal with adequately. The tripod ontology is too narrow to incorporate emerging leadership issues such as (1) complexity leadership, (2) shared leadership, and (3) relational theory (Drath *et al.,* 2008) for the reasons explained below.

Complexity Leadership Theory: A first area of leadership theory building that is contesting the full usefulness of the tripod ontology is the complexity theory. The borders between "locals" and "others" are simply blurred due to the globalization process that is occurring in almost all sectors of society – business, politics, culture, finance, arts, science, and even religion. Given the multidimensionality of globalization and its resultant complexity, the leadership research based only on the tripod ontology tends to lead to reductionism and determinism, which the complexity leadership theory (Marion & Uhl-Bien, 2001; Uhl-Bien, Marion, & McKelvey, 2007) seeks to avoid through holism – the tenet that posits the whole is more than the sum of its parts. Consequently, one cannot understand leadership through exclusive focusing only on the base leader-follower-common goals. Moreover, there is always an element of uncertainty in any complex system and therefore the determinism of the tripod ontology seems to fall short of developing a comprehensive leadership theory.

Shared Leadership Theory: A second area of leadership theory development that is challenging the tripod ontology beyond its limits is the emerging theory of shared leadership in recent years. Shared leadership is defined by Pearce & Conger (2003, p.1) as a "dynamic, interactive influence process among individuals in groups for which the objective is to lead one another to the achievement of group or organizational goals or both." The necessity of shared leadership largely stems from the complexity imposed by the external and internal dynamics of an organization. Shared leadership has come into existence to deal with the complexities of this nature (Contractor *et al.,* 2012). Pearce, Manz, and Sims (2014) have identified, based on their research on the leadership lessons driven from 21 organizations, four types shared leadership: (1) rotated shared leadership – "influence process passes from one to another in a purposeful way over time," (2) integrated shared leadership – "influence is not just passed from person to person in a linear way but often unfolds as a simultaneous and reciprocal process of mutual influence," (3) distributed shared leadership – "ways about power and influence sharing across a system," and (4) comprehensive shared leadership – combines all of the above types in a "highly advanced shared influence process." The tripod ontology is mostly silent with respect to these issues of shared leadership.

Relational Leadership Theory: A third area that is contesting the completeness and broad usefulness of the tripod ontology is the relational theory (Graen & Uhl-Bien, 1995; Murrell, 1997; Uhl-Bien, 2006). The relational theory, as a general conceptual scheme, elucidates that meaning creation is essential for leadership and is continuously made, maintained, and negotiated over time in the context of ongoing relationships in an organization. The ontological suggestion of such a general conceptual scheme is that the meaning of leader, followers, and common goals is not fixed. In fact, meaning is constantly being framed and reframed both

contextually and periodically (Drath *et al.*, 2008). If the meaning of leadership entities significantly depends on the context of ongoing relationships, then the tripod ontology is put in doubt from the perspective of relational theory, as to its validity and usefulness in continuous meaning making for leadership theory and practice.

Drath *et al.* (2008) are of the opinion that the complexity theory, shared leadership approach, and the relational theory are the emergent ideas about leadership that are not addressable aptly by the tripod ontology that frames leaders, followers, and their shared goals as essential, indispensable elements of leadership. They propose a more integrative ontology, namely the DAC leadership ontology.

An Overview of the DAC Ontology

The DAC ontology of (Drath *et al.*, 2008) assumes and suggests that the creation and practice of the three leadership outcomes – direction, alignment, and commitment – fundamentally evidence the occurrence of leadership in organizations that drives longer-term success. The three leadership outcomes are described as: (1) *direction* is a "widespread agreement in a collective on overall goals, vision, and mission," (2) *alignment* is "the organization and coordination of knowledge and work in a collective," and (3) *commitment* is "the willingness of members of a collective to subsume their own interests and benefits within the collective interest and benefit." The production and practice of direction, alignment, and commitment are due to the presence of the following vital enablers: (1) *Leadership beliefs* as dispositions to behave; (2) *Leadership practices* as a pattern in the behavior of the collective aimed at producing DAC; (3) *Leadership culture* as a system of belief-and-practice; (4) *Leadership context* as a background enveloping leadership culture, DAC, and long-term success (the leadership context is where leadership beliefs and practices generated and justified); (5) *Feedback loops* as a system of collective learning (organizational learning is essential – single-loop learning in association with leadership practices (Argyris & Schön, 1974) and double-loop learning in association with leadership beliefs (Argyris & Schön, 1974)); (6) *Short-term DAC outcomes* as leadership effectiveness indicators in producing DAC in the short-run (single-loop learning for effective leadership practice; and (7) *Long-term DAC outcomes* as understanding and learning the context and its implications for the collective for adaptation (double-loop learning to alter the existing leadership beliefs for the benefit of the collective).

