CREATIVE LEADERSHIP:
A MULTI-CONTEXT CONCEPTUALIZATION[+]

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Abstract

Various streams of organizational research have examined the relationship between creativity

and leadership, albeit using slightly different names such as "creative leadership", "leading

for creativity and innovation," and "managing creatives." In this article we review this

dispersed body of knowledge and synthesize it under a global construct of creative

leadership, which refers to *leading others towards the attainment of a creative outcome*.

Under this unifying construct we classify three more narrow conceptualizations that we

observe in the literature: *facilitating employee creativity; directing the materialization of a

leader's creative vision; and integrating heterogeneous creative contributions*. After

examining the contextual characteristics associated with the three conceptualizations, we

suggest that they represent three distinct collaborative contexts of creative leadership. We

discuss the theoretical implications of a multi-context framework of creative leadership,

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especially in terms of resolving three persisting problems in the extant literature: lack of definitional clarity, shortage of nuanced theories, and low contextual sensitivity.

Introduction

The concept of creative leadership has a long and interesting history in organizational science. In his 1957 book *Leadership in Administration,* Philip Selznick (1984) argued that while technical-rational administrative behavior fosters efficiency when decision alternatives are restricted, under conditions of indeterminacy and freedom the renewal of institutions requires creative leadership. Selznick (1984) suggested that creative leadership entails the art of building institutions that embody new and enduring values, and the creation of the conditions that will make possible in the future what is excluded in the present. Six years later Stark (1963) published in AMJ the article "*Creative leadership: Human vs. metal brains,*" in which he critiqued the interminate debate between the "formalist" and "intuitivist" perspectives of the time. While the former emphasized exclusively the formal and mechanically feasible processes of the human mind, the latter placed an equal emphasis on its intuitive and creative processes. Stark (1963: 166-168, italics in the original) wrote:

> Why did Professor Selznick write this *particular* essay? And why did he title it *Leadership in Administration?* Any reply to the first question should include, I believe, a statement to the following effect: he wrote it as an *intuitivist* supplement, corrective, or antithesis to the formalist essay that Herbert A. Simon titled *Administrative Behavior.* And any reply to the second question should include, I believe, a statement to the following effect: leadership in the old-fashioned sense, which stood so high with the intuitivist likes of Plato, Carlyle, and Weber, stands very low in the world of scientific empiricism; in *Administrative Behavior…* the word leadership itself cannot be found in the heading of a single chapter, chapter section, chapter subsection, or *anywhere* in the index.

> …My guess is that Professor Simon would wonder much, and that Professor Selznick would find it exceedingly difficult to satisfy him. But we *must* satisfy him if we are ever to convince him that at any given time the computer is not doing all the thinking that middle or upper managers do. For example, when he says that "we will have the technical capability, by 1985, to manage corporations by machine" (1960, p. 52), are we entitled to smugly retort, "Sure, but what about *leading,*

creatively leading—a la Selznick—by machine?" if we cannot reach agreement on what Professor Selznick means? It is one thing to say to Professor Simon—"You've left creative leadership out of your social psychology and out of your machine"—and another to demonstrate that he has omitted a piece of reality.

Today, machines control a rapidly increasing number of organizational activities, but they have not come any closer to substituting humans in the creative functions of leadership. For example, while the music industry possesses the technological means to manufacture any desired sound in the production process, the creation and success of its main product, the record, are highly dependent on the creative leadership of the music producer (Lingo & O'Mahony, 2010; Thomson, Jones, & Warhust, 2007). One could argue that our discipline has never before stressed the importance of creative leadership--for individuals, organizations and the larger society-- as much as it does today (e.g., Amabile, Schatzel, Moneta, & Kramer, 2004; Mumford, Scott, Gaddis, & Strange, 2002; Shalley & Gilson, 2004; Tierny, 2008). As Sternberg (2007) recently observed, while in the past creativity was often perceived as an optional feature leadership, today it is no longer optional because leaders who lack creativity are unlikely to propel their organizations into the future.

Selznick's (1984) distinction between administrative behavior and creative leadership remains relevant and puzzling. Mumford et al. (2002) suggested that creative leadership differs from other forms of leadership in three ways: it induces rather than preserves structure; it cannot rely on influence tactics linked to power, conformity pressure, and organizational commitment; and it has to manage the inherent conflict between creativity and organization. Obstfeld (2012) argued that no matter how much one stretches or redefines the construct of routines, the latter cannot explain the emergence and unfolding of 'de novo' creative action in organizations. Hunter, Thoroughood, Myer, and Ligon (2011) as well concluded that creative leadership requires a unique repertoire of behaviors that are frequently at odds with traditional forms of management and organizational functioning.

Despite the growing realization that creativity is a central ability for leaders in promoting change (Shalley & Gilson, 2004), there is a striking absence of the trait 'creative' from existing lists of Implicit Leadership Theories (e.g., Epitropaki & Martin, 2004; 2005; Epitropaki, Sy, Martin, Tram-Quon & Topakas, 2013; Offermann, Kennedy & Wirtz, 2004; Shondrick & Lord, 2010), and creative individuals are less likely to emerge as leaders (Kark, Miron-Spektor, Kaplon & Gorsky, 2012; Mueller, Goncalo, & Kamdar, 2011). Most organizations tend to promote executives who preserve the status quo, do not take risks, and stick to useful and working solutions (Basadur & Basadur, 2011; Mueller et al., 2011), although many organizations claim that creative leadership is essential to them. For example, a 2010 IBM Global CEO Study, which surveyed more than 1,500 chief executive officers from 60 countries and 33 industries, concluded that creativity is now the most important leadership quality for success in business, outweighing competencies such as integrity and global thinking (Nikravan, 2012).

Although the paradoxes of creative leadership are well documented (e.g., DeFillippi, Grabher, & Jones, 2007; Hunter et al., 2011; Lampel, Lant, & Shampsie, 2000), creative leadership research usually lacks the requisite theoretical depth to investigate them thoroughly and extensively. In a recent review and analysis of 752 articles on leadership phenomena published in 10 top-tier academic journals in the last decade, Dinh et al. (2014) noted that 'leading for creativity and innovation' has seen significant research during the specific period of inquiry (72 instances), but is, nonetheless, the area of leadership for which the highest mismatch between theoretical thinking and the research designed to investigate the theory exists (in 50% of the cases). Dinh et al. (2014) also pointed out that the majority of studies have failed to capture the dynamic nature of the intra-personal and inter-personal processes associated with creative insight and performance.

While the increase of the number of empirical studies on creative leadership is

encouraging, the lack of progress on the theoretical front is disconcerting. Research on creative leadership has long struggled with lack of definitional clarity, shortage of nuanced theories, and low contextual sensitivity. Twenty years ago Ford (1995: 33) observed that the findings of creativity research had "emerged from a limited array of professional settings," which "leaves one to wonder if the same leader behaviors would facilitate creativity" in different situations. Mumford and Licuanan (2004) noted that the "leadership of creative efforts is an unusually complex activity" (163) and requires "a new wave of research expressly intended to account for leadership in settings where creative people are working on significant innovations" (170). In her review of the organizational creativity literature, George (2007: 459) suggested that "for jobs that do require creativity, the same supervisory behavior that potentially can encourage creativity in noncreative jobs might actually inhibit creativity." More recently, Hunter et al. (2011) and Vessey, Barrett, Mumford, Johnson, and Litwiller (2014) observed that most studies on creative leadership tend to ignore substantial differences between leaders, between followers, and especially between contexts.

These critiques imply that a 'one size fits all' conceptualization of creative leadership is inadequate, probably because the phenomenon itself is sensitive to contextual variability. If creative leadership is unusually complex and its manifestations vary according to the context wherein it is enacted, we should expect to encounter complexity and contextual differences in a critical reading of the body of knowledge that has been generated about creative leadership to date. This is, in fact, the case with the review that we present in this article. What we found is that since Selznick's (1984) original formulation of creative leadership, the concept has evolved into three different conceptualizations which are *theoretically* complementary and reflect contextual differences. This implies that there is more than one ways to exercise creative leadership, a fact that may help explain why it has proved difficult in the past to develop a unitary, context-general theory of creative leadership.

Three Conceptualizations of Creative Leadership in the Organizational Literature

The three conceptualizations of creative leadership that we identified in our review are not exclusive properties of any given research strand. Rather, each conceptualization underlies the intellectual efforts of two or more research strands in the organizational literature. The first conceptualization focuses on the leader's role in fostering the creativity of others in the organizational context. This conceptualization was originally developed within a strand of organizational creativity research that examines contextual influences on employee creativity. Later, it expanded into a strand of leadership research that examines the influences of various leadership styles on employee creativity. These two research strands (located in the creativity and leadership fields, respectively) share a social-psychological foundation, have regularly exchanged findings and insights, and they have been the most prolific contributors to creative leadership research to date. Their development was propelled by three influential theories of creativity that appeared in the late 1980s and 1990s: Amabile's (1988) componential theory, Woodman, Sawyer, and Griffin's (1993) interactionist model, and Ford's (1996) theory of creative action. Because these theories argued that leadership influences employee creativity, subsequent studies in both research strands sought to understand how leaders foster and hinder employee creativity (e.g., Amabile et al., 1996; George & Zhou, 2001; Liao, Liu, & Loi, 2010; Oldham & Cummings, 1996; Mumford et al., 2002; Shin & Zhou, 2003; Tierney, Farmer, & Graen, 1999; Zhang & Bartol, 2010). Most studies in these two strands have examined creativity not in the creative industries but in industry environments where creativity is a less fundamental aspect of organizational activity (Vessey et al., 2014). Creative leadership in these two strands refers to *fostering employee creativity*. In the remainder of the article we refer to this manifestation of creative leadership as *Facilitating*.

The second conceptualization portrays the creative leader as the primary source of creative thinking and behavior, as a creative institutional entrepreneur, or as a master-creator

who both creates and manages his or her creative enterprise. This conceptualization of creative leadership is evident in three strands of organizational research that have rarely informed each other, to date: a stream of neo-institutional case studies of creative haute-cuisine chefs (e.g., Bouty & Gomez, 2010; Svejenova, Mazza, & Planellas, 2007); a set of studies on orchestra conductors (e.g., Hunt, Stelluto, & Hooijberg, 2004; Marotto, Roos, & Victor, 2007); and a set of studies on creative leadership in the context of top-down corporate innovation (e.g., Eisenmann & Bower, 2000; Vaccaro, Jansen, Van Den Bosch, & Volberda, 2012). Creative leadership in these strands refers to *materializing a leader's creative vision through other people's work.* In the remainder of the article we refer to this manifestation of creative leadership as *Directing*.

The third conceptualization focuses on the leader's role in integrating his or her creative ideas with the diverse creative ideas of other professionals in the work context. This conceptualization has emerged from research on creativity in new forms of work (e.g., temporary organizations, brokerage) and in contexts where the traditional leader-follower distinction gives way to a group of expert professionals who collaborate intensively in the context of a creative project. This conceptualization is evident in a stream of studies on creative leadership in filmmaking (e.g., Perretti & Negro, 2007), theatrical (e.g., Dunham & Freeman, 2000), and television (e.g., Murphy & Ensher, 2008) settings; a second stream of social network studies on creative leadership in the form of brokerage in music production (e.g., Lingo & O'Mahony, 2010), industrial design (e.g., Obstfeld, 2012), and museum settings (e.g., Litchfield & Gilson, 2013); and a nascent stream of research on dual (e.g., Hunter et al., 2012; Sicca, 1997) and shared (e.g., Davis & Eisenhardt, 2011; Hargadon & Bechky, 2006) forms of leadership. Creative leadership in these strands *refers to a leader who synthesizes his or her own creative work with the heterogeneous creative contributions of other professionals.* This creative synthesis may be undertaken either by a single leader or

by multiple leaders in a collaborative leadership context. In the remainder of the article we refer to this manifestation of creative leadership as *Integrating*.

To date, some of the research strands mentioned above have exchanged findings and insights, owing to their common conceptualization of creative leadership. Other research strands have rarely interacted with one another despite the fact that they embrace a common conceptualization. The most alarming observation that emerged during our review, however, is that the sharing of scientific knowledge and insight has been most constrained and even non-existent among research strands that embrace different conceptualizations of creative leadership. This is evident in previous reviews of the creative leadership literature that emphasized one conceptualization and its associated research streams at the expense of other conceptualizations and research streams. For example, Mumford and Licuanan's (2004) and Tierney's (2008) reviews focused on social-psychological quantitative studies that were conducted in Facilitating contexts, but paid little attention to sociologically-oriented qualitative studies that were conducted in Directing and Integrating contexts. The resulting lack of integration of the insights generated by diverse research streams is largely responsible for the shortage of nuanced theories and for the low contextual sensitivity of existing theories in the creative leadership literature.

To overcome the problems of selectivity and fragmentation in the field, we used a single and relaxed criterion for inclusion in our review: that a conceptual or empirical study offered findings and/or insights about leadership in relation to creativity and/or innovation in any work context. As a result, our review incorporates multiple research strands; studies conducted in Facilitating, Directing and Integrating contexts; both psychologically- and sociologically-oriented studies; and studies that employ a wide range of quantitative and qualitative methodologies, including survey, laboratory, interview, case study, and ethnographic designs. To the best of our knowledge, this article is the first attempt to

integrate this diverse body of work that has remained dispersed and fragmented, to date. We clarify at the onset that our purpose is not to reconcile paradigmatic and methodological differences among multiple research streams, but rather, to shed light on the three manifestations of creative leadership that permeate these research streams despite their other differences. Most importantly, we synthesize the three conceptualizations into a unified multi-context framework, which offers to creative leadership research a valuable analytical tool for strengthening its definitional clarity, theoretical depth, and contextual sensitivity.

A Multi-Context Framework of Creative Leadership

The development of the theoretical framework that we present in this article was propelled by four overarching observations that emerged during our review. First, across all research strands creative leadership generally refers to leading others toward the attainment of a creative outcome. Second, different research strands give different meaning to what it actually means to lead others toward the attainment of a creative outcome, a fact that has led to the emergence of the three conceptualizations. Third, the three conceptualizations differ primarily in terms of the relative ratios of the creative and supportive contributions that leaders and followers make in the creative process. Fourth, the differences among the three conceptualizations are not mere artifacts of diverse methodological choices, but rather, they reflect actual differences in the enactment of creative leadership across work contexts.

Drawing on these observations, we propose that the definition of creative leadership should include both a global component that captures the invariable, context-general aspect of the phenomenon, and three more specific components that capture its variable and context-dependent manifestations. We suggest that at the global level *creative leadership refers to leading others toward the attainment of creative outcome.* Under the conceptual umbrella of this global definition, *creative leadership entails three alternative manifestations: facilitating employee creativity; directing the materialization of a leader's creative vision; and*

integrating heterogeneous creative contributions. The global definition is purposively broad in order to encompass the three specific manifestations, while the latter are defined in a more narrow and discriminating manner in order to strengthen the definitional clarity and contextual sensitivity of the construct. This twofold definitional approach provides to creative leadership research a common conceptual platform for contrasting, comparing, and cross-fertilizing knowledge and insights across various research strands.

In epistemological terms, we adopt a 'constitutive' orientation which is primarily concerned with the dynamic and complex processes through which creativity and innovation emerge, rather than with static levels of analysis or with the micro-marco dichotomy per se (Garud, Gehman, & Giulani, 2014). Although the outcomes of creative leadership can be measured at distinct levels of analysis (e.g., individual, team, organizational), creative leadership itself does not reside within leaders, followers, or organizations, but within the dynamic interactions among leaders, followers, and contextual characteristics.