Figure 2 depicts how the above concepts relate to one another as a framework based on the DAC ontology. The first box in the figure is *leadership culture* and envelops individual and collective leadership beliefs that guide leadership practices. The solid-line arrows indicate the direction of feedforth influences whereas dotted-line arrows indicate feedback influences in the CAD ontology. The feedforth influences include (1) the interactions of individual and collective leadership believes, (2) the instantiations of some of the leadership believes in leadership practice, (3) the production of direction-alignment-commitment as the outcomes of leadership practice, and (4) the realization of long-term outcomes such as organizational learning, shared sensemaking, and social adaptation. Moreover, the feedforth influences relate mostly to outcome production. The dotted-line feedback influences, on the other hand, are concerned more with change of leadership culture. The feedback arrows from DAC and long-term outcomes pointing to both individual and collective leadership beliefs indicate double-loop learning whereas those pointing to leadership practice, directly or through DAC,

typically entail single-loop learning in the sense of Argyris & Schön (1974). All these feedforth and feedback influences occur within the *context* of leadership.
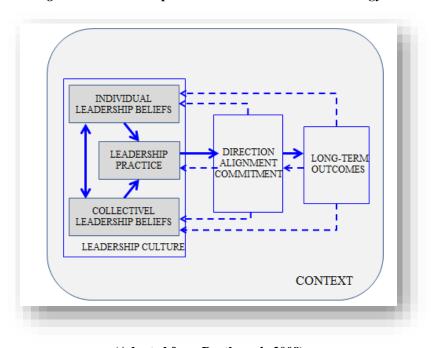
Figure 2: A Leadership Framework Based on DAC Ontology

(Adapted from Drath *et al.*, 2008)

The DAC ontology expands the integrative potential of leadership theory developments and has some advantages over the tripod ontology in terms of (1) *levels of analysis,* (2) *cultures,* (3) *emerging theory,* and (4) *theory and practice* (Drath *et al.,* 2008)*.*

Levels of Analysis: The tripod ontology assumes that leadership analyses are at the levels of dyadic influence and therefore any higher levels of analyses must aggregate dyadic interactions. The DAC ontology, on the other hand, enables the production of leadership outcomes at every level, ranging from dyad to team, team to organization, organization to organization of organizations, and even to overall society.

Cultures: The tripod ontology requires re-interpretation of leadership as one crosses cultural borders. The meaning and use of the concepts of leaders, followers, common goals, and influencing processes might considerably vary from one culture to another. The outcomes of the DAC ontology are culturally neutral because they are the results of leadership beliefs and practices. Since the beliefs and practices are the roots of direction-alignment-commitment production and naturally reflect the elements of the culture in question, the DAC ontology is therefore more integrative across cultures for leadership theory development.

Emerging Theories: The new areas such as shared leadership, complexity theory, and relational approach all put into debate the usefulness of the tripod ontology simply because such emerging concepts must be framed in terms of the leader-follower interaction which

might not always be possible in all situations. This constraint became non-existent through the DAC ontology by not limiting the processes and structures in producing the leadership outcomes direction-alignment-commitment. Thus, the DAC ontology allows possibilities for the development of a new leadership theory that deals with shared work, complex situations, and relational issues.

Theory and Practice: Shared leadership is an emerging leadership practice which, one way or another, occurs in organizations at different degrees (Pearce, Manz, & Sims, 2014). Such emerging practices not contentedly described in terms of the tripod ontology do not matter and therefore are not easily made a part of leadership theory. In the case of the DAC ontology, any new leadership practice (shared leadership, complexity handling, and relational pursuits) that produces the outcomes direction-alignment-commitment are not only considered as leadership coordinates, but also are viewed as the potential originators of a new leadership theory (Drath *et al.,* 2008).

The DAC ontology transcends and includes the tripod ontology (*Figure 1*) with respect to two leadership tenets of the tripod ontology: (1) *characteristics* of leaders and followers, and (2) *behaviors* of leaders and followers. In the DAC ontology, "*leadership beliefs transcend* leader and follower characteristics because leadership beliefs can be about any aspect of how to produce DAC, but leadership beliefs also *include* beliefs about leaders and follower characteristics" (Drath *et al.,* 2008). With respect to behaviors of leaders and followers, "*leadership practices transcend* leader and follower behaviors to involve the total pattern of interactions and systems that produce DAC, but leadership practices also *include* the leader-follower interaction" (Drath *et al.,* 2008).

PVA – A New Leadership Ontology

Meaning Management and its three circularly related and supporting functions (cognitive, creative, and communicative) together frame the PVA ontology of leadership. The three functions with their formal conceptualizations detail the features and advantages of the PVA ontology that transcend and include the DAC ontology in a similar way that the DAC ontology does the tripod ontology. Moreover, the PVA is an epistemology-laden ontology since it provides propositions as to how to theorize the leadership outcomes "perception formation-value creation-achievement realization."

Meaning Management

I posit that *meaning of management is management of meaning,* and within the context of leadership theory development, I claim that Meaning Management is the basis of leadership theory and practice. I conceptually define Meaning Management as:

> *managing the interactions of an organization with its internal and external environments through (1) perception formation of reality for the purpose of identifying organizational and managerial issues that need to be dealt with –* **cognitive function,** *(2) creation of value for its stakeholders by making products and rendering services –* **creative function,** *and (3) communication of the value built in the offerings of organization to both internal and external stakeholders for higher levels of achievement –* **communicative function.**

The above definition of Meaning Management implies that the output of the cognitive function is a *perception* of environments from an organization's own perspective. There are factors that guide perception formation: achievement, information, and mental models of perceivers.

The creative function aims to theorize how value generated for stakeholders – and therefore its output – is *value.* The nature and magnitude of the value created depends on the perception formed previously, knowledge produced and used to perform value creating activities, and the resources and capabilities created and managed for this purpose.