Evidently, creative leadership research is not concerned with solitary creativity but with collaborative contexts in which leaders and followers interact in the creative process. Across all strands of creative leadership research there is substantial agreement that in such contexts creativity depends not only on one or more individuals' *creative contributions* (e.g., generating and developing new ideas), but also on other people's *supportive contributions* (e.g., providing psychological, social, or/and material support for creativity). Supportive contributions are rarely seen as creative contributions themselves, but they play a crucial role in triggering, enabling, and sustaining creative thinking and behavior by other members of the collaborative context (Amabile, 1988; Ford, 1996; Madjar, Oldham, & Pratt, 2002; Oldham & Cummings, 1996). The three manifestations of creative leadership that we discuss in this article differ in terms of the ratio between the *creative contributions* made by the leader and those made by the followers; and also in terms of the ratio of the supportive (to

creativity) contributions made by the leader and the followers, as shown in Figure 1.

---Insert Figure 1 about here---

In the Facilitating context employees may act as 'primary creators', but their actual creative contributions are influenced by the level of leader supportive contributions. In Figure 1 we illustrate the latter as a space of influence whereby, keeping constant the level of leader creative contributions, increases in leader supportive contributions result in increases in the level of followers' creative contributions. In the Directing context the leader may act as the 'primary creator', but his or her actual creative contributions are influenced by the level of follower supportive contributions. In Figure 1 we illustrate the latter as a space of influence whereby, keeping constant the level of followers' creative contributions, increases in follower supportive contributions result in increases in the level of leaders' creative contributions. We clarify that, in both the Facilitative and the Directive creative leadership contexts, 'primary creator' does not mean lone or sole creator because other people (leaders or followers, respectively) make creative contributions as well, albeit of lower magnitude.

The Integrating context entails more balanced ratios of leader/follower creative and supportive contributions, and its creative outcomes are more sensitive to the degree of leader-follower *creative synergy*. In Figure 1 we illustrate the latter as a space of influence whereby increases in leader and follower creative contributions reflect mutual synergistic gains of leader-follower creative collaboration. Finally, Figure 1 also depicts a conceptual space of low/non-creative leadership whereby the creative contributions of both leaders and followers are low or non-existent. Low/non-creative leadership may be related to a social or relational context that is hostile to the very idea of creativity in the workplace (Amabile & Conti, 1991; Mainemelis, 2010), or it may represent a case of unsuccessful creative leadership in Facilitative, Directive, or Integrative contexts where creativity is at least desirable. Our subsequent review sheds light on the multitude of factors that influence higher and lower

degrees of creative leadership across the three contexts. In Tables 1, 2, and 3 we offer brief descriptions and illustrations of the three manifestations of creative leadership directly drawn from the body of research that we review in this article.

---Insert Tables 1, 2, and 3 about here---

Like past research (e.g., Amabile, 1996; Mainemelis, 2010), we view creativity as both a process and a product, namely the process that results in a novel product that the social context accepts as useful, tenable, or otherwise appropriate at some point in time (Stein, 1953). As a process, creativity unfolds (linearly or/and recursively) in distinct stages, such as preparation, incubation, insight, evaluation, and elaboration (Csikszentmihalyi, 1997). The creative process plays an important role in our analysis for two reasons. First, many studies that we review have examined in detail how creative leaders manage the challenges and transitions associated with the stages of the creative process in a collaborative context. Second, since Wallas's (1926) early model of the creative process, all psychological models that we are aware of have described the creative process not only in terms of idea generation but also in terms of idea evaluation, idea elaboration, and idea implementation. The three latter stages are integral components of the creative process, and in collaborative contexts they may be undertaken by people other than those who generate the new ideas. We highlight this fact because it informs our subsequent analysis of the differential ratios of creative and supportive contributions that leaders and followers make in the creative process.

As a product, creativity is assessed in terms of the novelty and utility of its outcomes within a specific social domain (Amabile, 1988, 1996). As noted above, creative outcomes can be assessed at different levels of analysis, but in the literature that we review they are usually assessed at the individual or team levels and in short time frames. In contrast, innovation refers to the large-scale implementation of creative ideas in the organization and is usually assessed at the organizational level and in longer time frames (Amabile, 1988, 1996;

West & Richter, 2008). We highlight this fact because it underlies some differences among three manifestations of creative leadership that we identify later on. Furthermore, we note that creative outcomes may vary in terms of their magnitude, from incremental to radical (Gilson & Madjar, 2011; Madjar, Greenberg, & Chen, 2001; Mainemelis, 2010); and also in terms of their problem type and driver of engagement (Unsworth, 2001). Throughout the article we highlight these differences in the studies that we review, and in the discussion section we reflect on their associations with the three manifestations of creative leadership.

Last but not least, in the extant creativity literature there is substantial agreement that creative processes, creative interactions, and creative outcomes should be investigated in close association with the characteristics of the contexts in which they are embedded (e.g., Amabile, 1996; Grabher, 2004; Moedas & Benghozi, 2012; Shalley & Gilson, 2004; Thomson et al., 2007). Throughout our review we pay close attention to several contextual characteristics, such as the degree to which the opportunities for making creative contributions are weakly or strongly structured; elements of social structure (e.g., stratification, institutionalization, professionalization, roles, and normative expectations); elements of the nature of work (e.g., cumulative and disruptive learning, recombination, improvisation); elements of the nature of creativity (e.g., incremental, radical); and organizational characteristics (e.g., size, permanent, temporary, and network structures). In the discussion section we integrate these contextual factors and suggest that their interactions influence the emergence of the three manifestations of creative leadership. Put another way, we argue that long before the leader and the followers occupy their respective roles in the collaborative context, the latter is often *ex ante socially structured* in a way that favors the emergence of one of the three manifestations of creative leadership.

In the next three sections we review research on Facilitative, Directive, and Integrative creative leadership. In each of these sections we identify the main contributing

research streams; the focal research topics; and the central themes and findings about creative leadership. In the final section of the paper we elaborate on our multi-context framework and suggest that the three manifestations should be understood not as different leadership styles, but as three *collaborative contexts* that are shaped by the interaction among industry, organizational, professional, personal, and task imperatives and characteristics. We also discuss several directions for future research, and we argue that a multi-context conceptualization can help improve creative leadership research in terms of definitional clarity, contextual sensitivity, and knowledge transfer among different research strands.

Facilitating

Early creativity theories suggested that leaders, as a core aspect of the proximal social context of work, influence employee creativity (Amabile, 1988; Ford, 1996; Woodman et al., 1993). Subsequent research focused on employee creativity as the dependent variable and worked 'backwards' to identify leader-related factors that have an impact on it. In a historically parallel development, leadership researchers started from established leadership constructs, such as leadership styles, and worked 'forward' to examine their impact on employee creativity. Inevitably, both research orientations led to a common conceptualization of the creative leader as a facilitator of employee creativity. These research strands view employees as the primary contributors (generators) of creative ideas and rarely focus on the leader's creative contributions. If the objective is to increase employee creativity, high leader involvement in idea generation and idea elaboration may reduce the required levels of employee intrinsic motivation and commitment (Amabile, 1988). As Basadur (2004: 108) noted, "If people are asked to simply implement their leader's predetermined solutions, how much commitment will they feel to making those solutions succeed? People naturally work harder at their own projects than at someone else's. Leaders must transfer to others their

ownership of these challenges. The earlier they do so, the more ownership they will feel."

Leaders in the Facilitating context may not be primary idea generators, but they still make both creative and supportive contributions to creativity in the workplace. Mumford et al. (2002) argued that creative leaders are involved throughout the creative process, from idea generation to idea structuring and idea promotion. Leaders' creative contributions entail providing direction in the idea preparation phase (Mumford et al., 2002) and evaluation and combination of ideas in the idea evaluation phase (Mumford, Connelly, & Gaddis, 2003). Mumford et al. (2003) argued that leader creative cognition is primarily evaluative in nature. This implies that leaders' personal creative contributions in a Facilitating context are related more to selective retention and less to variation (cf. Ford, 1996). In addition, leaders make important supportive contributions to the creative process by shaping a supportive climate for creativity, by promoting new ideas in the work context, and by managing properly the stages of the creative process (Basadur, 2004; Mumford et al., 2002, 2003). Although these contributions are rarely seen as creative themselves, they often exert a critical influence on creativity in the work context. As shown in Figure 1, in the Facilitating context followers' creative contributions can range from low to high *for the same level of leader creative contributions*. This differential is influenced not only by employees' creative abilities, but also by a set of supportive leader behaviors such as idea promotion, feedback, and so forth.

In comparison to the Directing and Integrating contexts, Facilitative creative leadership appears to be more widespread across various industry and organizational contexts. The studies that we review below have observed Facilitative creative leadership in work contexts far beyond the creative or cultural industries. In Table 4 we summarize the key themes and contributions in research on Facilitative creative leadership. The main themes that we review below include competency perspectives; behavioral perspectives; relational perspectives; and transformational perspectives.

---Insert Table 4 about here--

Competency Perspectives

Mumford et al. (2002) argued that *technical expertise* allows creative leaders to communicate effectively with the group, adequately represent it, and properly handle the developmental needs and interactions of its members. In a longitudinal study with 238 knowledge workers in the US, Amabile et al. (2004) found that followers' perceptions of creative leaders were related more to leader behaviors that signaled intellectual and technical competence, and less to character-focused perceptions linked to leader personality and values. Mumford et al. (2002, 2003, 2014) suggested that leaders who lack technical expertise and *creative thinking skills* may find it extremely difficult to properly evaluate employees' ideas. This is crucial because in most organizations leaders are responsible for evaluating, filtering, and sponsoring new ideas (Benner & Tushman, 2003; Hargadon, 2008; Mainemelis, 2010); and also because through their evaluations and suggestions to employees, leaders may trigger additional levels of idea combination, generation, and refinement (Mumford et al., 2003). In a study with 399 middle level managers in Germany, Krause (2004) found that leader expert knowledge was positively associated with employees' situational perceptions (need and susceptibility to change) and idea-implementation behaviors, but it was not associated with idea generation. Mumford et al. (2002) argued that creative leaders must also possess *organizational expertise* in order to foster the implementation of creative projects in the work context.

Halbesleben, Novicevic, Harvey, and Buckley (2003) suggested that many competencies related to creative leadership require *awareness of the temporal complexity* dimensions of creative projects (i.e., timeframe, tempo, temporality, (a)synchronization, sequencing, pauses/gaps, simultaneity, time personality, and timelessness). The creative process consists of multiple stages which pose distinct and often antithetical demands, such as generation-evaluation, and divergent-convergent thinking (Mainemelis, 2002). Creative

leaders must possess temporal and other skills to manage the distinct demands of each stage (Mumford et al., 2014). Reiter-Palmon and Illies (2004) suggested that several *creative process management skills* are required for creative leadership, including the abilities to motivate problem-solving, stimulate creative thinking, align the creative process with organizational objectives, promote healthy degrees of cognitive conflict, structure and enhance the information search process, balance freedom and frugality, and articulate appropriate evaluation criteria. Some studies have shown that creative leaders should also possess substantial strategic planning skills (Byrne, Shipman, & Mumford, 2010; Mumford et al., 2003, 2014; Stenmark, Shipman, & Mumford, 2011).

Basadur (2004) and Basadur and Basadur (2011) argued that creative leaders must also be able to recognize the differences in people's preferred problem-solving styles and then integrate and syncronize these styles according to the demands posed by each stage of the creative process. Last but not least, Zhou and George (2003) suggested that leaders' *emotional intelligence* plays a critical role in enabling the awakening of employee creativity through five complementary routes: identification, information gathering, idea generation, idea evaluation and modification, and idea implementation.

Behavioral Perspectives

Leader support. Several authors have argued that supportive leadership fosters employee creativity by fostering intrinsic motivation, psychological safety, or/and positive moods (Amabile, 1988; Ford, 1996; Woodman et al., 1993). Mumford et al., (2002) suggested that creative leaders provide idea support, work support, and social support. Rickards and Moger (2002) and Basadur (2004) suggested specific supportive practices. Amabile et al. (2004) collected data from 238 knowledge workers in seven companies using daily questionnaires during 8-37 weeks. They identified specific leader behaviors that increased, decreased, or did not affect employees' perceived leader support. In turn,

perceived leader support was positively related to employee creativity. Their study shows that supporting, positive monitoring (e.g., maintaining regular contact), and recognizing leader behaviors lead to perceptions of leader support; while negative monitoring (e.g., close monitoring), not clarifying roles and objectives, avoiding solving problems or creating problems were negatively related to perceived leader support. Amabile et al.'s study sheds light on specific behaviors that affect perceived leader support, and demonstrates that the same type of behavior (e.g., monitoring) has differential expressions and effects.

In a recent meta-analysis of 42 studies that included 13 work climate dimensions, Hunter, Bedell, and Mumford (2007) found that leader support has positive effects on employee creativity. Equally important is the fact that, to date, studies on leader support and creativity have been conducted in various countries, including the US (e.g., Amabile, Conti, Coon, Lazenby, & Herron, 1996), the Netherlands (e.g., Janssen, 2005) Germany (e.g., Krause, 2004), Bulgaria (e.g., Madjar, Oldham, & Pratt, 2002), UK (e.g., Unsworth, Wall, & Carter, 2005), Egypt (e.g., Rice, 2006), and China (e.g., Zhang & Bartol, 2010).

Some studies highlight the mechanisms and interactions through which leader support achieves its effect on employee creativity. In a study in manufacturing facilities in the US, Oldham and Cummings (1996) found that employees produced the most creative work when they were supervised in a supportive, non-controlling fashion, had appropriate creativity-relevant characteristics, and worked in complex jobs. In a study in knitwear companies in Bulgaria, Madjar, Oldham, and Pratt (2002) found that positive mood mediated the relationship between leader support and employee creativity. George and Zhou (2007) found that employee creativity in an oil field services company was highest when positive mood, negative mood, and leader support (consisting of developmental feedback, interactional justice, and trust) were all high. In a study in an IT company in China, Zhang & Bartol (2010) found that leader support positively moderated the connection between employee

psychological empowerment and employee creative engagement. In a study with 207 blue-collar workers in a steel company in the Netherlands, Frese, Teng, & Wijnen (1999) found that leader support was not related to writing up and submitting a suggestion to a company suggestion scheme, but it was positively related to the improvement of the quality of a suggestion. This implies that leader support may have greater impact on idea elaboration (and idea implementation; Krause, 2004) than on idea generation.

Unsworth, Wall, and Carter (2005) surveyed 1,083 employees in a general hospital in the UK and found that the creativity requirement of the job fully mediated the relationship between leader support and creativity. They suggested that creativity requirement may be a more proximal aspect of the work climate. George (2007) noted that because the influences of the social context on creativity are combinatorial, a creativity requirement in a job may backfire if other supportive climate factors are not present. In a study in a cereals company in the US, Baer and Oldham (2006) found that employees exhibited relatively high creativity when they experienced intermediate creative time pressure and received considerable leader support. In a study of 226 ad designers in China, Lin, Mainemelis, and Kark (2014) found that supportive leaders were more likely to reward or forgive creative deviants and less likely to punish or ignore them. Among the creative deviant designers (those who had violated a managerial order to stop working on a new idea) only those who worked with supportive leaders improved their creative performance. This finding suggests that leaders may be perceived as supportive even after having rejected an employee's idea, and that supportive leaders are open to reconsidering an earlier rejection decision about a new idea.

Finally, one longitudinal study examined the effects of leader support on organizational innovation. In a study of 77 high-technology firms, Makri and Scandura (2010) found that the interaction between CEO creative leadership (defined as support for exploration) and CEO operational leadership in time 1 (1993-1995) was positively related to

innovation quantity in time 2 (five years later, 2000), but only CEO creative leadership was positively related to innovation quality in 2000.

Assigned goals. There is considerable agreement in the literature that creative leaders must find an optimal balance between autonomy and structure (Anderson, Potocnick, & Zhou, 2014; Gilson, Mathieu, Shalley, & Ruddy, 2005; Mumford et al., 2002, 2003). It has been suggested that goal-setting allows leaders to influence employees' motivation, effort, and attention in the creative process without harming their intrinsic motivation and sense of autonomy (Shalley & Gilson, 2004). Early experimental studies found that people who were assigned either do-your-best or difficult creativity goals exhibited higher creativity than people who were not assigned a creativity goal (Carson & Carson, 1993; Shalley, 1991, 1995). In an ethnographic study at IDEO, Sutton and Hargadon (1996) found that presenting a challenging goal at the beginning of a brainstorming session stimulated creativity. In a study of 29 resource-constrained firms, Baker and Nelson (2005) identified cases where managerial instructions to solve a problem without spending any money combined with managerial support resulted in employees generating creative solutions through bricolage.

Recently, Litchfield, Fan, and Brown (2011) found that individuals who were assigned a specific, difficult novelty goal produced higher creativity with or without brainstorming rules when goal commitment was high. Two other recent laboratory studies found that, when individuals are given more choice in terms of resources, only those who are explicitly instructed to be creative and also have relevant past expertise will be more creative (Chua & Iyengar, 2008); and that individuals who tend to think rationally are more likely to be more creative when they receive instructions to use an intuitive approach to problem-solving (Dane, Baer, Pratt, & Oldham, 2011). In a recent conceptual contribution, Litcfield (2008) argued that goal-based interventions provide a structure for tailoring expectations for

idea generation to the creative context. He suggested that leaders can adjust the specificity and difficulty of goals in order to guide the novelty and usefulness aspects of idea generation.

Monitoring. Because autonomy plays a central role in most creativity theories (e.g., Amabile, 1988), close monitoring is generally expected to reduce employee creativity and intrinsic motivation. Amabile et al., (2004) found that while monitoring in the form of maintaining regular contact with employees had positive effects on perceived leader support, close monitoring in the form of frequent and excessive checks of employees' work was detrimental. Zhou (2003) found that employees were more creative when leader close monitoring was low and creative co-workers were present. George and Zhou (2001) found that employees who were high on conscientiousness had the lowest levels of creativity when they were closely monitored by their supervisors. On the other hand, Choi, Anderson, and Veillette (2009) found that leader close monitoring was positively associated with employee creativity and reduced the negative effects of aversive leadership on creativity. They suggested that, because the scale that they used was neutral and focused on leader's behavior instead of the psychological consequences associated with it, it is possible that employees perceived close monitoring as an expression of caring and attention to their work and not as micro-managing. This explanation corroborates with Amabile et al.'s (2004) findings about the positive and negative aspects of leader monitoring behavior. Recently, in a diary study in an IT firm in the Netherlands, Gevers and Demerouti (2013) found that leaders' temporal reminders were positively associated with employees' experienced task absorption, which was in turn positively related to creativity. The relationship between temporal reminders and task absorption was stronger for employees with a preference for a deadline pacing style.

Expected evaluation. Shalley (1995) found in a laboratory setting that individuals who exhibited the highest creativity expected evaluation, worked alone, and were assigned a creativity goal. Shalley and Perry-Smith (2001) found that individuals exhibited higher

creativity and intrinsic motivation when anticipating an informational rather than controlling evaluation. Yuan and Zhou (2008) found that expected evaluation exerted differential effects on creative performance during variation and selective retention. Individuals were most creative when they expected evaluation only during the selective retention phase. It appears that expected evaluation can foster creativity under some conditions. For example, creative leaders may need to abstain from evaluation during idea generation (Basadur, 2004), but inform employees that their ideas will be later evaluated according to a set of given criteria (Reiter-Palmon & Illies, 2004); and then conduct the evaluation in an informational manner (Mumford et al., 2003; Shalley & Perry-Smith, 2001; Yuan & Zhou, 2008). However, Unsworth (2001) noted that goals and expected evaluation may foster responsive, expected, and contributory creativity but not necessarily proactive creativity. The type of creativity, thus, likely influences the impact that goals and expected evaluation have on creativity.

Feedback. Zhou (2008) suggested that leader feedback fosters employee creativity by strengthening employees' intrinsic motivation; by providing employees with standards for evaluating their own work; and by facilitating the acquisition of creative skills and strategies. In a laboratory study, Zhou (1998) found that individuals who received positive feedback delivered in an informational style were more creative than those who received negative feedback delivered in a controlling style. George and Zhou (2001) found that office employees, in a petroleum drilling equipment company, who were high on openness to experience had the highest creative behavior when they received positive feedback from their supervisors. In another study in a for-profit hospital in the US, Zhou (2003) found that employees were more creative when they received developmental feedback from their leaders and creative co-workers were present. Overall, there is agreement in the field that leader informational-developmental feedback generally fosters employee creativity (Mumford et al., 2014). However, some authors have noted that in contexts where radical creativity is

desirable even developmental feedback may constrain creativity by leading individuals to think in more conventional ways (George, 2007); and that in such cases it might be more advantageous for leaders to provide to employees high degrees of autonomy and suspend evaluation and feedback for long periods of time (Mainemelis & Ronson, 2006).

Play. More recently, some authors have suggested that leaders can facilitate employee creativity by fostering a playful culture and by institutionalizing play practices (Dogson, Gann, & Phillips, 2013; Mainemelis & Dionysiou, in press; Statler, Heracleous, & Jacobs, 2011; Statler, Roos, & Victor, 2009). Mainemelis and Ronson (2006) proposed a theory of play and creativity in which they argue that fostering play in the workplace may be particular important for leaders interested in promoting radical creativity. Andriopoulos and Gotsi (2005) found that top leader support for a playful blue-sky project in a new product design consultancy in California was critical for turning the blue-sky project into a context of creative thinking and imagination. In a study of strategy team retreats, Heracleous and Jacobs (2008) found that 'serious play' with physical objects triggered mindshifts and creative insights. Oliver and Ashley (2012) found that creative leaders in advertising perceive a playful climate as important for stimulating the creative process, preventing burnout, and maintaining an energy-charged social climate.

Filis and Rentschler (2010) proposed that entrepreneurial leaders' intrinsic motives are translated into specific attitudes that promote entrepreneurial passion, play, and creativity in the work context. In a study with 112 entrepreneurs in Southern California, Kauanui, Thomas, Sherman, Waters, and Gilea (2010) found that entrepreneurial leaders who were intrinsically motivated experienced more flow at work and fostered a work culture that promoted play and creativity. Kark (2011a) argued that leader playfulness fosters employee creativity by strengthening employees' intrinsic motivation, by signaling psychological safety in the leader-follower relationship, and by shaping a work culture that promotes fun,

curiosity, and exploration. This argument corroborates with early laboratory findings about play signals (e.g., Glynn, 1994; Sandelands, 1988). Jaussi and Dionne (2003) found that non-conventional leadership behaviors, which were manipulated in an experiment as playful behaviors (e.g., standing on furniture, hanging ideas on clotheslines) significantly interacted with follower perceptions of the leader as a role model for creativity predicting followers' creativity. Considering that an increasing number of organizations embrace playful practices (Mainemelis & Altman, 2010; Mainemelis & Dionysiou, in press), it would be useful to examine more closely in the future the links between creative leadership, leader play behaviors, leader unconventional behaviors, and follower creativity.

Empowerment. Zhang and Bartol (2010) studied the role of empowering leadership. They define empowering leadership as the process of fostering the conditions that enable sharing power with employees by highlighting the meaning and significance of the employees' work, enhancing decision-making autonomy, showing confidence in their capabilities, and removing hindrances to performance. Although this definition seems very broad and does not differentiate between empowering leadership and other leadership styles that have some similar components, they found support for the mediating role of psychological empowerment in the relationship between empowering leadership and both intrinsic motivation and creative process engagement (Zhang & Bartol, 2010). These latter two variables then positively influenced creativity. Furthermore, empowerment role identity moderated the relationship between empowering leadership and psychological empowerment, whereas leader encouragement of creativity had an interactive effect with psychological empowerment on creative process engagement. Their study further suggested that leaders can actively encourage creative engagement by articulating the need for creative job outcomes, spelling out what the organization values, and calling attention to the effectiveness of engaging in processes likely to lead to creative outcomes. For instance, Mumford et al.

(2002) suggested that creative leaders must use different influence tactics such as intellectual stimulation, role modeling, participation, and goal-setting in order to motivate followers.

Sun, Zhang and Chen (2012) utilized social learning and self-determination theories and tested a chain mediating process linking empowerment to employee creativity. They found that psychological empowerment was a significant mediator of the relationship between structural empowerment and creativity, and that both structural and psychological empowerment were mediators of the relationship between transformational leadership and creativity. Somech (2006) also found that participative leadership had a strong positive effect on team innovation and that team reflection was an important mediator.

Authentic leader behaviors. Authentic leadership is another construct that has received empirical attention in relation to creativity. Various definitions have been proposed in the literature (e.g., Gardner, Cogliser, Davis & Dickens, 2011) which, however, converge on two key components of authentic leadership: (a) self-oriented, such as self-awareness, personal values, integrity and moral processing and (b) others-oriented, such as positive follower development and organizational engagement. With regards to creativity, Rego, Sousa, Marques and Pina e Cunha (2014) analyzed how authentic leadership predicted employees' creativity both directly and through the mediating role of employees' positive affect and hope. Their results confirmed that (a) authentic leadership predicted employees' creativity, both directly and through the mediating role of employees' hope, and (b) authentic leadership also predicted employees' positive affect, which in turn predicted employees' hope and, thus, creativity. Rego, Sousa, Marques and Pina e Cunha (2012) also found that authentic leadership predicted employees' creativity, both directly and through the mediating role of employees' psychological capital.

These findings are of interest, however, the construct of authentic leadership has been criticized for its broad definitions its possible overlap with other positive forms of leadership

such as transformational and ethical leadership, its loose interpretation of the philosophical works that are used as its theoretical foundation, such as Heidegger's (1962) notion of *"resoluteness",* as well as its favoring a collective self at the expense of the individual self and subjectivity. Concerns have also been raised regarding the validity and generalizability of existing measures (e.g., Ford & Harding, 2011; Gardiner, 2011; Gardner et al., 2011). Eagly (2005) criticized the one-sided perspective of existing authentic leadership models and suggested that authenticity must be acknowledged by followers for it to produce positive outcomes, naming this two-sided concept *relational authenticity*. Thus, future studies may consider the effect of relational aspects of authentic leadership on creativity, as well as alternative, more rigorous and theoretically grounded definitions of authenticity.

Ethical leader behaviors. To the best of our knowledge, there are only three studies that have examined the role of ethical leadership (or related constructs) on creative outcomes despite the fact that research on ethical leadership is booming (e.g., Brown & Trevino, 2007; Mayer et al., 2012; Stouten, van Dijke & De Cremer, 2012; Stouten, van Dijke, Mayer, De Cremer & Eeuwema, 2013). Palanski and Vogelgesang (2011) conducted an online experiment and showed that followers' perceptions of leader's behavioral integrity positively predicted their intention to think creatively and to take risks via their sense of psychological safety. Gu, Tang and Jiang (2013) examined moral leadership in a Chinese context and found that the relationship between moral leadership and employee creativity was mediated by both employee identification with the leader and LMX. Finally, Yidong and Xinxin (2013) found that ethical leadership on both the individual and the group-level was positively associated with innovative work behavior. They also found individual and group intrinsic motivation to be important mediators. The relationship between ethical leadership and creativity might be more complex than hypothesized in these three studies. It is for example possible that ethical leaders, who encourage normative behavior and adherence to group rules and standards,

might negatively affect employee creativity by suppressing dissent (Nemeth, 1997), creative deviance (Mainemelis, 2010), and bootlegging (Criscuolo, Salter, & Ter Wal, 2014).

Networks. Creative leaders in the Facilitating context also need to connect the team with various external sources of information and to successfully champion a new idea in the work context (Mumford et al., 2002, 2014; Rickards & Moger, 2000). For example, Elkins and Keller (2003) observed that in order to increase the chances of project success in R&D organizations, project leaders must use their networking, political, and persuasion skills in order to secure the support of top management and other divisions inside the organization, and also manage effectively external relationships with clients, suppliers, governments, trade associations, and even competitors. Although these processes are unlikely to be viewed as creative themselves, they play a catalytic role in fostering creativity in project teams.

Mumford et al. (2002) argued that in their interactions with the larger organization, leaders must be able to build support for the creative ideas of their team members, which other parts of the organization may perceive as unclear or inherently risky. Kanter (1988) argued that the more radical a new idea is, the broader and stronger organizational support it needs in order to be accepted and transformed into an organizational innovation. She suggested that a major element of the innovation process is the building of coalitions, "acquiring power by selling the project to potential allies" (184). Power, per Kanter, involves acquiring more information, more resources, and more support, which help not only with selling a new idea to the larger organization but also with enriching the creative process of a leader's focal team or department. Mumford et al. (2002) noted that creative leaders must be willing to engage in organizational politics and also be aware of organizational strategy in order to be effective in gaining legitimacy for new ideas in the work context. Lacking such willingness and ability, leaders may still be able to foster their employees' creative thinking but not the transformation of their employees' creative ideas to organizational innovations.

Future research should play close attention to this possibility because it can help us draw more fine grained distinctions about the differences between fostering creativity and fostering innovation in Facilitative creative leadership contexts.

Venkataramani, Richter, and Clarke (2014: 966) examined leaders' social networks as important contextual influences affecting employee radical creativity, defined as "…the development of useful and novel ideas that deviate substantially from the status quo". They highlighted that the leader assumes the role of a critical liaison, or *between centrality,* in the informal network of idea exchanges and interactions. By utilizing data from 214 employees working in 30 teams, they found that team leaders' between centrality in the idea network inside the team as well as among peer leaders significantly influenced employees' radical creativity over and above employees' own social network and ties. Leader between centrality was predictive of employee radical creativity when leader and employee ties targeted different sources within or external to the team, but not when they targeted the same source within or external to the team.

The importance of social networks for creativity has been consistently highlighted in prior research. For example, Baer (2014) argued for the strength-of-weak ties perspective in creativity (see also Brass, 1995; Perry-Smith 2006; Perry-Smith & Shalley, 2003; Zhou, Shin, Brass, Choi & Zhang, 2009) and found that actors are more creative in idea networks of optimal size, weak strength, and high diversity, and when they score high on openness to experience. Similarly, Perry-Smith (2014) in an experimental study found tie strength to affect creativity through individual processing of non redundant knowledge. She specifically found distinct knowledge frames received from all contacts (strong or weak ties) to equally facilitate creativity but only knowledge content from weak ties had an effect on creativity.

Nevertheless, Venkataramani et al.'s (2014) study is one of the first to address the role of leader's social network ties for employees' radical creativity (beyond employees'

social networks and ties) and acknowledges the difficulty horizontal organizational structures within teams pose for employees' exchange of ideas and information with all members of the team. In such contexts, leaders can act as critical liaisons by sharing their understanding of different perspectives, ideas and obstacles and by helping team members see the big picture and connect the dots that can lead the team to radical creativity. We note that a distinct pattern, where the leader himself or herself connects most of the dots, is observed in research on Integrative creative leadership as creative brokerage, which we discuss later in the article.

The above review suggests that some leader behaviors focus on the employees and how they should be treated; some focus on the task and how the creative process should be structured; and others focus on the leader's role in building coalitions and political support in the organization. This implies that the Facilitating context is complex and imposes upon leaders multiple behavioral demands. Future research can examine in detail how contextual differences influence the ways by which leaders respond to this complex challenges.

Relational Perspectives

Relationship-based approaches to leadership (e.g., *Leader-Member Exchange theory*) represent one of the most popular approaches to understanding workplace leadership (e.g., Erdogan & Bauer, 2013). The importance of the leader-follower relation for creativity has been examined by several studies that consistently report a positive relationship between the two (e.g., Basu & Green, 1997; Scott & Bruce, 1994; Tierney, 1992; 2000). A recent meta-analysis reported a moderate relationship (ρ = .29) between LMX and innovative performance (Hammond et al., 2011). In her review on leadership and creativity, Tierney (2008:107) stressed that "Given the nature of LMX, it appears that such dyadic relations may be a natural conduit for employee creative action".