The communicative function, on the other hand, is concerned with how the value embedded in the offerings of the organization effectively conveyed to the intended stakeholders. The more effective the communication is, the higher levels of achievement are realizable. Therefore, the output of the communicative function relates to achievement, whichever way the concept of achievement is defined and measured.
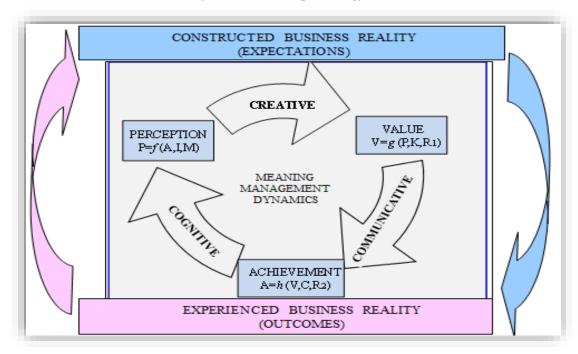
Figure 3: **Leadership Ontology PVA**

The Meaning Management definition above and its pictorial description in *Figure 3* also encapsulate that it is a never-ending circular process to narrow down any likely gap between "constructed reality – expectations" and "experienced reality – outcomes" – in fact, a seemingly unavoidable gap. The three functions of Meaning Management strive to align "constructed reality" with "experienced reality." "Constructed reality" is the reality as perceived by the leadership of an organization and "experienced reality" is what an organization actually achieves. Therefore, any gap, especially an unfavorable one, between "constructed reality" and "experienced reality" is the main concern of Meaning Management and calls for a better and more effective implementation of its three functions. From this perspective, the concepts of fallibility and reflexivity of Soros (2003, 2009) somewhat

coincide with Meaning Management. The concept of fallibility posits that the complexity of an organization's business world or environmental context far exceeds the capacity of leaders to comprehend it completely. Consequently, leaders can perceive only a portion of environmental reality and this portion is frequently, if not always, distorted. The concept of fallibility of Soros (2003, 2009) is, in fact, a reformulation of the bounded rationality of Simon (1991); accordingly, leaders can only form incomplete and imperfect perceptions of an organization's environment. The resulting "constructed reality" is therefore bound to have shortcomings in comprehensively reflecting the reality. This is the first source of having a gap between "constructed reality" and "experienced reality."

The second source for the gap between "constructed reality" and "experienced reality" is due to the fact there are usually several organizations that are active in a given environment. Organizations are "thinking participants" and therefore they shape the very nature of their environmental context as well as are shaped by it. These interactions make the environment of organizations constantly a changing phenomenon, explained by the concept of reflexivity of Soros (2003, 2009). The concept of reflexivity applies to situations that have thinking participants, and in the context of Meaning Management, organizations with their leaders are the thinking participants. Leaders' thinking activates two functions. The first one is *cognitive function* – understanding the world in which leaders work and live. The second one is *manipulative function* – changing the situation to the advantage of a leader's organization (Soros, 2009). This is, indeed, the case for every organization active in its given environment. Each organization is affected by the actions of other organizations in building its own constructed reality – causation from the world to the mind. Conversely, each organization has an impact on the collective conduct of organizations which contributes to the emergence of experienced reality – causation from the mind to the world (Soros, 2009).

As can be observed from *Figure 3,* the three functions of Meaning Management are spirally interrelated and supportive because one function follows the other, each time at a higher level, until the "expectations" prescribed or planned as implied by "constructed reality" sufficiently match the "outcomes" as dictated or imposed by "experienced reality." Moreover, the passage from one function to the next, realized after a period of reflection, prompts leaders to reflect critically on their beliefs and practices that eventually guide their observations and perceptions to a more comprehensive view of leadership practice. It is important to additionally emphasize the mutual inclusiveness of the three functions of Meaning Management. They embed each other in the sense that while one function performs, the other two are also present and contribute to the one currently active. For instance, the *creative function* is affected by both *cognitive function* and *communicative function* – the former to create a perception to guide which activities are to be performed and the latter to show how these activities are realized to create value for stakeholders.

Having Meaning Management described in such general terms, it is now appropriate to formally explain its three functions as a more formal background for making connections with a leadership process through a set of theorizing propositions.

Cognitive Function – Sensemaking
The cognitive function of Meaning Management is, in essence, processing and using organizational intelligence to form a perception of the environmental characteristics that

govern an organization's reality – in the past, present, and future. It encompasses three components: *Achievement A, Information I,* and *Mental Models M.* These three components incorporate in *Cognitive Function f* to form *Perception P* as follows:

$$P = f(A, I, M) \qquad\qquad (1)$$

Perception – P : Perception is fundamentally a sensemaking process (Weick 1988, 1995) used to understand the environment in order to guide the proper functioning of an organization. An organization's leadership team (shared or vertical, or any practice between these two extreme types) is the perceiver because there is a need to understand the environmental characteristics from the perspective of the organization in question. The role of a leadership team, as perceivers, in understanding the environmental characteristics of organizations has been reported in the literature on both strategy and organization studies. Sutcliffe (1994) investigated the factors influencing managerial perception formation in top management teams. Sutcliffe & Huber (1998) empirically studied the commonality of views about an organization's environment among the organization's top managers. Their results led to the conclusion that there is a significant consensus with respect to managers' perceptions within organizations and industries. Supported by this empirical evidence, the "perceiver" – in the context of Meaning Management – refers to a group of leaders, or in a more integrative manner, leadership actors.

Mental Models – M : Mental models have been on the research agenda of cognitive scientists for a long time. According to Johnson-Laird (1983), the history of mental models goes back to Charles Sanders Peirce (1839-1914), the father of pragmatism, although the concept of "mental models" has been more attributed to Craik in light of his book on the subject (Craik, 1943). Since then, cognitive scientists, most noticeably Johnson-Laird (1983) and Klimoski & Mohammed (1994), have concentrated on mental models as part of the efforts to understand how humans process information, create knowledge, form perceptions, and make decisions in a variety of settings.