In a study with 191 R&D employees of a chemical corporation in the US, Tierney, Farmer, and Graen (1999) tested a multi-domain, interactionist creativity model of employee

characteristics (e.g., intrinsic motivation and cognitive style), leader characteristics, and Leader-Member Exchange (LMX). With regard to intrinsic motivation, they found that when employees work with supervisors who possess a similar intrinsic motivational orientation, creative performance is enhanced. When it comes to cognitive style, they found that cognitive-innovators, no matter what type of relationship they had with their supervisor, experienced high levels of creative output. However, cognitive-adaptors in higher quality LMX dyads were consistently more creative than were adaptors in low quality relationships. Although they hypothesized that innovative cognitive style employees working with a similar style supervisor would result in creative performance, it was not confirmed by the data. A possible explanation is that cognitive innovators are creative loners (Kirton, 1976) that may not be interested in relationship building or that these employees already possess the skills and confidence to be creative and may not receive incremental benefit from interacting with a supervisor who also exhibits these tendencies.

In a more recent study, Atwater and Carmeli (2009) examined how leaders create the conditions for creativity at work. By utilizing the componential theory of creativity (Amabile, 1983), Spreitzer, Sutcliffe, Dutton, Sonenshein and Grant's (2005) model of thriving and Quinn and Dutton's (2005) theory of coordination they showed that LMX was positively related to employees' feelings of energy, which in turn were related to a high level of involvement in creative work. Liao, Liu, & Loi (2010) in a longitudinal, multisource and multi-level study looked at both LMX and TMX (Team-Member Exchanges). They examined how and when the quality of the social exchange relationships that a team member develops with the supervisor and other team members will affect his/her creativity. They further used social cognitive theory and examined self-efficacy as a mediating mechanism and relationship differentiation as a moderator. Their basic finding is that both the relation with the leader and with other members are important for employee creativity (depending on

how differentiated these relationships are in a work group) and that self-efficacy is an important explanatory mechanism.

Furthermore, Olsson, Hemlin, & Poussette (2012) examined the effects of LMX in leader and member ratings on leader and member creative performance among 137 leader–member dyads in academic and commercial R&D groups. Their study yielded mixed results. First, LMX from a leader perspective was positively associated with leaders' and members' higher creative performance in academic research groups. Second, member- and leader-rated LMX was negatively linked to higher creative performance as measured by the number of publications by leaders and members in commercial research groups. As they used LMX-MDM, they further found that the affective dimension of LMX was positively associated with creative performance in the academic group and negatively associated with creative performance in the commercial group.

Volmer, Spurk, and Niessen (2012) in a longitudinal field survey integrated job design theory and LMX theory and found support for an interactive effect of LMX and job autonomy on creative work involvement, which has generally been defined as "the extent to which an employee engages his or her time and effort resources in creative processes associated with work" (Carmeli & Schaubroeck, 2007, p. 36). Specifically, the positive relationship between LMX and creative work involvement was stronger when employees experienced greater job autonomy. Their findings suggest that employees who have a high quality connection with their supervisors, involving mutual awareness and trust together with high job autonomy, are more creatively involved in their work.

While LMX is a popular leadership theory focusing on the dyadic level, many of the studies undertaken examining creative outcomes are one-sided, adopting only the followers' perspective. As a result, they do not truly capture relational processes or the 'space between' the leader and the follower with regard to creative outcomes. Future studies can thus adopt a

perspective more attuned to the dyadic interaction. This may lead to studying LMX or other types of leader-follower relationships, such as high quality relationships (Dutton & Heaphy, 2003) and work intimacy in leader-follower relations (Kark, 2011b), using post-heroic leadership relational perspectives (Fletcher, 2007) that may enable us to understand the leader-follower creative process through alternative lenses (e.g., the integrating lens). Future studies can also address the multilevel nature of LMX (e.g., Henderson, Liden, Libkowski, & Chaudhry, 2009) which has been totally disregarded by existing LMX-creativity research and examine the role of meso- and group-level constructs such as relative LMX and LMX differentiation on creative outcomes.

Transformational Perspectives

Transformational leadership has been conceptualized as leadership targeted at creativity, change, innovation, or/and entrepreneurship (e.g., Burns, 1978; Eisenbeiss, van Knippenberg, & Boerner, 2008; Kark & Van Dijk, 2007; Wang, Oh, Courtright, & Colbert, 2011). The link between transformational leadership and follower creativity and innovation has gained support from various empirical studies, as well as from two recent meta- analyses (Hammond, Neff, Farr, Schwall, & Zhao, 2011; Wang, et. al., 2011) that generally report positive moderate relationships between transformational leadership and creative performance ($\rho=.13$ and $\rho=.21$, respectively).

Recently, transformational leadership theory has been critiqued for its limitations (i.e., its definition is not clear and is conflated with its effects; the lack of understanding of the specific role of the different dimensions and how each dimension has a distinct influence on mediating processes and outcomes; and the validity of the measurement tools) (van Knippenberg & Sitkin, 2013). Furthermore, recent empirical research suggests that transformational leadership and other leadership styles constructs should include not only interpersonal and motivational dimensions, but also instrumental dimensions linked to

environmental scanning and strategy formulation (e.g., Antonakis & House, 2004). Thus, findings based on the theory and measurement of transformational leadership should be understood with caution, keeping in mind these critiques. However, notwithstanding these limitations, there is a wide variety of research that has linked transformational leadership with creativity that can substantively contribute to the understanding of the ways in which leadership may affect followers' creativity.

Individual level studies. Various studies found support for the hypothesized relationship between transformational leadership and individual employee creativity. For example, one experimental study in which the leadership behavior was manipulated using scenarios describing either transformational or transactional leadership showed that participants who read the scenario of the transformational leader reported that they would behave in a more creative manner, as well as demonstrated higher levels of creativity (Kark & Van Dijk, 2014). In field studies that focused on the organizational context in different cultures similar relationships were found. A multilevel study in a large multinational company based in China showed that transformational leadership was positively related to subordinates' creative performance and transactional leadership was negatively related to subordinates' creative performance (Si & Wei, 2012). This relationship was further supported in other individual level contexts (e.g., Gong, Huang, Farh & 2009).

Other studies explored interpersonal variables linked to the self as mediators of the relationship between transformational leadership and creative outcomes. Gong et al. (2009) found that employee *creative self-efficacy* mediated the relationship between transformational leadership and employee creativity. In a study in a large telecommunication company, Aryee, Walumbwa, Zhou & Hartnell (2012) found support for a model in which followers' work engagement, experienced meaningfulness of work, and experienced responsibility for work outcomes mediated the relationship between transformational leadership and followers'

innovative behavior. They suggested that transforming followers' self-concepts and linking them with the unit's mission and vision enhances positive psychological states, which are valued resources from which employees draw on to behave in an innovative manner.

Another major mechanism that has been suggested to mediate the relationship between transformational leadership and employee creativity at the individual and team level is the *self-regulatory focus*. Drawing on the self-regulatory focus theory and on self-concept based theories of leadership, Kark and Van Dijk (2007) developed a conceptual framework proposing that individuals' promotion foci, which represents the "ideal self" and focuses individuals and groups on their hopes, wishes, and aspirations, is likely to moderate the relationship between transformational leadership and creativity. In contrast, transactional and monitoring leadership is likely to enhance followers' prevention self-regulatory foci, which represents the "ought self" and focuses individuals and groups on their duties, obligations, and responsibilities and is likely to limit creativity at the individual and team level. A recent experimental study that explored these relationships showed support for this model (Kark & Van Dijk, 2014). However, a following study in the field showed that while transformational leadership was not able to enhance individual creativity via the promotion self-regulatory focus, transactional leadership negatively affected employees' creativity, through a situational prevention focus (Kark & Van Dijk, 2014). Another related study on servant leadership, which is a leadership style that emphasizes high morality and concern to the wellbeing of others and shares some conceptual similarities to transformational leadership, demonstrated that the promotion focus mediated the relationship between servant leadership and individual creative behavior (Neubert, Kacmar, Carlson, Chonko & Roberts, 2008).

Team level studies. Many authors have argued that fostering team creativity and innovation is an increasingly important leadership function, and that leadership style in general, and transformational leadership more specifically, has direct and strong effects on

these outcomes (e.g, Anderson et al., 2014; Bledow, Frese, Anderson, Erez, & Farr, 2009; George, 2007). However, the empirical evidence for the role of transformational leadership in fostering team creativity and innovation is scarce and mixed (Anderson et al., 2014, Eisenbeiss et al., 2008).

A study by Jaussi and Dionne (2003) used confederates in the lab as leaders and did not find support for the relationship between transformational leadership and team creativity. Other studies showed that transformational leadership in an experimental context enhanced the teams' creativity. A series of studies examined the effect of different manipulated leadership styles (transformational vs. transactional) on indicators of participants' divergent thinking in a team brainstorming task. The findings of these studies showed that fluency (the number of ideas) and flexibility (the number of different types of ideas) were higher in teams in the transformational leadership condition, as opposed to the transactional condition (Jung, 2001; Sosik, Kahai, & Avolio, 1998, 1999). Studies that were performed in an organizational context found further support for the relationship between transformational leadership and team creativity in different contexts and cultures around the world (e.g., Eisenbeiss et al., 2008; Gumusluoglu & Ilsev, 2009; Shin & Zhou, 2003, 2007).

Eisenbeiss and Boerner (2010) found a curvilinear U-shaped relationship, showing that team innovation was high under extreme levels of transformational leadership (very high or very low levels), while in contrast team innovation was low under intermediate levels of transformational leadership. The authors contended that since R&D teams have high intrinsic motivation for creativity and innovation, they can enjoy autonomy and be creative under low levels of transformational leadership, or thrive when there is a high quality of transformational leadership. However, moderate levels of transformational leadership limit the autonomy and do not offer the benefit of high quality leadership guidance. Although this

finding may be unique to the context of R&D, it suggests that future research should pay close attention to contextual characteristics and various moderators.

Other studies examined team level moderators of the relationships between transformational leadership and team innovation. For example, Si and Wei (2012) found support for the role of *team empowerment climate* as a moderator of the relationship between transformational leadership and followers' creative performance. In lower levels of the empowerment climate, leaders who displayed transformational behaviors had a greater effect on subordinates' creative performance, while leaders who displayed transactional leadership behavior reduced subordinates' creative performance. In contrast, in contexts where the empowerment climate was high, the leader's transactional leadership enhanced subordinates' creative performance. Si and Wei (2012) suggested that team empowerment climate can play the role of a substitute for personal leadership behavior in creative performance situations, weakening the active effect of transformational leadership. This implies that in some work contexts there may be a weaker need for leaders to play a personal role and that the team climate can also provide important recognition, motivation, and inspiration.

Recent studies on the role of *team climate of innovation* (cf. Anderson & West, 1988; West & Anderson, 1986) show that the moderation effect of innovative team climate on the relationship between transformational leadership and employee creativity depends on employee identification with leader. Wang and Rhody (2010) found that for employees with low identification with the leader, the effect of transformational leadership on employee creativity was weaker under a high innovative climate than under a low innovative climate. For employees with high identification with the leader, the effect of transformational leadership on employee creativity was stronger under a high innovative climate than under a low innovative climate. Eisenbeiss et al. (2008) found that transformational leadership may make an important contribution to team innovation, but for teams to become innovative it is

also important that team members share a concern for high-quality performance (i.e., climate for excellence). This study also showed that the teams' *support for innovation,* a team-level construct that reflects the extent to which team members display supportive behaviors aimed at enhancing the development and implementation of new ideas, is an important mediator between transformational leadership and the teams' shared commitment to innovation.

Shin and Zhou (2007) examined moderators that related to the team composition. According to their work, transformational leadership and the teams' *educational specialization heterogeneity* interacted to affect team creativity in such a way that when transformational leadership was high, teams with greater educational specialization heterogeneity exhibited greater team creativity. A recent meta-analysis by Rosing et al. (2011) pointed to an important moderator, namely, the *stage in time* in which the creative and innovative process is at and how this stage interacts with the leadership process. Rosing et al. (2011) found that transformational leadership was related more strongly with and was more effective at the initial *opening-up stages* of the creative process, whereas transactional leadership was generally found to be more effective for the *later stages of idea implementation*. Other studies support this finding (e.g., Axtell et al., 2000; Kanter, 1988; Mumford, et al., 2002). This suggests that more attention should be given in the future to the role of transactional and monitoring leadership styles and how they may foster creativity.

Organization-level studies. Ling, Simsek, Lubatki, and Veiga (2008) found that CEOs' transformational leadership promote corporate entrepreneurship through the CEOs' interface with the members of the top management team. In a study conducted in 140 elementary schools, Eyal and Kark (2004) found that transformational leadership set the most favorable managerial behavior for organizational entrepreneurial activism and for proactivity in generating novel ideas. However, the contribution of transformational leadership to the teams' creativity and to organizational innovation did not enable the full materialization of

radical, second-order changes, since it was curtailed and shaped by the specific context of the institutional school system and its limited ability to enable creativity and innovation.

Lin and McDonough (2011) investigated the role of leadership and *organizational culture* in fostering innovation ambidexterity (i.e., the ability to simultaneously generate multiple types of innovation). Although not studying directly transformational leadership, they found that an entrepreneurial and sharing organization culture mediated the relationship between various types of leadership behavior and innovation. They concluded that the way in which leadership affects innovation is complex. While prior research has suggested that transformational leadership will foster radical innovation and that transactional leadership will foster incremental innovation, Lin and McDonough's findings suggest that this is an oversimplification of the links between leadership and innovation. Therefore, failing to take into account the role of organizational climate and culture may lead to a distorted picture on how leadership influences the ability of individuals, teams and organizations to generate different forms of creativity and innovation. This corroborates our argument that the three manifestations of creative leadership should be understood not as leadership styles but as collaborative contexts shaped by the interaction among contextual and personal elements. Put another way, the ability of Facilitative leaders to promote more radical creativity and large-scale innovations is related to the overarching social structure of the work context.

It becomes obvious from the above review that the concept of transformational leadership has been quite influential in research on Facilitative creative leadership. Its popularity can be explained by it transformative and change-oriented nature as well as its encompassing dimensions, such as intellectual stimulation, that have been deemed relevant for creative outcomes. It is, nevertheless, alarming that limited prior work has examined the distinct contributions of the different components of transformational leadership, and this is a critical avenue for future research. Examining the differential effects of transformational

components (intellectual stimulation, idealized influence, charisma, individual consideration and inspirational motivation) on followers' creativity, at the different levels of transformational influence reviewed above (the individual follower, the team and the organizational level), can significantly advance our understanding and further address some of the recent criticisms of transformational leadership (van Knippenberg & Sitkin, 2013). Measurement remains, however, a thorny issue that must be explicitly addressed in future research on transformational leadership in order for solid and valid conclusions to be drawn regarding its contributions to creativity in Facilitating contexts.

In summary, the research reviewed above suggests that in Facilitating contexts the creative contributions of followers require substantial supportive contributions from their creative leaders; and that the latter also make some creative contributions, especially in the idea evaluation and idea implementation phases of the creative process. Table 4 summarizes the main themes and contributions in research on Facilitative creative leadership.

Directing

Directive creative leaders are primary creators who materialize their creative vision through other people's work. The degree to which followers make creative contributions largely depends on the nature of work. For example, low-ranked employees in large organizations may contribute mostly to the implementation of a leader's creative vision, while creative leaders in orchestras, haute cuisine restaurants, and architectural offices expect from followers to make creative contributions as well. In either case, Directive creative leadership is not a case of solitary personal creativity. Directive creative leaders do not create in the way individual poets or mathematicians do; rather, the single most important characteristic that all Directive creative leaders share is that their creative ideas can be brought into life *only* through the collaboration of other people. Furthermore, Directive creative leaders, such as

orchestra conductors, do not expect from followers supportive contributions in the form of 'blind', mundane execution, but in the form of high quality, impeccable, and even world-class execution. If the generation of a creative idea is the hallmark of individual creative thinking, the hallmark of Directive creative leadership is the materialization of a creative idea through inspiring, eliciting, and integrating others' high quality supportive contributions.

We note earlier that Facilitative contexts may impose ex ante upon followers the normative expectation to make substantial creative contributions, for example, by making creativity an internal requirement of their jobs (Unsworth et al., 2005). In contrast, Directive contexts often impose ex ante upon leaders the normative expectation to generate a creative vision and communicate it effectively to the followers. In our review, we found fewer studies on Directing creative leadership than Facilitative creative leadership, which implies that Directive creative leadership might be less widespread in organizations. Although the lower number of studies does not necessarily mean that phenomenon itself manifests itself at lower frequencies, the subsequent analysis that we present below suggests that Directive leadership may in fact be relatively less widespread for two reasons. First, Directive creative leadership is manifested in some work contexts where there is a substantial overlap between the identity of the organization and the identity of the leader. We assume that this high degree of identity overlap does not generalize in many or most organizations. Second, Directive creative leadership may be manifested more episodically in a great number of organizations but in close relation to large-scale corporate innovation that is generated and directed by top leaders. Although the implementation of such innovations involves the entire organization, Directive creative leadership in those cases is usually limited only to the upper echelon of it.

While Facilitative creative leadership has been observed in a wide range of work contexts, Directive creative leadership has been studied systematically mainly in three contexts: top-down innovation; orchestra conductors; and haute cuisine chefs. In Table 5 we

summarize the main themes and contributions in these strands of research.

---Insert Table 5 about here---

Top-Down Innovation

Selznick (1984) viewed high-ranked institutional leaders as responsible, practically wise, and capable to think strategically about complex social issues. He argued that besides focusing on maintaining institutional character and competence, top leaders must also be creative in order to embrace change. Selznick portrayed creative leadership as a *personally expressive, communicative action* that infuses "day-to-day behavior with long run meaning and purpose" (151). Today, the focus on top leaders who act as primary creators is a central theme, albeit in different expressions, in research on Directive creative leadership. The focus of these studies is not on individual and team creativity in the short time frames, but on organizational innovation in longer time frames. In doing so, these studies shed light on some aspects of creativity and innovation that at times only top organizational leaders can tackle.

Mumford, Zaccaro, Harding, Jacobs, & Freishman (2000) suggested that while first-line supervisors confront managerial problems (e.g., business projection), creative leaders solve complex social problems which are ill-defined, novel, and involve a large number of interactions among constituencies. They proposed that creative leaders must possess intelligence, creative problem-solving skills, social skills, as well as wisdom. Sternberg (2003, 2007) argued that creative leaders need intelligence (analytical and practical), creativity, and wisdom. The emphasis on wisdom is interesting because it does not appear in the Facilitating literature. Mumford et al. suggested that wisdom enables leaders to 'go outside themselves' to gather perspectives and build wide support for the implementation of their creative vision. Sternberg (2003) noted that wisdom is the most important but also the rarest component of leadership. He suggested that a leader is wise to the extent that he or she uses his or her intelligence, creativity, and experience in order to reach a common good over

the short and long terms; and also in order to adapt, shape, or select environments by balancing multiple interests.

Sternberg and his colleagues proposed a propulsion model of eight types of creative outcomes that leaders seek to accomplish. The types range from extending existing paradigms (by replication, redefinition, forward incrementation, or advance forward incrementation), to replacing existing paradigms (by redirection, reconstruction, or reinitiation), and to synthesizing existing paradigms to create a new one (Sternberg & Kaufman, 2012; Sternberg, Kaufman, & Pretz, 2001, 2003). The eight types differ quantitatively (within types) and qualitatively (between types). The focus of this propulsion model is less on distinct creative products or services and more on large-scale innovations.

The propulsion model posits the creative leader's personal mark is visible or recognizable in the final creative outcome. This is another common theme in all studies in the Directing context. Future research should investigate the factors (e.g., personal, contextual, situational) that influence leaders' decision to pursue one or more of the eight creative outcomes. Recent studies found that incremental creativity is associated more with extrinsic motivation, ideas that are solution-driven and developed on the basis of concrete practices, and organizational identification; while radical creativity is related more to intrinsic motivation, willingness to take risks, career commitment, and ideas that are problem-driven and abstract (Gilson & Madjar, 2011; Madjar, Greenberg, & Chen, 2001). It would be interesting to test these variables in relation to the propulsion model. Following Tierney et al.'s (1999) study, it would also be interesting to examine the interactive effects of leader and follower motivational orientations across the eight types.

Conger (1995) discussed examples of breakthrough innovations that were generated by top leaders. He argued that visionary creative leaders have a seemingly uncanny ability to foresee market and social trends, recognize opportunities, synthesize diverse information, and

capitalize on them by devising revolutionary products or services. Nemeth (1997) argued that some of the most admired companies at the time had a creative CEO and a cult-like culture that emphasized conformity, commitment, and goals. She argued that such cultures suppress employee creativity but facilitate the implementation of the leader's creative ideas. Nemeth suggested that top-down innovation is linked to a managerial philosophy that is not friendly to employee creativity and freedom at the lower levels of the organization. In some organizations, however, many employees perform work that does not permit much creativity. Among the innovations that Conger (1995) discussed many took place in companies where creativity was *not* an internal requirement of most jobs *nor* a critical factor for successful performance. In fact, Conger notes that the top-leader generated innovations that he identified were not strategically planned but emerged from leaders' opportunistic search processes.

Eisenmann and Bower (2000) noted that CEOs in global media firms frequently drive strategic innovation in a top-down manner to capture first-mover advantages. They argued that reliance on an 'activist CEO' is useful when environmental turbulence is high, the risk of the decision is high, and quick action is vital. Eisenmann and Bower (2000) concluded that the 'superhuman CEOs' seem to be alive and well in the media industries-- from Hearst and Luce to Murdoch and Turner. Recently, Kamoche, Kannan, and Siebers (2014: 990) found that the top leaders of a large confectionery company designed a new knowledge management system and they made the R&D personnel implement it without using normative or coercive control, but rather, by using subtle forms of symbolic violence, "the exercise of force or power upon social agents with their complicit acceptance" (see also Bourdieu, 1991). Kamoche et al. (2014) found that the company's top leaders used the three elements of symbolic violence: *pedagogy* (e.g., they introduced a new language about the new knowledge management system); *misrecognition* (e.g., they allowed some voluntary participation in order to prevent employees from feeling that managers are applying too much

control); and a "*cultural arbitrary*" that realized but concealed the interests of top leaders (e.g., they stressed they new system's role in promoting knowledge sharing among scientists while underplaying its significance for business results).

In another study in management consulting firms, Anand, Gardner, and Morris (2007) found that the emergence and embedding of new creative knowledge practices can follow either bottom-up or top-down pathways, and that "In a top-down context, direct intervention through goal setting and deployment of skilled or formally powerful people might be more fruitful" (425). The Directing context of creative leadership in the latter case is evident in the view of a senior consultant interviewed by Anand et al.: "It is very much an individual-based business, because the client buys ME. It's me the buy into, it's very personalized" (411).

Figure 1 illustrates that, in the Directing context, for any given level of creative contributions made by the followers, the leader's creativity can range from low to high. This difference is linked in part to the supportive contributions that followers make to the creative outcome: They contribute to the success of the creative idea by implementing it successfully. Although mere execution is rarely seen as a creative contribution, it is an important supportive contribution to the creative process. Furthermore, in work contexts located in the media, R&D, and consulting industries, implementation rarely takes the form of mundane execution. Rather, it usually takes the form of high quality execution by qualified professionals who have at least the possibility to make some creative contributions as well.

This pattern has to be empirically examined in the future in relation to organizational size as the moderator. In a recent study of 1,000 Dutch organizations, Vaccaro, Jansen, Van Den Bosch, and Volberda (2012) found that transformational leadership was more effective in promoting innovation in large companies (by helping people overcome bureaucratic barriers); while transactional leadership was more effective in promoting innovation in small and less complex organizations where active management is possible. This finding

corroborates with Vera and Crossan's (2004) earlier suggestion that transactional leadership is helpful in the implementation phase of innovation. Vacacaro et al. (2012) concluded that "management innovation may be generated and directed from the upper-echelon in organizations while the implementation of certain management innovations may be monitored and rewarded accordingly to pre-established goals." (2012: 45).

While it is certainly possible that during the implementation process employees may make lower magnitude creative contributions, the Directing context of creative leadership is in sharp contrast with the Facilitating context discussed earlier. This does not imply that the two cannot co-exist at different parts of the same organization. For instance, Directive creative leadership may be enacted at the top and trigger large-scale, long-term innovations, while Facilitative creative leadership may be enacted in lower-level departments and trigger smaller magnitude, short-term creative solutions that assist the innovation implementation (West & Richter, 2008). Such an organization, of course, would be quite different from an organization where both top and middle-level leadership are Facilitative. Nemeth (1997) pointed out that organizations where innovation is generated primarily at the top are fundamentally different in cultural terms from organizations where creative ideas and innovations are generated by a multitude of organizational members. Similarly, Kanter (1988) argued that organizations that produce a greater number of radical innovations are more complex and decentralized and utilize the creativity of various organizational members.

Future research should examine in greater detail the comparative advantages of Directive and Facilitative creative leadership at the upper echelon of organizations. A first factor to consider is organizational size. Nemeth (1997) and Kanter (1988) focused on large organizations where the bottom-up innovation pattern of Facilitative creative leadership is likely to produce a greater number of radical innovations than the top-down innovation pattern of Directive creative leadership. This is not necessarily the case, however, in small

organizations which may benefit equally or more from top-down Directive creative leadership (Vacacaro et al., 2012). A second important factor is whether the innovation is consistent or episodic in temporal terms (Mainemelis, 2002). While Kanter (1988) focused on factors that produce more innovative products, more frequently, and more consistently, Conger (1995) focused on opportunistic incidents of innovation whose objective was not consistency but a sudden and substantial redirection of an organization's course. It is possible that the former is better served by Facilitative leadership, while the latter is better served by the more centralized and agile nature of Directive leadership (Eisenmann & Bower, 2000).

Last but not least, different organizational and industry contexts embrace different interpretations of what 'optimal creativity' means to them (Mainemelis, 2010). In large and established organizations 'optimal creativity' is usually understood primarily in quantitive terms, such as producing more innovations more frequently by more organizational members (Kanter, 1988). This 'optimum' seems to be better served by Facilitative creative leadership. In contexts lile symphony orchestras and haute cuisine, however, 'optimal creativity' is understood primarily in qualitative terms, such as crafting and maintaining an authentic creative identity (Jones, Anand, & Alvarez, 2005). The research that we review below suggests that this may be better served by Directive creative leadership.

Orchestra Conductors

Symphony orchestras are complex and stratified settings with well-defined statuses and roles (Faulkner, 1973b). An orchestra is led by the conductor who is responsible for *generating the creative interpretation of the score* and also controls technical and performative decisions (Marotto, Roos, & Victor, 2007). Musicians must respond to and follow the conductor's interpretive vision. Their individual creative contributions are usually limited to solving creatively technical issues, except from a few musicians who are occasionally granted the opportunity to make a solo creative contribution during the performance (Hunt, Stelluto, &

Hooijberg, 2004). The structure of orchestras, thus, offers to the conductor the *opportunity* to make the most important creative contribution; it places upon the conductor *demanding expectations* for delivering a high quality performance; and it also allows the continuous *evaluation of* the conductor's skills and interpretation by the players.

While conductors give their own creative interpretation to the score, the final outcome depends on the individual and especially collective performances of the musicians. Faulkner (1973a) found that the musicians expect from the conductor to manifest leadership, authority, direction, intelligence, confidence, a sense of beauty, and technical ability with the stick. Musicians perceived as successful those maestros who helped them predict behavioral outcomes and enhanced their expectancies of mastery. Conversely, poor maestros provided inconsistent directions and ambiguous definitions. In a participation observation study of an Eastern European orchestra, Marotto et al. (2007: 397) examined the leadership of four different conductors and found that "the same musical work performed by the very same musicians sounded dramatically different from one conductor to the next." The most succesful conductor in their study manifested charismatic leadership traits and was able to impose his tempo on the orchestra. Marotto et al. concluded that an authoritarian-charismatic leadership style can catalyze 'collective virtuosity' in orchestras, a state which entails both high quality musical performance and a strong collective aesthetic immersion in the process.

Ultimately, an orchestra performance is a collective endeavor and successful conductors are deeply involved in all stages of the collaboration process (Hunt et al., 2004). While in the Facilitating context this is often seen as close monitoring or micro-managing, in orchestras it is both expected and appreciated (Marotto et al., 2007). In the words of Maestro Neeme Jarvi, "In the orchestra, if there is a wrong note or we're not together, who's fault is it? The leader's." (in Strubler & Evangelista, 2009: 120).

Most orchestra players are highly educated, skilled, and quite insightful about any

piece of music (Faulkner, 1973b; Hunt et al., 2004). Most of them have performed in the past the same score with other conductors. Faulkner (1973a) found that musicians agree that when an orchestra meets a new conductor it needs no more than fifteen minutes to determine whether the new conductor is 'charismatic', 'brilliant', 'second rate', 'poseur', 'fake', or 'charlatan'. Therefore, while in Facilitating contexts the creative leader evaluates followers' ideas, in the Directing context of the orchestra the conductor is the target of evaluation in terms of his or her interpretation and leadership skills. Failure to inspire and lead the players may lead to the latter's resistance or/and mediocre performance (Hunt et al., 2004).

The collaborative context of orchestras offers to conductors the chance to make high magnitude creative contributions, but they can reach that end only by persuasively establishing their authority and by building reciprocal trust and respect with the players (Faulkner, 1973a). Hunt et al. (2004) argued that conductors need to have a broad behavioral repertoire (including skills for networking and managing relationships with external constituencies), and the flexibility to adjust their behavior to different stages of the creative process. Faulkner (1973a) found that interpretive ability, communicative competence, and wisdom allows conductors to transform a performance from one of merely playing notes to a genuinely creative collaborative event. Marotto et al. (2007) found that self confidence, eloquence, emotional expressiveness, and permanent communication with the players were key aspects of successful conductors.

Furthermore, Faulkner (1973b) described the 'entrapment' that musicians feel and their attempts to become virtuosos so as to gain greater freedom for creative expression. This 'entrapment' reflects the structural tension triggered by the conductor's interpretation-direction, which limits players' individual creativity. Most orchestras cannot resolve this tension by facilitating greater musician creativity in the orchestra; instead, they often create other opportunities that allow musicians to express their personal musical creativity outside

the orchestra's regular performances (Sir Clive Gillinson in Mainemelis & Ronson, 2002).

Another interesting issue is the conductor's professional identity. In her study of the tensions between the players and the administrators of the Atlanta Symphony Orchestra, Glynn (2000: 296) does not mention anywhere the conductor except in a brief note: "The musical director had an independent occupational identity, without strong professional ties to either the musicians or the administrators. He seemed to neither be disclaimed nor claimed by either of the competing groups, as he seemed to personify neither identity." Although one could imagine alternative possibilities (e.g., Glynn mentions the incorporation of dual identities), Glynn's study highlights that conductors have a distinct occupational identity.

This is not unique to orchestra conductors. Cardinal and Lapierre (2007) discussed the identity tensions experienced by prima ballerina Karen Kain when she became Artistic Director of the National Ballet of Canada. As a dancer she had a brilliant career but it was always the Artistic Director that decided her roles. As the Artistic Director she gained more decision making power but, despite her identification with other dancers, she now had to meet different role demands. For example, despite her caring for the dancers, she had to let five dancers go. The larger implication that merits greater empirical investigation in the future is how conductors and artistic directors manage their distinct professional identity while they are also expected to be a 'musicians' musician' or a 'dancer's dancer'.