There are many definitions of mental models. One of the most cited ones is credited to Senge (1990, p.8) and reads: "mental models are deeply held internal images of how the world works, images that limit us to familiar ways of thinking and acting." In the context of Meaning Management, however, I define mental models as:

> *cognitive structures that are continuously being rebuilt through both assimilating and accommodating theoretical and experiential knowledge gained over the years and are the basic mechanisms for perceiving and acting.*

In a leadership team, it is not rare to have members with different mental models. In such cases, convergence of mental models toward a "shared mental model" is important for team performance. Dionne *et al.* (2010) developed an agent-based computational model to study the connection between "quality and convergence of mental models" and "leadership team performance." They concluded that leadership teams favoring and developing social network structure allowing high-density communicating perform much better than those who do not. This conclusion is also supported by cumulative evidence; that is, converged mental models positively influence leadership team functioning and performance (Edwards *et al.*, 2006;

Mathieu *et al.,* 2005; DeChurch & Mesmer-Magnus, 2010). The above conclusions also support the idea of considering Meaning Management at a leadership team level.

Information – *I*: An acceptable clear definition of "information" has been a serious challenge for even information scientists themselves. Recently, however, McKinney Jr. and Yoos (2010) accepted this challenge and suggested a classification of information views so that scholars and practitioners might specify their concept of information. Their taxonomy of information views translates itself into the context of cognitive function as follows: the mental models of leaders are the sources that determine what kind of information is needed. The other important feature of the taxonomy is that it requires an ontological stance shift, from the belief that there is an objective reality independent of perception, to the recognition that reality is, in fact, subject to perception. This understanding of information use coincides with the concept of "constructed reality" within the context of Meaning Management.

The way in which perceptions are formed depends, to a large degree, on the types of information collected and the methods by which they are processed. As a general practice, leaders need to collect the kind of information that will aid, when processed with the right methods of analysis, in the formation of a "constructed reality," hopefully as close as possible to an "experienced reality." The information analysis methods might include all sorts of appropriate qualitative and quantitative statistical techniques. In other words, statistics is an effective arsenal for data gathering and information processing for perception formation. Within the context of the cognitive function, information is the basis of both retrospective sensemaking (studying the consequences of past actions to refine the current ways of thinking) and prospective sensemaking (casting the organization's situation into the future and perceiving accordingly) (Weick 1988, 1995).

Achievement – *A* : The level of "achievement" is the degree to which an organization is satisfied with its performance; in fact, a measure that indicates how close the "constructed reality" is to the "experienced reality." The larger the gap between the two, the more attentive formulation of a new "constructed reality" is needed. If the gap is negligible, there is usually no need for a major modification in the way perception is currently formed unless an analysis of new information obtained suggests otherwise. Therefore, an evaluation of achievement – leading to a better understanding of the past – is a way for traditional retrospective sensemaking to occur and it inevitably produces refinements in the current way of thinking and hence, perception formation.

The Function *f*: The cognitive function *f* is the process by which perception is formed through a particular combination of using "achievement," "information," and "mental models." Additionally, it also determines the "cognitive style of leadership" and the dominant process of sensemaking, both retrospectively and prospectively.

The discussions above about the nature of the cognitive function and its components therefore suggest that perceptions are formed in the manner leaders use organizational achievement, shared mental models of leadership team, and the kinds of information gathered and processed. These arguments lead to:

Proposition 1a: Organizational and managerial perception P is an output of the way the cognitive function P=f (A,I,M) made operational through sensemaking processes at a single-loop learning level.

Proposition 1a posits that function *f* is fixed and produces perceptions in the same way, regardless of what the levels or characteristics of situation arguments *A, I,* and *M* might be. Put differently, the situation factors or variables *A, I,* and *M* might vary, but the way they are used in forming Perception *P* is always the same: that is, *f.* This process of perception formation corresponds to the instantiation of the single-loop learning of Argyris & Schön (1974), since *f* is fixed for any values or scores of the situation factors. However, there might be emerging complexities and practices which may demand or necessitate a higher level of cognitive function: *F,* for instance, instead of *f,* to cope with such situations. Replacing cognitive function *f* with a higher level of cognitive function *F* is a significant transformation in the way perception is formed. Such a mind-set conversion invites the double-loop learning process of Argyris & Schön (1974). Therefore, I posit:

Proposition 1b: Organizational and managerial perception P is an output of the way the cognitive function P=F(A,I,M) made operational through sensemaking processes at a double-loop learning level.

The usefulness of and need for Proposition 1a and Proposition 1b become apparent through the example of following simple regression models. If the parameters *a* and *b* in $Y = a + bX$ remain unchanged for any value of *X,* then a single-loop learning is present. In this case, we do not change the way we estimate the value of *Y* given *X.* However, if the value parameters *a* and *b* in $Y = a + bX$ change as *X* varies, then a double-loop learning process is active as we do change the way we estimate the value of *Y* as *X* varies.

Creative Function – Sensegiving, Sensemaking, and Sensepracticing
The creative function of Meaning Management is associated with the process of value creation in organizations for their stakeholders through all sorts of activities and operations. At the heart of creative function reside *knowledge production* and *its use* in order to solve problems, better understand managerial issues, develop new products, improve processes, and design and implement new methods and procedures. It encompasses three components: *Perception P, Knowledge K,* and *Resources R₁.* These three components theorized in *Creative Function g* create *Value V*:

$$V = g(P, K, R_1) \qquad\qquad (2)$$

The expression in (2) involves five concepts and their relationships in a general way. The concept of *Perception P* is already explained while discussing the cognitive function. Within the context of the creative function, however, the "perception" formed previously is used as the basis of sensegiving to those who are in charge of value creation so that they can engage in their own sensemaking for themselves and then sensepracticing it in their decisions and activities. The definitions and/or descriptions of the remaining others as well as their general relationships are provided below.

Value – *V*: Value is the totality of net benefits created by an organization for its stakeholders – shareholders, managers, employees, customers, suppliers, creditors, government, and the

public at large. Net benefit is the difference between the "worth" in the mind of the buyer and the "price" of what the buyer is paying. In general, if the "worth" created by an organization is higher than what the stakeholders are willing to stake, then a value is created. For shareholders, if the prices of shares increase and handsome dividends paid because of the profit made, then a value is created. Managers and employees consider it value created when they have financial rewards and job satisfaction. If products and services are provided at prices lower than what customers are willing to pay, then a value is created for customers. Suppliers consider it value created if they become regular and significant collaborators of an organization's supply and value chain system. Creditors are happy when an organization is able to create financial superiority through its activities. Government values the activities of an organization when handsome profits are made and commensurate taxes are paid; this provides a major source of revenue for the government as well as maintains employment at higher levels resulting in a social tension reducing contribution.

Knowledge – K: The bottom line of creating value for stakeholders is to produce all sorts of actionable knowledge – technological, managerial, functional, social, and organizational – *and* to embed it in making products and rendering services. Producing actionable knowledge and using it to create value for stakeholders is the very fundamental feature of successful competition. This understanding is supported by both theoretical and empirical studies from the perspective of "knowledge-based view of the firm" (Kogut & Zender, 1992; Choi & Lee, 2002; Reus *et al.,* 2009). Consequently, the development of organizational knowledge creation has become a central issue and research agenda for several organization scientists (Nonaka, 1991, 1994; Nonaka & Konno, 1998; Teece, 1998; Nonaka & von Krogh, 2009). The most influential of all is the concept of knowledge-creation through knowledge-conversion in organizations, the development of which is ignited and inspired by the seminal article of Nonaka (1994).

Nonaka's and his colleagues' influence in the area is mostly, and rightly, due to the knowledge-creating model they developed and actually implemented in several organizations. The main features of their model are described by the following statements: (1) *Explicit* and *tacit* knowledge are two distinct types of knowledge. (2) It is possible to convert one type of knowledge into another type as well as onto itself. (3) Possessing these features, the knowledge-creating model is, in fact, a model of "value-creation" itself, for it implants the knowledge thus generated in products, processes, and methods, eventually resulting in value creation. Therefore, knowledge-creation and use form the basis of the creative function of Meaning Management.

Resources – R_1: Organizational knowledge creation requires deployment and development of certain sets of resources and capabilities, which in turn necessitates "knowledge investments." The knowledge-creation model of Nonaka & Takeuchi (1996) posits that the presence of "enabling conditions" such as intention, autonomy, creative chaos, redundancy, and requisite variety, is needed for the (tacit → tacit), (tacit → explicit), (explicit → explicit), and (explicit → tacit) types of knowledge conversion. Such conversions require people, time, perseverance, sensegiving, sensemaking, and sensepracticing, which all eventually result in a demand for both financial and non-financial resources. Reus *et al.* (2009) developed a

model of knowledge investments and value creation based on the very assumption that "knowledge creates value."

The Function g : The creative function g is the process by which "value" created through a particular combinational use of "knowledge," "resources," and "perception." Any combination of this triad corresponds to a particular leadership approach that enables value creation in a certain way. The creative function is based on sensegiving (the perception formed needs to be communicated by the leaders to others in the organization); sensemaking (the others need to make sense of the perception communicated by the leadership processes), and sensepracticing (the value creators need to put the sense made into practice).

The discussions above regarding the nature of the creative function of Meaning Management therefore suggest that value is created in the manner the leaders use the perception formed previously via the cognitive function in deciding, conducting, and aligning organization's activities through organizational knowledge creation and use, and deploying the required resources for this purpose. Hence:

> *Proposition 2a: Value created V is an output of the way creative function V=g(P,K,R1) is made operational through sensegiving, sensemaking, and sensepracticing processes at a single-loop learning level.*

Proposition 2a postulates that function g is fixed and, therefore, creates value in the same way regardless of the way the situation factors *P*, *K,* and *R1* present themselves. In other words, the situation factors or g variables *P*, *K,* and *R1* might vary, but the way used in creating Value *V* is always the same; that is, function g. This process of value creation is unchanged – since g is fixed, and with this type of using creative function, the single-loop learning of Argyris & Schön (1974) marks the occurrence and nature of organizational learning. However, there might be emerging complexities and practices that might demand or necessitate a higher level of creative function, *G,* for instance, instead of g, to cope with such possibilities. Replacing creative function g with higher level of creative function *G* is a significant conversion in the way value created. Such an important mind-set change, again invites the double-loop learning process of Argyris & Schön (1974). Therefore, I posit:

> *Proposition 2b: Value created V is an output of the way creative function V=G(P,K,R1) made operational through sensegiving, sensemaking, and sensepracticing processes at a double-loop learning level.*

Communicative Function – Sensegiving
The communicative function of Meaning Management is the process of persuading stakeholders as to the nature and magnitude of value built-in and offered by organizational activities. The communicative function strives to realize through communication an achievement level as high as possible. It entails three components: *Value V, Communication C,* and *Resources R₂.* These three components incorporate in *Communicative Function h* to realize *Achievement A* as follows:

$$A = h(V, C, R_2) \qquad\qquad (3)$$

The expression in (3) again involves five concepts and their relationships in an abstract manner. The two concepts, *Value V* and *Achievement A*, are already explained when

discussing the cognitive function, achievement, and the creative function, value, respectively. Within the context of the communicative function, "value" is the basis of the sensegiving process to persuade stakeholders. The definitions and/or descriptions of the remaining as well as their relationships are summarized below.