Haute Cuisine Chefs

Haute cuisine is a highly institutionalized field (Ferguson, 1998) that involves various actors (e.g., chefs, critics, restaurateurs), among whom chefs are the dominant players (Rao, Monin, & Durand, 2003). This gives them the power to make more creative contributions than anyone else. Bouty and Gomez (2010) examined the evolution of practices in a Michelin-starred restaurant in France over an eight year period. Although the restaurant changed three head chefs in that period, the structure of creative work remained an inverted pyramid: most

creative work (idea generation and development) was generated by the top chef; some idea development work was done by the second chefs; and little creative work was done by the cooks. The inverse pattern was observed for execution: the cooks did most and the head chefs did least of the cooking. Similarly, Slavich, Capella, and Salvemini (2014) noted that haute cuisine restaurants must balance the demand for creativity with competing demands for standardization and reproduction. In their study of Italian chefs Moreno Cedroni and Davide Scabin, they found that when these chefs experiment with new recipes they use techniques, such as 'codification' and 'teachability', to ensure the serial and impeccable reproduction of the new recipes later in their restaurants by second chefs and cooks.

Jones et al. (2005) noted that authenticity can be claimed either by subjecting one's creative voice to the perpetuation of tradition or by crafting a unique and distinctive creative identity. Haute cuisine has strong norms for authenticity *and* creativity, a fact that allows top chefs to produce creations that carry their personal, distinctive, and discernible signature. Fauchart and von Hippel (2008) found that Michelin-starred chefs consider their recipes as very important for their success, and they also believe that it would be difficult for others to reproduce their recipes without their help. Recipes are protected not by intellectual property laws but by social norms among chefs to be honorable, trustworthy, and recognize a chef's right to be "acknowledged as the author of the recipe one has created" (193). Without an authentic creative identity chefs cannot gain recognition and renown (Svejenova, Mazza, & Planellas, 2007). Personal creativity is thus a sine qua non condition for becoming a top chef. This is not a question of being creative in mixing ingredients and crafting recipes, but a question of doing so in a way that leads up to the formation of an authentic identity which challenges or/and replaces ideas and practices in the field.

We note earlier that in Facilitating contexts 'optimal creativity' usually refers to more creativity, more frequently, by more organizational members (Kanter, 1988). In the Directing

context of haute cuisine, however, 'optimal creativity' does not refer to producing more creative recipes, more frequently, by more chefs and cooks in a restaurant. Paris and Leroy (2014) noted that in a creative company production is the creator himself or herself. Messeni Petruzzelli & Savino (2014) found that when chef René Redzepi opened his restaurant Noma, "despite the excellent taste… it was neither innovative nor true to his cultural origin" (232). Redzepi gained acclaim (for himself, Noma, and what is now known as the 'New Nordic cuisine') only after developing a personal style that combines traditional ingredients, cultural elements, and cutting-edge techniques. Gomez and Bouty (2011: 934) showed that while until 2000 chef Alain Passard was considered creative and his restaurant was highly acclaimed, he was perceived as a rising chef who was still under the influence of his mentors. In 2000 he radically changed his menu to include only vegetable-based recipes, something that no chef had done before. This elevated his reputation and he is now seen as one of the best chefs in the world and as the "legitimate master of vegetables."

In haute cuisine there is an intimate overlap between the identity of the chefs and the identity of the institutions, organizations, products, and trends of the field. This creates three challenges for creative leaders. First, chefs must embody the entire organization. For example, Bouty and Gomez (2010) found that unsuccessful chefs focused only on kitchen affairs and did not develop external relationships or they did not express publicly their vision of gastronomy. Second, chef succession is highly risky. For example, Paris and Leroy (2014) observed that after the death of chef Berbard Loiseau, "the employees knew how to run the company but there was no one who could fill his shoes in terms of leadership" (52). Third, reputation exerts a tremendous pressure on the creativity of chefs. In order to protect his creative freedom, Ferran Adria separated spatially and temporally his restaurant from a creativity workshop where he and his team could freely explore and experiment. He kept his restaurant closed six months of the year in order to provide to himself time and space for

exploration (Svejenova et al., 2007, 2010). Many or most top chefs use similar creative 'labs' in order to generate and test new ideas prior to implementing some of them in their restaurants (Messeni Petruzzelli & Savino, 2014; Paris & Leroy, 2014; Slavich et al., 2014).

Svejenova et al. (2010) examined the career of chef Ferran Adria and found that while personal creativity was his strategic resource, the main trigger of his career was his quest for creative freedom. They suggested that top chefs should be understood as '*individual business models*' which create and capture value while pursuing personal motives and interests. Svejenova et al. (2007) proposed a four-stage model of chef-driven institutional change: creativity, theorization, reputation, and dissemination. The four stages describe the flow of new ideas from generation to acceptance by the field. There is substantial agreement in this strand of research that chefs need high degrees of social, symbolic, and technical capital to bring about institutional change and innovation in haute cuisine (e.g., Bouty & Gomez, 2010; Cousins, O'Gorman, & Stierand, 2009; Gomez & Bouty, 2011; Svejenova et al., 2007, 2010).

Like orchestra conductors, chefs can materialize their creative vision only through the work of highly qualified others. Unlike orchestra conductors, however, chefs collaborate with professionally similar others. Top chefs need a team of highly qualified chefs to work with them in developing and executing recipes; and as a top chef's restaurant operations grow larger, they usually involve more their teams also in exploring and generating new recipes. Haute cuisine follows the master-apprentice model that has been used since the times of ancient Greek philosophers and Renaissance artists. After graduating from culinary academies, young chefs work in the restaurants of top chefs where they practice the craft and acquire knowledge about trends, ingredients, methods, networks, and so forth. One of the leadership qualities of top chefs that is frequently mentioned in the literature is their ability to mentor and develop others (Bouty & Gomez, 2010; Boyatzis, Smith, & Beveridge, 2013; Inversini, Manzoni, & Salvemini, 2014). The theoretical implication is that while Facilitative

creative leadership is focused on fostering the creativity of others by providing them with generous degrees of autonomy, in contexts like haute cuisine the close guidance of Directive creative leaders seems necessary for the creative development of new talented chefs.

As the new chefs rise up the hierarchy, they face a tension between remaining devoted to their mentor and crafting their own authentic identity (Iversini et al., 2014). As members of a top chef's team they can express their creativity but only up to a point and under the direction of the top chef. Gomez and Bouty (2011) found that Passard considers his cuisine a training space for elite chefs, and that two years after he has promoted them to the position of the second chef he encourages them to start up their own restaurant. Inversini et al. (2014) noted that chef Daniel Boulud started his restaurant when he realized that in his previous job his creativity was 50% of what he wanted. This implies that in Directive contexts one can grow creatively under others up to a point, after which one has to become a creative leader.

Table 5 summarizes the main themes discussed above. Most themes appear to generalize in other fields, such as top fashion and architecture, although the literature there is limited. Jones (2010) found that social and symbolic networks played a key role in the recognition and eminence of architects Corbusier, Walter Gropius, Sir Edwin Lutyens, Ludwig Mies van de Rohe, and Frank Lloyd Wright. Jones (2010, 2011) also noted that, although various professionals contribute to the construction of a building, in the field of architecture only the design architect receives credit for it. This tends to be true about most creative leaders in the Directing context. In addition, Bennis (2003) noted that Frank Gehry is the most influential architect of our times because he has invented a new, personal, and authentic language. The theme of hands-on involvement in the Directing context appears in Gehry's statement that "You have to control the project through to the end, really control the goddamned thing, because it's your design. Nobody else knows how to do it" (in Bell, 2011: 168). In addition, Gehry illustrates the theme of followers' evaluation of the creative leader's

ideas: "I also have the senior guys who draw the line in the sand technically if we get out on a toot where we can't go… having them as the gatekeepers means that I can soar a little bit and they'll pull me back. So I feel comfortable that they won't let me get out into outer space" (in Bennis, 2003: 84). The larger implication is that a creative leader in the Directing context usually (but not always) needs highly competent collaborators—musicians, chefs, architects-- in order to evaluate, develop, and materialize his or her creative vision.

We reiterate that while Facilitative creative leadership is widespread across various work contexts, Directive creative leadership appears to be restricted in a small number of contexts where there is substantial overlap between the identity of the leader and the identity of the organization (or the identity of the performance). On the other hand, while Facilitative creative leadership is enacted in contexts where creativity may not be a central imperative of organizational activity, Directive creative leadership tends to be enacted in work contexts where creativity is often a defining and sine-qua-non element of organizational activity.

Integrating

Murnighan and Conlon (1991) observed that while musicians in orchestras are bounded by the conductor's decisions, musicians in string quartets have more space for personal creative expression and they often have one-fourth of the input for musical and business decisions. In a study of 20 string quartets in Great Britain, Murnighan and Conlon (1991) identified three paradoxes. First, while the four members are considered equal, the quartet has a leader, the first violinist, who shapes and directs the collective effort. Second, the performance of the quartet is influenced considerably by the second violinist, who must echo rather than lead the first violinist, although in technical terms the second violinist is often as good or even better violinist than the first. Third, because the four members are highly interdependent, they deal with their conflicts through the extremes of confrontation and compromise. Murnighan and

Conlon found that the most successful quartets had a first violinist who acted as a decisive leader while simultaneously advocating democracy; they had a second violinist who accepted his or her role as a 'second'; and they absorbed (rather than suppressed) their conflicts *into their music* so as to produce an integrated, unified sound. The successful quartets recognized and maintained the paradoxes of their collaboration by creatively transforming them.

While string quartets are highly idiosyncratic contexts, Murnighan and Conlon's (1991) seminal study illustrates the basic features of creative leadership in Integrating contexts. Like creative leaders in Directing contexts, creative leaders in Integrating contexts are primary creators who have a personal creative vision and need other professionals to help them materialize it. In the Integrating context, however, the creative contributions of other professionals are essential and heterogeneous (Jones, 1996), and they are not blended into a final product, but rather, they remain discernible. For example, while it is difficult to separate the individual contributions of the 30 violinists of an orchestra, one can easily discern the distinct contributions that actors, composers, and photographers make in a film (Simonton, 2004a). While in Directing contexts the creative leader usually gets most or all of the credit for the creative work, in the Integrating context different collaborators can receive individual credit for their distinct creative contributions. This is the case, for example, with the cinematic awards for directors, writers, costume designers, and so forth (Simonton, 2004a). Finally, while in Directing contexts the leader can strongly dictate and control the creative interpretation of the work, in Integrating contexts the creative character of the work is open to various interpretations and often debates among the collaborators throughout the evolution of the work (Lampel & Shamsie, 2003). For instance, a cinematic or theatrical director may envision and have a clear idea about how an actor should embody and enact a role, but the actor inevitably has a considerable say about his or her performance (Dunhman & Freeman, 2000). Furthermore, in some Integrative contexts there is no single creative leader, but rather,

creative leadership is shared among multiple creative contributors.

The key aspect of Integrative creative leadership is the *synthesis* of the creative vision and inputs of the leader (or multiple leaders) with the heterogeneous creative inputs of other team members. Attaining higher degrees of personal and collective creativity in such contexts usually relies on higher levels of creative synergy. The Integrating collaborative context appears in the extant literature in three variants that we present below: the film or theatrical director who works intensively and closely with a team; the creative broker who synthesizes creative inputs whose production is often dispersed in time and space; and work contexts where Integration is not achieved by a single leader but by shared forms of leadership. Table 6 summarizes the main themes in these strands of research.

---Insert Table 6 about here---

Cinematic, Theatrical, and Television Directors

Film directors can contribute more to the creative product than other professionals (Allen & Lincoln, 2004), but at the same time, the realization and success of their films depends on their ability to inspire and elicit high-magnitude creative contributions from other professionals, such as writers, actors, and so forth (Faulkner & Anderson, 1987; Ferriani, Corrado, & Boschetti 2005). Simonton (2002, 2004a, 2004b) analyzed over 1,000 US films and found that filmmaking is a truly collaborative process, where various professionals make distinct creative contributions, but the latter are not equal: Directors exert the greatest creative influence on films. This is embedded, in part, in the social structure of the filmmaking industry in which roles are more important than positions (Baker & Faulkner, 1991). In an ethnographic study of four film projects in Hollywood, Bechky (2006) found that the coordination of work in temporary film organizations is made possible by role structure and role enactment that permeate the entire film industry. Roles are portable capsules of social and cultural capital and they signal hierarchical structure (Baker &

Faulkner, 1991) For example, Bechky (2006) found that a role hierarchy is always clear in the minds of Hollywood professionals and directors and producers are at the top of it.

Film and theatrical directors start making creative contributions in the preproduction phase when other professionals have not yet joined the project. Directors read and interpret the script; develop their creative interpretation; select actors and crew; and then plan various aspects and phases of the production (Dunhman & Freeman, 2000). Their creative thinking and planning abilities play an important role in that process. Directors have to select and recombine various professionals in order to satisfy external demands for novelty in the final product as well as their own needs for creative renewal (Lampel, Lant, & Shamsie, 2000; Menger 1999). Lampel and Shamsie (2003) found that the success of films in the US film industry is directly related to the mobilization and transformation of talent. Delmestri, Montanari, and Usai (2005) found that the directors' reputation, which allows them to attract talent, influences the success of Italian films. In an analysis of over 6,000 US films, Perretti and Negro (2007) found that the combination of 'newcomers' and 'old-timers' was predictive of the creativity of films. Newcomers contribute new ideas and insights to the collective creative endeavor, while old-timers contribute a sense of familiarity and predictability.

Filmmaking unfolds in three phases (preproduction, production, and postproduction) and the director, producer, and script writer are the only people who are involved in all three phases (Morley & Silver, 1977). The three sequential phases involve two distinct teams, the artistic and the technical, which operate in different times and communicate to each other through the director (Perretti & Negro, 2007). The director, thus, has to generate and communicate a creative vision to the team; to elicit creative contributions from all people involved; and to actively synthesize a wide range of heterogeneous creative inputs. Because they key aspect of their work is integration, directors need to be 'hands-on" and involved in all aspects of the project, whether they direct in cinema (Mainemelis & Epitropaki, 2013;

Svejenova, 2005), television (Murphy & Ensher, 2008) or theatre (Dunham & Freeman, 2000; Ibbotson & Darse, 2010). Directors must achieve creative synthesis at multiple levels: integrating their creative vision with the creative work of the other professionals; integrating the heterogeneous creative inputs of the team members; and given that temporary film, television, or theatrical projects usually take place within a permanent organizational structure, the director has to also integrate and balance competing demands among writers, actors, cinematographers, editors, composers, studio or tv executives, sponsors, and others.

The difference between an orchestra conductor and a film director is that the latter expects from others not only technically impeccable execution but also a highly creative contribution. Directors vary in terms of how 'autocratic' or 'democratic' they are, but all directors have to facilitate some exploration, experimentation, and improvisation in the filmmaking process (Ibbotson & Darse, 2010; Morley & Silver, 1977). The ability of the director to elicit creative performances from others is essential in cinematic, television, and theatrical settings. In such contexts, creative work is highly personal and highly collective at the same team. Dunham and Freeman (2000) found that 'best-in-class" theatrical directors were able to clearly articulate a unifying creative vision and pull "together a cohesive whole whereas encouraging an explosion of individual and idiosyncratic activity" (108). In a study of 21 television directors, Murphy and Ensher (2008) observed creative vision, sensitivity to members' needs, and other charismatic behaviors in some directors' behavior. Overall, the extant literature suggests that in order to lead creatively, directors need substantial social, symbolic, and technical capital (Cattani & Ferriani, 2008; Delmestri et al., 2005; Ferriani et al., 2005); cognitive and behavioral flexibility (Dunham & Freeman, 2000); and social and emotional skills (Coget, Haag, & Gibson, 2011; Murphy & Ensher, 2008).