Communication – *C.* There are two categories of communication: internal and external. Internal communication refers to those communications (be they one-way or two-way types) taking place within the organization between its people in different units or departments. The importance of internal communications between departments is conceptualized by Little and Little (2009) in connection with the service quality delivery involving the units of human resource management, operations, and marketing. Similarly, Ahmed *et al.,* (2010) link managerial communication with performance. The essence of internal communications necessitates both sensegiving and sensemaking processes. External communication, on the other hand, is the process of persuasion by which the value of organizational offerings is conveyed to stakeholders, especially to customers, suppliers, shareholders. The main activities and means of the persuasion process include marketing, advertisement, impression management, public relations, promotions, special events, sponsorships, contributions to charity organizations, respectable corporate governance compliance, and many other social awareness and responsibility activities. It is of prime importance to establish connections between an organization and its business environment through communications in order to influence the latter in favor of the former so that a high level of achievement is realized. The bottom line of external communication is, therefore, sensegiving, and mainly to external stakeholders.

Resources – *R_2:* Both internal and external communications require different types of resources: top managers and middle managers in all functions of the organization along with supportive financial, physical, and intangible assets for effective internal communication as well as the top management and marketing-sales people supported by financial and organizational capabilities for effective external communication.

The Function *h*: The communicative function *h* is the process that aims at reaching the highest possible level of "achievement" through a particular combinational use of "value," "communication," and "resources." "Resources" are created and used in "communicating" activities in order to persuade stakeholders of the value embedded in an organization's offerings so that the most favorable "achievement" is attained. The communicative function is, by its very nature, mostly governed by sensegiving processes. Consequently,

> *Proposition 3a: Achievement A is an output of the way the communicative function A=h (V,C,R2) is made operational through sensegiving processes at a single-loop learning level.*

Proposition 3a advances the concept that function *h* is fixed and, therefore, realizes achievement in the same way regardless of what the levels of the situation factors *V, C,* and *R_2* might be. Again, the situation factors *V, C,* and *R_2* might vary, but the way they are used in the realization of Achievement *A* is always the same; that is, *h.* This process of achievement realization remains unchanged – since *h* is fixed, and with this feature of communicative function, the single-loop learning of Argyris and Schön (1974) is present in organizational learning. However, there might be emerging complexities and practices that might demand or

necessitate a higher level of communicative function, *H,* for instance, instead of *h*, to cope with such settings. Replacing communicative function *h* with another communicative function *H* is a significant change in the way achievement realized. Such an important mind-set transformation, again, requires the double-loop learning process of Argyris and Schön (1974). Therefore, I posit:
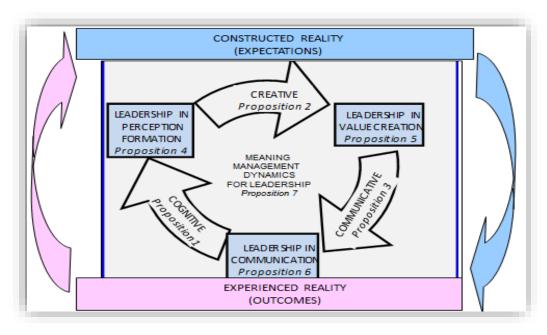
> *Proposition 3b: Achievement A is an output of the way the communicative function A=H(V,C,R2) is made operational through sensegiving processes at a double-loop learning level.*

Implications for Leadership Theory

The three major propositions for each function of Meaning Management (in fact, stated in terms of six minor propositions) given above solely relate to the three functions of Meaning Management. In this section, I present four more major propositions that link Meaning Management to leadership theory. *Figure 4* shows how the seven major propositions are positioned vis-à-vis each other within the context of Meaning Management.

Leadership for Perception Formation

Perception formation is defining the reality of an organization and therefore becomes the very fundamental basis of all decisions and actions that follow. Moreover, an organizational perception is expected to give prominence to *doing the right* and *good things.* Forming a perception that eventually exhorts doing the right and good things involves a leadership process for perceiving. Leadership without a perception might lead to failure and a perception without leadership might not even exist; therefore, leadership and perception must coexist as one without the other is practically, as well as conceptually, unthinkable. Hence, perception requires wisdom which is a higher level of reasoning that combines goodness, wellness, intelligence, creativity, knowledge, and experience.

Figure 4: **Leadership Ontology PVA and Theorizing Propositions**

Although a generally agreed-upon definition does not yet exit, many definitions of wisdom, as in the case of leadership, are offered in the literature. Below are two mutually supporting definitions:

> *Wisdom is an analytic theory of expert knowledge, judgment, and advice about difficult and uncertain matters of life (Baltes & Kunzmann, 2004).*

> *Wisdom, from the cognitive dimension, is an understanding of life and a desire to know the truth, i.e., to comprehend the significance and deeper meaning of phenomena and events particularly with regard to intrapersonal and interpersonal matter. From the reflective dimension, wisdom is a perception of phenomena and events from multiple perspectives (Ardelt, 2004).*

The above definitions reflect two main approaches to wisdom: (1) wisdom as "an expert knowledge system" of the collective as advocated by the Berlin Group (Baltes & Kunzmann, 2004), and (2) wisdom as "a personality quality" integrating cognitive, reflective, and affective dimensions as advanced by Ardelt (2004). In this paper, however, wisdom, as a dominant required virtue for the cognitive function of Meaning Management, is defined as follows:

> *Wisdom is an ethical perception formation of an organization and its enacted environment from multiple perspectives for the betterment and appreciation of all involved and beyond.*

The above definition of wisdom intends to integrate *leadership-related wisdom* (Yang, 2011) and *wise person* – a definition that asserts that wisdom is realized through wise persons and wise persons enhance cumulative wisdom. It therefore assumes that there exists an interplay between implicit (Ardelt, 2004) and explicit (Baltes & Kunzmann, 2004) theories of wisdom. The implicit theory defends that wisdom is realized because of wise persons whereas the explicit theory emphasizes that wisdom is the property of the collective and wise persons are only approximate carriers of the collective wisdom (Sternberg, 2004). Leadership for cognitive function requires leadership-related wisdom as well as wise leaders to retransform leadership-related wisdom into practice for the betterment and appreciation of all involved. Leadership-related wisdom is also a vision of things as they relate to an organization and its environments as seen from multiple perspectives; therefore, vision is associated with perception. In other words, the constructs "leadership," "wisdom," and "perception" are related to one another in important ways. In conclusion, perception is to be formed using "leadership-related wisdom" by "wise leaders" so that betterment and appreciation of all involved are realized.

A "visionary" style of leadership, as described by Goleman, Boyatzis, and McKee (2002) is most appropriate in this context. They define a visionary leadership style as the one that builds resonance by moving people toward shared dreams; it is most appropriate when changes require a new vision or when a clear direction is needed in an organization. Visionary leadership must articulate where an organization or a group should go, but not how it should go there. Followers are expected to innovate, experiment, and take calculated risks to realize the vision envisaged. Perception usually means a new vision and therefore the cognitive function calls for a visionary style of leadership. These statements lead to:

Proposition 4: Wisdom is the very foundation of the cognitive functions P=F(A,I,M) and determines the way achievement, information, and mental models are made operational in sensemaking toward perception formation leadership.

Leadership for Value Creation

The primary output of the creative function is value and value is created by knowledge acquisition, development, and use in all activities of an organization. In other words, leadership processes and organizational practices are contingent upon knowledge-related activities (Lord & Shondrick, 2011). Leadership for the creative function is essentially leadership in organizational knowledge generation and use. Put differently, leadership in knowledge-related activities is equivalent to leadership in value creation.

Perception, as an output of the cognitive function, is, in fact, a "theory" of environment from the perspective of an organization. This "theory" of an organization connected to the reality of environment through the creative function of Meaning Management first prescribes and then imposes which kinds of activities need to be realized and how these activities are to be actually carried out to create value. Through efficient and effective fulfillment of such activities, an organization finds itself connected to the business environment and consequently reaches a certain level of achievement. Therefore, it is knowledge, especially actionable knowledge, that molds efficient and effective realizations of value-creation activities.

The creative function entails vision for general direction, mission for what is to be accomplished, and action for value creation. Given the organizational knowledge creation model of Nonaka and Takeuchi (1996), it is important to have all the six leadership styles suggested by Goleman, Boyatzis, and McKee (2002) put into practice. This is the "visionary" style needed for directing knowledge workers in an organization as to what kind of knowledge to create. The second leadership style is "coaching" which builds resonance in leadership by connecting what a person wants and attains with the organization's goals. Coaching style is appropriate when there is a need to help knowledge workers improve their performance by building long-term capabilities. Knowledge creation necessitates such a leadership style in order to align knowledge workers' objectives with an organization's goals. The third leadership style, "affiliative," creates harmony by connecting people to each other so that the process of sensegiving, sensemaking, and sensepracticing is realized effectively in knowledge creation. This type of leadership is instrumental to heal discords in a team, motivate knowledge workers during stressful times, and reinforce connections. It is more effective when affiliative leadership carried out in tandem with a "visionary" style. The fourth leadership style is "democratic" which values people's input and generates commitment through participation. Such a process appeals to those who are interested in, and capable of, contributing to knowledge creation in organizations. The participation process brings into play different and new ideas as to what kind of knowledge is needed and how such knowledge is created. It is also a way of building consensus among knowledge workers. The fifth leadership style, "pacesetting," which tries to meet challenging and exciting goals, is appropriate to obtain high-quality results from a motivated and competent team. The leaders of this style usually do not resist the temptation of getting personally involved in completing the task, especially under pressure. Goleman, Boyatzis, and McKee (2002) advise that the "pacesetting" style should

be exercised with "visionary" and "affiliative" styles. The sixth, and the last leadership style, is the "commanding" type. It builds resonance in organizations by soothing fears through giving clear direction and instructions, especially in cases of crisis, emergencies, or turnaround efforts. However, this style of leadership needs to be exercised occasionally and carefully, for it creates a highly negative climate when used frequently.

> *Proposition 5: Knowledge expertise is the very foundation of the creative function V=G(A, K, R1) and determines the way perception, knowledge, and resources are made operational through sensegiving, sensemaking, and sensepracticing toward value creation leadership.*

Leadership for Achievement Realization

Leaders, whether their leadership positions are formally given or informally gained because of their individual merits, have status of one kind or another in their organizations. Such status, when coupled with formal authority, puts them in positions to establish and play interpersonal roles with others such as *figurehead* – representing their organizations in all matters of formality and *liaison* – linking the business environment with organizations through interacting with peers and other people outside their organizations to gain favors and information (Mintzberg, 1973). In the *liaison* role, leaders are able to develop a special kind of external linkage system. They connect their organizations to their business environments, using their arrangements and networks to advance and enhance their intelligence about "experienced reality" to shape "constructed reality" better.