Kramer and Crespy (2011) used an ethnographic methodology to examine how the director of an educational theater production and group members worked to create a

collaborative culture for the production. Their study unveiled five layers/actions that can lead to collaborative culture: collaborative philosophy, recruiting for collaboration, creating a collaborative climate, communicating a collaborative philosophy (to designers, crew members, actor and assistants) and directing collaborative communication (through character development discussions and collaboration on moments in the play). They also highlighted collaborative tensions that took place mainly when the Director read a line to get across his idea of how he wanted something to be performed. He always ended this line reading with something like "Don't do it like I did. Do it better," but his later actions did not match these words (i.e., he was expecting lines to be read in his own way). We note earlier that in their study of string quartets Murnighan and Conlon (1993) made a similar observation about the first violinists who acted as decisive leaders while simultaneously advocating democracy.

A promising direction for future research is the examination of the temporal skills that foster effective creative leadership in Integrating contexts. The temporal complexity model of Halbesleben et al (2003), which we discuss earlier in the article, can guide such investigations as it is both inclusive and detailed. Although temporal skills likely generalize in all three contexts, it is possible that some temporal complexity skills, such as sequencing and flexibly switching behavioral orientations during the creative process, are more important or critical in the Integrating context.

Lampel and Shamsie (2003) noted that filmmaking involves intense and simultaneously interconnected bargaining among various actors. Bechky's (2006) study recorded social tensions at different levels of film projects. In a case study analysis of Francis Ford Coppola's direction of *The Godfather*, Mainemelis and Epitropaki (2013) observed that one of the most successful films of all time (in critical acclaim, financial performance, and lasting cultural impact) was marked by extreme conflicts among Coppola, the crew, and the studio during preproduction, production, and postproduction. They suggested that the creative

heights of the film were substantially influenced by Coppola's charismatic leadership (e.g., clear artistic vision, risk-taking, unconventional behaviors) and overt creative deviance (Mainemelis, 2010). Mainemelis and Epitropaki argued that creative leadership is likely to trigger extreme social tensions and possibly radical creativity when the leader is an artist who pursues an intimately personal creative vision; the team consists of creative professionals who want to leave their own mark on the creative product; the creativity of the product is central to its success; and the temporary collaboration unfolds within a permanent organizational structure that has to balance artistic creativity with commercial imperatives.

Alvarez, Mazza, Pedersen, and Svejenova (2005) noted that art puts pressures on directors to develop idiosyncratic styles, while business exerts on them pressures to attract audiences and generate profits (see also Glynn, 2000, and Lampel et al., 2000). Alvarez et al. suggested that some directors become assimilated and trade idiosyncracy in order to secure inclusion; some 'mavericks' protect their idiosyncracy but risk losing access to resources and audiences; while 'optimally distinctive' directors strike a balance between these competing dynamics. In their study of Pedro Almodovar, Nanni Moretti, and Lars von Trier, Alvarez et al. found that these European directors were able to shield their idiosyncracy in three ways: by consolidating artistic and business roles; by forming their own production companies; or/and by maintaining long-term relationships with trusted producers. These practices for protecting one's creative freedom have been observed in studies of Hollywood directors as well (e.g., Baker & Faulkner, 1991). In particular, the consolidation of the director-writer roles gives to directors ultimate creative control of the film, while the consolidation of the director-writer-producer roles gives them dual artistic and business control (Alvarez et al, 2005; Baker & Faulkner, 1991; Mainemelis, Nolas, & Tsirogianni, 2008; Svejenova, 2005).

Alvarez and Svejenova (2002) found that the cinematic accomplishments of Pedro Almodovar are related not only to his creative genius, but also to his brother and executive

producer Augustin Almodovar who over the years has been committed to managing the "dirty part of business" (184). Alvarez and Svejenova (2002) argued that directors develop 'symbiotic careers' with a trusted person, usually a producer, or a friend or relative who becomes their producer. This provides them with a permanent supportive structure and a heighten ability to tackle competing artistic and business demands. Alvarez et al. (2005) observed the symbiotic pattern in the cases of Moretti and von Trier as well. In a biographical study of 12 Oscar-nominated Hollywood directors, Mainemelis et al. (2008) found that they all maintained a small group of trusted people with whom they worked time and again. Considering that past research has shown that 'cliques' can both foster and hinder creativity (Uzzi & Spiro, 2005), and that the combination of old-timers and newcomers fosters cinematic creativity (Perretti & Negro, 2007), future studies can examine in greater detail how the stable presence of a closely knit group around a creative leader influences his or her creative work and creative collaboration in the long run.

Creative Brokers

Many recent studies have examined the link between brokerage and creativity at the individual (e.g., Fleming, Mingo, & Chen, 2007; Obstfeld, 2005), organizational (e.g., Starkey, Barnatt, & Tempest, 2000); inter-organizational (e.g., Dodgson, Gann, & Salter, 2007), and network (e.g., Uzzi & Spiro, 2005) levels. While some studies in this research stream view brokers as tastemakers or selectors of creative work, other studies view brokers as creative leaders who co-produce a creative work (cf. Foster, Borgatti, & Jones 2011).

Thomson et al. (2007) noted that musicians produce music but music companies produce records, and that it is only through the latter that the former can enter the market. The producer plays a pivotal role in the conception, production, and success of a record. Thomson et al. argued that the selection of the producer is the most direct intervention a music company makes in the exercise of creative labor. Producers do not compose music and

do not write the lyrics for the creative product that is known as 'the song'. However, producers are co-creators of the creative product that is known as 'the record'. Producers develop a creative vision for the record; search, select, and connect creative contributors, such as composers, lyricists, and musicians; and they also actively manage the creative collaboration among multiple constituencies as the creative process unfolds.

In an ethnographic study of 23 independent music producers in the Nashville music industry, Lingo and O'Mahony (2010) observed that as the producers move across four phases of the process (resource gathering, project boundary definition, creative production, and final synthesis), they encounter three sources of ambiguity related to definitions of quality (i.e., what makes a hit), occupational jurisdictions (i.e., who's expertise should control the process), and the transformation process (i.e., how the work the should be done). Lingo and O'Mahony found that producers made use of a nexus of practices by acting at times as *tertius iungens* brokers (by bringing certain collaborators together) and at other times as *tertius gaudens* brokers (by keeping certain people apart). The music producers who were more succesful in promoting collaborative creativity were those who made broader and more timely use of nexus work practices in order to tackle effectively the ambiguity, multiple interests, and tensions inherent in the collaborative creative process. Lingo and O'Mahony's study is important because it clarifies specific nexus practices and illustrates vividly the predominantly integrative nature of creative leadership in such work contexts.

In an ethnographic study in an automotive design facility, Obstfeld (2012) followed two managers who were convinced that the firm's prototype-parts-purchasing routine was flawed. In order to trigger the redesign of the routine, they had to make the transition from problem-finding to articulating to others a vision for exploring a creative solution, and then to forming a 'de novo' creative project by attracting a core group of individuals from different specialties, ranks, and divisions. As the two projects grew, participants engaged in

deliberations about how to combine in novel ways various problems, solutions, choices, people, and resources in order to move the creative project forward and establish its legitimacy in the organization. Obstfeld concluded that "Such combinatorial work is fundamentally triadic in the sense that one entity coordinates, links, or mobilizes two other actors, groups, or divisions" (1585); and that brokers' nexus work involves both knowledge articulation and social action towards fostering new linkages and attracting more participants.

Anand et al. (2007) found that while the emergence of bottom-up creative practices requires individual socialized agency, their embedding also depends on an appropriately sequenced combination of differentiated expertise, turf delineation, and organizational support. Future research on creative brokerage should shed more light on the differences among the key individual actors, their motives, their specific location in the collaborative context, and the motives and objectives of the larger collective. Lingo and O'Mahoney's (2010) study sheds light on the creative broker as an independent producer who leads a formal temporary project which seeks to produce a creative product for the organization. Obstfeld's (2012) study sheds light on the creative broker as an organizational member who leads an informal temporary project which seeks to make a lasting creative intervention in an organizational practice. Given that the projects in Obstfled's (2012) study initially pursued creative action 'underground' or hidden from senior management, future research could also examine brokerage in relation to recent conceptualizations of creative action as creative deviance (Mainemelis, 2010) and bootlegging (Criscuolo et al., 2014).

Moreover, Litchfield and Gilson (2013) suggested that curators are responsible for shaping, maintaining, and finding uses for art collections. Their analysis sheds light on the role idea generation, idea evaluation, and idea implementation processes play in a curator's work. In terms of idea generation, curators are not the creators of any item in the collection, but they are the creators of the synthesis that becomes an exhibition. It is their creative vision,

aesthetic sensibility, and ability to synthesize different art works into a novel coherent whole that shapes the character, quality, and appeal of exhibitions. Put another way, curators are primary co-authors of the story that each exhibition tells. In terms of idea evaluation, curators decide which items in the collection are put in display, which remain in the backstage, and which become dismissed. In addition, like music producers (Lingo & O' Mahony, 2010), curators have to make tough and risky judgments about the merit of the work of new artists. In terms of idea implementation, curators use their social capital to acquire resources and bridge museums, artists, collections and the public. Litchfield and Gilson's (2013) article offers another vivid illustration of Integrative creative leadership, as well as several insights for treating top leaders in other organizational contexts as curators of collections of ideas.

Multiple Leaders: Collective Leadership

Although the idea of collective leadership can be traced back in the 1920s when scholars like Mary Parker Follett (1924) suggested that leadership emerges from dynamic interactions among organizational actors, it is only recently that systematic empirical attention has been paid on collective leadership forms (Denis, Lamothe & Langley, 2001; Denis, Langley & Sergi, 2012; Friedrich et al., 2009; Nicolaides, LaPort, Chen, Tomassetti, Weis, Zaccaro & Cortina 2014; Pearce & Conger, 2003; Yammarino et al., 2012). A number of different models of collectivistic leadership has emerged over the years, such as *team leadership* (e.g., Burke et al., 2006; Day, Gronn & Salas, 2004; Morgeson, DeRue & Karam, 2010), *network leadership* (e.g., Balkundi & Harrison, 2006), *shared leadership* (e.g., Carson, Tesluk & Marrone, 2007; Pearce & Conger, 2003), *complexity leadership theory* (e.g., Marion & Uhl-Bien, 2001), *pooling leadership* (e.g., Denis et al., 2012) and *collective leadership* (e.g., Friedrich et al., 2009; Yammarino et al., 2012).

Over the years different definitions of the various collectivistic leadership constructs have been formulated. For example, Pearce and Conger (2003:1) defined shared leadership 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". They further observed that shared leadership is "broadly distributed…instead of centralized in the hands of a single individual" (2003: 1). Mehra, Smith, Dixon, and Robertson (2006) distinguished among four patterns of leadership: leader-centered, distributed, distributed-coordinates and distributed-fragmented, whereas Friedrich et al. (2009: 933) defined collective leadership as: "…a dynamic leadership process in which a defined leader, or set of leaders, selectively utilize skills and expertise within a network, effectively distributing elements of the leadership role as the situation or problem at hand requires".

Despite the differences in construct definitions there are three important characteristics that overlap: first, multiplicity of leaders, second, multiplicity of leadership roles, functions and relationships and third, leadership as a dynamic process that unfolds over time through the interactions among actors. These three characteristics are well-described by Contractor et al. (2012) in the context of collective leadership: (a) it involves multiple leaders enacting leadership; (b) leadership serves multiple collective functions or roles. Hiller et al. (2006) proposed a four-dimensional typology of roles, i.e., planning and organizing, problem-solving, support and consideration, developing and mentoring. Carson and Tesluk (2007) also indicated four distinct roles of team leadership: navigator, engineer, social integrator and liaison. In addition to the multiplexity of roles, Contractor et al. (2012) also highlight the multiplexity of relationships in collective leadership which has specific implications for creativity. For example, Albrecht and Hall (1991) found that mutliplexity in relationships, i.e., relations involving more than one type of relationships, led to more creative outcomes. The third aspect of collective leadership that Contractor et al. (2012) highlight is: time. Collective leadership develops over time as certain individuals rise to the occasion to exhibit leadership roles and then step back to allow others to lead.

Two recent meta-analyses (Nicolaides et al., 2014; Wang, Waldman & Zhang, 2014) have attempted to integrate studies on various collective leadership forms under the common umbrella of "shared leadership in teams" and further examined its relationship to team effectiveness. Both studies revealed an overall positive relationship (ρ = .35 in Nicolaides et al. and ρ = .34 in Wang et al.). Nicolaides et al. (2014) further showed that shared leadership had important effects on team performance over and above the effects of vertical leadership.

On the other hand, in the creativity literature there has been recently substantial work on collective creativity that has revealed that creativity occurs through a dialectic negotiation and integration of group members' perspectives (e.g., Hargadon & Bechky, 2006; Harvey, 2014; Harvey & Kou, 2013). Specifically, Hargadon and Bechky (2006) suggested that collective creativity represents specific moments when individual members' experiences, perspectives and ideas are brought together to create new solutions on problem. They further identified four types of social interaction that facilitate collective creativity: help seeking, help giving, reflective reframing and reinforcing. Taylor and Greve (2006) analyzed innovations in the comic book industry and showed that multimember teams and teams with experience working together produced innovations with great variation in value. Nevertheless, they found individuals to be able to combine knowledge diversity more effectively. Recently, Harvey (2014) presented a dialectical model in which *creative synthesis* (the integration of group member perspectives) produces extraordinary group creativity. Using Pixar as an exemplar, she argued that "the critical creative moment at Pixar comes not when group members diverge but when they synthesize diverse ideas (p. 328).

Interestingly, the number of studies that have simultaneously examined collective leadership and collective creativity is still small. Two studies on R&D teams indicated the benefits of shared leadership and multiple leaders. Hauschild and Kirchmann (2001) evaluated 133 innovations and found that having a set of individuals taking different

leadership or championing roles (e.g., 'power promoter', 'technology promoter' and 'process promoter') increased team performance by 30% to 50%. Howell and Boies (2004) also found that project performance in an R&D context was positively influenced by the participation of multiple leaders that brought unique skills and expertise in the team. In another study in one of the largest video game studios in the world, Cohendet and Simon (2007) examined *communities of specialists* and showed that the integration forces implemented by the leaders of the firm to bind the creative forces together led to a hybrid form of project management that balanced between decentralized platforms and strict time constraints. They argued that these integration forces generated creative slacks for further expansion of creativity.

Davis and Eisenhardt (2011), in a recent inductive study of eight technology collaborations between ten organizations in the global computing and communications industries, examined the dynamic organizational processes associated with the leadership roles assumed by collaboration partners in order to solve critical innovation problems. They found three leadership processes that partners used in these collaborations: (a) *Dominating leadership*, wherein a single partner controlled decision making, determined innovation objectives and mobilized participants; (b) *Consensus leadership*, wherein they shared decision making, had common objectives and mobilized participants together; and (c) *Rotating leadership* that involved three components: Alternating decision control between partners to access their complimentary capabilities; zig-zagging objectives to develop deep and broad innovation search trajectories; and fluctuating network cascades to mobilize diverse participants over time. They further developed their theoretical logic linking rotating leadership and collaborative innovation.

Each component of rotating leadership activates one major mechanism related to recombination of knowledge, technologies and other resources across boundaries. Alternating activates the assessment of complementary capabilities and resources from both

organizations. Zig-zagging is linked with deep and broad trajectories searching for potential innovations. On the other hand, fluctuating mobilizes diverse participants who have difference knowledge and other resource inputs. They further proposed that rotating leadership may be the answer to the question of "How do organizations develop symbiotic relationships that combine longevity and adaptation?" through its capacity to facilitate innovative development over a series of collaborative alliances. Finally, they note two key boundary conditions. Rotating leadership is likely to be particularly relevant in (a) interdependent environments (e.g., the computer industry) and (b) dynamic environments in which collaborations are highly unpredictable.

In improvisational organizational contexts, Barrett (1998) studied jazz bands and found leadership to be rotated within the band. Players took turns soloing and supporting others by providing rhythmic and harmonic background. Vera and Crossan (2004) used the improvisational theater metaphor to inform organizational practice. They defined improvisation as a latent construct with two dimensions, spontaneity and creativity; and viewed improvisational theory as one pole on the continuum that theater can occupy, from the scripted which is led by a single leader/director to the experimental/improvisational that relies on shared/improvised roles. In relation to leadership, they clearly state that "improvisational theatre has a radically egalitarian ethic: there is no group leader…Actors learn to 'rotate leadership' and to 'share responsibility', which means that they take the lead at different times, depending on the needs of the situation, and that every member of the group is responsible for every other" (p. 743).