The interpersonal roles above place leaders in unique positions to acquire information. Their external contacts, through the *liaison* role, bring special outside information and their leadership activities serve to make them a focal point for organizational information. The result is that leaders emerge as the key nerve system of organizational information system (Mintzberg, 1973), and therefore as key actors of both internal and external communication. Internal and external communications are realized, following the findings of Mintzberg (1973), through three types of "informational roles," namely, *monitor, disseminator,* and *spokesman*, in addition to *negotiator* of "decisional roles." Leaders as *monitors* continuously seek information that enables them to understand what is taking place in their organizations as well as within their business environments. Understanding this business environment – which includes perceiving the perceptions of the external stakeholders – occurs by obtaining a wide variety of information from a wide variety of sources. A leader's *monitor* role exists when leaders establish and use their own special communication channels as well as benefit from their organizational formal information systems. Leaders as *disseminator* communicate and infuse external information into their organizations and internal information from one unit to another. The information communicated through the role of *disseminator* is of two distinguishable types: factual and value-laden (Mintzberg, 1973). Factual information is a matter of fact information and is easy to validate whether it is correct or incorrect. Value-laden information that leaders communicate, on the other hand, reflects preferences, judgment, opinions, reasoning, beliefs, and even decisions to guide subordinates in making decisions and taking actions. Therefore, this type information necessitates both sensemaking and sensegiving for effective communication. The *spokesman* role of leaders deals with transmitting information out to their environments to communicate the value of their offerings so that the level of achievement is realized as high as possible. The aim is not to have an

unfavorable gap between "constructed reality" and "experienced reality." The *negotiator* role of leaders is that of participant in negotiation activity that entails all sorts of business and non-business deals with other organizations in the environment. This role is a vital part of leadership since it partially determines the level of organization's achievement through persuading external actors. The *negotiator* role is better played when accompanied by the roles of *figurehead* and *spokesman*, for they add credibility and reflect the value system of organization's leadership.

> *Proposition 6: Persuasion expertise is the very foundation of the communicative function A=H(V, C, R2) and determines the way value, communication, and resources are made operational through sensegiving toward achievement leadership.*

Meaning Management Dynamics – Shared and Integrated Leadership

The continuous and circularly feeding nature of the three functions of Meaning Management can be termed "Meaning Management Dynamics for Leadership." Any function of Meaning Management by itself necessitates "shared leadership" in the sense of Pearce and Conger (2003) and Pearce (2004) simply because of the complex and demanding characteristic of each. For instance, the perceivers of an organization, usually a top-level management team, might base their perception formation task (cognitive function) on shared leadership to become more effective. Similarly, the value creators - mostly production and middle managers – might rightly depend on shared leadership in creating value (creative function). Finally, communicators or marketing managers might perform their task of communicating the value inherent in the offerings of the organization to intended stakeholders (communicative function) based on shared leadership model again.

Any continuous and circular use of all the functions of Meaning Management, on the other hand, is even a more complex and demanding process and therefore necessitates more than shared leadership models. The "integrated leadership" model of Locke (2003) is much more appropriate in the case of Meaning Management Dynamics. The integrated leadership model is a combination of "top-down," "bottom-up," and "shared" leadership models. Recalling that cognitive function is for perception formation and transmitting it throughout the organization, perception leadership mainly implies a "top-down" model within Meaning Management Dynamics when the entirety of the organization is considered. The creative function, in addition to the shared leadership model, might require both "top-down" and "bottom-up" leadership models simply because of the need for alignment of decisions and actions required to realize the achievement level envisioned.

> *Proposition 7: Any gap between constructed reality and experienced reality narrows down through the continuous and circular employment of Management Meaning based on integrated leadership models.*

Both DAC and PVA ontologies seem to sound similar to one another on the surface but they differ considerably from one another in terms of theorizing leadership outcomes. The DAC outcomes are only at conceptual levels whereas the PVA outcomes are formally theorized through seven propositions and each proposition is explicitly linked with the concepts of sensemaking, sensegiving, and/or sensepracticing. These features distinguish the PVA ontology from the other two as an epistemology-laden ontology of leadership.

Concluding Remarks

It is interesting to observe that leadership theory and research have historically evolved in the sequence of methodology, epistemology, and ontology rather than in the order of ontology, epistemology, and methodology (for a 25-year review of leadership literature, see Day *et al.* 2014). It seems as the knowledge domain enhances, leadership researchers move from trivial and simple issues (like "great man" leader models) to much more complex challenges and sophisticated issues (like shared leadership with relational theory), suggesting that there is a trend from methodology to epistemology. With the implicit ontology of Bennis (2007), the tripod, and with the explicit DAC ontology of Drath *et al* (2008), we are now moving from the epistemology domain to the ontology domain. The current paper is also in that direction by proposing the PVA ontology.

Leadership, although it is a very old subject of interest to many scholars and practitioners for research, still is widely considered as a challenging topic of study, and it seems that researchers, in this kind of inquiry, employ different approaches reflecting a wide variety of perspectives. This paper has discussed the leadership process through a theory called Meaning Management.

It would not be overly presumptuous to claim that we are "educated ignorant" researchers in leadership: "educated" because we think we know certain things about leadership and "ignorant" because we do not know the rest. And the "rest" is colossal. Therefore, the sign of "help wanted" needs to be shown on the front window of leadership research shop so that it can be seen from all directions. Being aware of our partial ignorance on the subject offers great opportunities to do research on leadership from different and enhanced perspectives.

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