Emphasis has also been given on dual leadership in various other work contexts. In one sense, dual leadership may refer to *dual creative leadership* in the context of a temporary creative project, such as the production of an opera performance. In a study of Italian operas, Sicca (1997) observed that the production of any given opera entails *dual creative leadership*:

Like orchestras, operas have a music conductor who manages the orchestra; and like theatres, they have a director who manages the acting performances. Sicca observed that the conductor and the director take turns in rehearsing with the musicians, actors, and singers, and then a full rehearsal is staged so as to bring together all 'cells' of the production. In this sense, operas may be thought of as exemplifying dual creative leadership in an Integrative context.

In a second sense, dual leadership may refer to *a symbiosis between a creative leader and an administrative leader* whose role is primarily supportive, albeit not less important. Sicca (1997) pointed out that any temporary opera production is nested within a larger and permanent organizational structure (the opera house), which has dual leadership as well: the artistic director, whose oversees the artistic program, the choice of conductors and directors, and so forth; and the superintendent who functions as the managing director in charge of the opera's administrative leadership. Sicca (1997) argued that at this level *dual artistic and administrative leadership* is necessary for an effective production process.

Moreover, Hunter et al. (2012) proposed a partnership model of leading for innovation and used as examples supportive of their model a series of innovative leadership dyads such as Steve Jobs and Tim Cook, Robert Oppenheimer and Leslie Groves. In another study of eight performing arts organizations in Canada, Reid and Karambayya (2009) highlighted the need for dual executive leadership in creative organizations to balance contradictory forces and make trade-offs between artistic excellent and financial viability. In addition, we note earlier that Alvarez and Svejenova (2002) found that Pedro Almodovar maintained a symbiotic career with his brother Augustin, who over the years has been committed to managing the "dirty part of business" (184) in order to help Perdo's creativity flourish. Overall, these studies draw attention to the increased likelihood of multiple and often competing institutional logics existing in collaborative, innovative contexts (e.g., Reay

& Hinings, 2009) which inevitably pose high demands for organizational leaders and ask for dual leadership solutions.

Sicca's (1997) analysis of Italian operas is rare and instructive because it focuses simultaneously on two coexisting configurations of leadership at two different levels of organizations. His study serves as a reminder that in the future researchers should make clear whether their use of the term 'dual leadership' refers to a temporary creative project (e.g., an opera performance, a concert, a film, a music record), to the more permanent level of organizational management wherein the temporary project takes place, or/and to the link between the leadership of the temporary creative project and the more permanent or less temporary leadership of the organization. In addition, in the future researchers should also make clear whether the use of the term 'dual leadership' refers to dual creative leadership or to a symbiosis between a creative leader and an administrative leader whose role is primarily supportive, albeit not less important.

In general terms, Integrative leaders have to be more facilitative than Directive leaders and more directive than Facilitating leaders. This does not imply, however, that Integrative creative leadership is an additive function of the other two manifestations. For example, Integrative creative leaders cannot abstain from proposing creative ideas in order to motivate followers, as Facilitative creative leaders often do (Basadur, 2004), nor can they elicit supportive contributions by using processes such as codification and teachability that Directive creative leaders often use (Slavich et al., 2014). In addition, Integrative creative leaders have little choice but to share with followers the 'authorship' of a creative work in a way that neither Directive nor Facilitative leaders can do. Furthermore, integrating heterogeneous creative ideas is different from generating creative ideas (Lingo & O'Mahony, 2010). Therefore, Integrating should be thought of as a unique manifestation of creative leadership that is qualitatively distinct from the other two manifestations.

Discussion

In this article we have reviewed a large body of research on creative leadership in organizational settings. While previous reviews focused sharply on social-psychological studies conducted in Facilitating contexts (e.g., Mumford & Licuanan, 2004; Tierney, 2008), the single criterion for inclusion in our review was that a conceptual or empirical paper offers insights about the relationship between leadership and creativity *regardless* of the paper's intellectual underpinnings, theoretical orientation, and methodological choices. This inclusive selection criterion enabled us to reach out to multiple strands of research and synthesize a rich and pluralistic body of knowledge that has remained dispersed and fragmented, to date. Throughout the article we sought to highlight, rather than suppress, the theoretical and methodological differences among these research strands. We also adjusted our writing style across different sections of the article in order to match as much as possible the diverse 'languages' of social-psychological quantitative studies, neo-institutional case studies, and sociologically-driven ethnographies. While such differences exist among various research strands, our review points to three general conclusions.

First, across all strands of research, *creative leadership refers to leading others towards the attainment of a creative outcome.* Because this definition is broad enough to encompass the diverse foci of all research strands, it can stimulate a long overdue cross-fertilization of knowledge among clusters of researchers who have studied different aspects or contexts of creative leadership but have rarely exchanged insights, to date.

Second, different research strands tend to give different meanings to what it actually means to lead others toward the attainment of a creative outcome. Our analysis showed that *there are three different conceptualizations of creative leadership, which we designated as*

Facilitating, Directing, and Integrating. These three more specific and narrow conceptualizations can be accommodated under the conceptual umbrella of the general definition of creative leadership mentioned above. This implies that there is not one but three different ways for exercising creative leadership, a fact that may help explain why in the past it has proven difficult to develop a unitary, context-general theory of creative leadership.

Third, the three conceptualizations are not mere artifacts of diverse methodological choices, but *they reflect actual differences in the enactment of creative leadership across contexts*. By posing different research questions about creative leadership, different research strands seem to be attracted to different work contexts that favor one of the three manifestations. For instance, it is not surprising that social psychologically-driven researchers interested in how leaders influence employee creativity select research sites like the steel company studied by Frese et al. (1999), where the very idea of the company's idea-suggestion scheme was to facilitate employee creativity. It is not surprising either that neo-institutional researchers interested in cultural entrepreneurs choose to study chefs like Adria (Svejenova, 2007) and Passard (Gomez & Bouty, 2012), considering that haute cuisine is a highly institutionalized field where the creative identity and creative output of top chefs are at the epicentre of all other elements and developments in the field. Similarly, it is not surprising that sociologically-driven researchers interested in networked forms of creativity select research contexts such as the music record projects studied by Lingo and O'Mahony (2010), considering that the creation of a music record requires the producer to creatively synthesize the essential and heterogeneous creative contributions of various collaborators.

Elaborating on these conclusions, we suggest that by adopting a general definition which encompasses three more specific manifestations of creative leadership, future research can tackle simultaneously the dual challenge of integrating and differentiating the findings of various research streams, without compromising either the generality or the specificity of the

construct, and most importantly, without compromising its contextual sensitivity. We note in the introduction that in the last twenty years many authors have repeatedly questioned whether the findings of some studies of creative leadership can generalize in contexts or situations that are different from those in which these studies were conducted (e.g., Ford, 1995; George, 2007; Hunter et al., 2011; Mumford & Licuanan, 2004; Vessey et al., 2014). By adopting a common definition that encompasses three distinct manifestations of creative leadership, future research can engage more frequently and more mindfully in a systematic contrast, comparison, and integration of the findings of various research streams. This is likely to reduce the tendency of over-generalizing the findings of any given subset of studies, and to strengthen the ability of all research strands to develop more nuanced, more accurately bounded, and more synthetic perspectives about creative leadership.

A Multi-Context Framework of Creative Leadership

In this article we developed the framework of Facilitating, Directing, and Integrating as a conceptual tool for organizing and synthesizing the extant body of research on conceptual leadership. We started with the observation that in the multidisciplinary creativity literature there is substantial agreement that, unlike solitary creativity, creativity in collaborative contexts depends not only on creative contributions but also on supportive contributions (e.g., Amabile, 1988; Amabile et al., 1996; Ford, 1996; Madjar, Oldham, & Pratt, 2002; Oldham & Cummings, 1996; Simonton, 2002, 2004a, 2004b). Our framework suggests that the three manifestations of creative leadership differ in terms of the ratio of leader/follower creative contributions, and also in terms of the corresponding ratio of leader/follower supportive contributors. Following Amabile's (1988) componential theory of creativity, we suggest that in the Facilitating context the variable levels of follower creative contributions are influenced not only by their expertise, creative abilities, and motivation, but also by variable levels of leader supportive contributions. Conversely, in the Directing context the variable levels of

leader creative contributions are influenced not only by his or her expertise, creative abilities, and motivation, but also by variable levels of follower supportive contributions. More often than not, the latter are not mundane contributions of unskilled workers but high quality contributions of highly competent professionals (e.g., orchestra musicians, second chefs, R&D scientists, etc.) The probability and magnitude of creative outcomes in the Integrating context tend to be more sensitive to variable levels of leader-follower creative synergy.

We believe that the tripartite framework of creative leadership shown in Figure 1 can help future research move beyond the mere acknowledgement that creativity is rarely the act of a lone genius, as well as beyond the mere recognition that creative contributions require supportive contributions. Future research can draw on our framework to develop novel investigations that focus on the dynamic interplay between leader and follower creative *and* supportive contributions, as well as on leader-follower creative synergy, across the three manifestations of creative leadership and across various work contexts.

Throughout our review we designated the three manifestations as '*collaborative contexts'* in order to signal that they are not leadership styles or industry contexts. Because of variable personal characteristics, individual leaders and followers may show variable levels of affinity for the three manifestations. Because of variable operational exigencies and cultural mindsets, different industry contexts may exhibit variable preferences for the three manifestations. Our review implies, however, that whether creative leadership will be manifested in the form of Facilitating, Directing, or Integrating ultimately depends on a *dynamic confluence of cultural, industry, organizational, professional, personal, and task characteristics.*

In epistemological terms, we view creative leadership as residing not within leaders, followers, or industries, but rather, within the dynamic interplay among all constituting players and factors. This epistemological orientation is consistent with recent developments

in the strands of research that we have reviewed. For example, Garud et al. (2014: 1177) noted that while past research on creative entrepreneurs was preoccupied with the micro-macro dichotomy and with differences associated with single or multiple levels of analysis, in recent years the field has moved towards a "constitutive" orientation which focuses on the actual dynamics whereby innovation emerges, "drawing attention to how actors and contexts are co-created through an interactive and emergent process." For example, the field of haute cuisine exerts a definitive pressure upon young chefs to limit their creative voice in order to remain loyal to their mentors, then to abandon their mentors in order to grow creatively, and then to become themselves mentors of young chefs in order to help the latter grow creatively. Haute cuisine exerts a pressure upon chefs to be Directive creative leaders, but by acting as Directive creative leaders some chefs innovate and change the very field of haute cuisine.

In addition, Thomson et al. (2007: 636) criticized severely the tendency to treat the creative industries as a single type of work context, and they noted that "the distinctive characteristics of creative labor are best understood within particular sector and market contexts." Our review showed, in fact, that the creative industries are not associated with any specific manifestation of creative leadership, but rather, different sectors of the creative economy (e.g., advertising, orchestras, filmmaking) tend to favor different manifestations of creative leadership. We stress that this does *not* imply that we see any given sector as being automatically associated with a specific manifestation of creative leadership. Some sectors do in fact favor specific manifestations of creative leadership, but they do not fully determine them. For example, the prestige that film directors enjoy today as the 'principal artists of filmmaking' (Simonton, 2002, 2004a, 2004b) is not an inevitable reality of filmmaking, but rather, the historical product of a collective bargaining which took place in Hollywood in the late 1960s and succeeded in securing for the directors more creative freedom and power (Allen & Lincoln, 2004; Baker & Faulkner, 1991; Mainemelis et al., 2008). This implies that

individuals (leader and/or followers) may take action to alter the distribution of the opportunities for creative contributions in any give sector or work context (Glynn, 2000).

Moreover, some sectors consist of multiple structural elements that are recombined to produce different structural configurations which tend to favor different manifestations of creative leadership within the same sector. For example, Moedas and Benghozi (2012) recently studied 31 triads of fashion designers, manufacturers, and retailers in the fashion industry. They identified five industry architectures (designer-led, manufacturer-led, supplier-led, and two hybrid forms) which were largely determined by three design architecture choices (efficiency, level of fashion innovativeness, and innovation type). Moedas and Benghozi (2012: 405) concluded that "the broad range of design situation can designate designers as anything from mystified magicians to mere employees."

Our preceding review of research on symphony orchestras, string quartets, and jazz bands points to a similar conclusion: the broad range of music assembly contexts influences the degree of creative freedom that professional musicians have, the variable manifestations of creative leadership across various music assembly contexts, and the identity, relational, and career tensions experienced by leaders and followers across various music assembly contexts. It is quite likely that a similar set of dynamic takes place in many other sectors or industries besides fashion and music (e.g., technology, software, industrial design). We discuss below implications and suggestions for future research on the emergence of the three collaborative contexts of creative leadership.

Implications for Research on the Emergence of Creative Leadership Contexts

Perhaps the most important direction for future research is the exploration of the factors that influence the emergence of three collaborative contexts of creative leadership. Taking stock of our preceding review, we propose that collaborative contexts can be thought of as falling on a continuum *from 'weakly' to 'strongly' structured* in terms of how the opportunities for

making creative contributions are distributed among the members of the collaborative context. In 'weak' contexts leaders (and at times followers) have relatively higher degrees of freedom to determine whether creative leadership will take the form of Facilitating, Directing, or Integrating, whereas in 'strong' contexts the distribution of opportunities for creative contributions often commences *long before* leaders and followers start collaborating.

For instance, symphony orchestras do not ask musicians to brainstorm about the creative interpretation of a score: they are structured in such a way so that all parties involved know *in advance* that the creative interpretation of a score is the responsibility and 'right' of the conductor. Similarly, filmmaking crews do not gather to brainstorm about task allocation because they know *in advance* that directors, scriptwriters, actors, and other cinematic professionals have the responsibility and professional 'right' to make distinctive creative contributions in their respective areas of expertise. This does not imply that 'strong' contexts are free of tensions or negotiations about the distribution of creative contributions, but that such tensions and negotiations are embedded in and often perpetuated by their very structure.

Reflecting on our review, we further propose below that the position of any given collaborative context on the 'weak-stong' continuum is influenced by the *dynamic interplay* among at least five categories of factors: social structure; the nature of work; the nature of creativity; organizational characteristics; and follower characteristics.

Social structure. Future research can investigate a wide range of elements of social structure, such as stratification, institutionalization, professionalization, roles, and normative expectations. Our review suggests that Directing contexts tend to entail high degrees of stratification (e.g., orchestras) or institutionalization (e.g., haute cuisine restaurants), where some improvisational Integrative contexts (e.g., jazz bands, improvisational theatre) entail low degrees of stratification. Another observation we submit to future research is that Facilitating contexts tend to revolve more around jobs or positions (e.g., creative director in

advertising, managers in product development and R&D units), while Integrating contexts tend to revolve more around professional roles (e.g., directors, writers, actors in filmmaking). Professional roles are not located in any specific organization, but rather, they permeate the entire industry or field (Baker & Faulkner, 1991). As a result, roles facilitate role-based coordination in temporary creative projects and they are often attached to specific normative expectations for creative performance (Bechky, 2006).

The larger issue is whether the social structure behind any given work context imposes upon creative leaders *ex ante normative expectations* for making high personal creative contributions, a fact which should generally increase the likelihood of either Directive (e.g., orchestra conductors, top chefs) or Integrative (e.g., film, theatrical, and television directors) creative leadership. Conversely, social structures that impose upon followers *ex ante normative expectations* for making high creative contributions (e.g., advertising agencies, industrial design firms, filmmaking projects) should generally decrease the likelihood of Directive creative leadership and (depending on other factors that we discuss below) increase the likelihood of either Facilitative or Integrative creative leadership. Last but not least, some work contexts (e.g., newly formed cross-functional teams or newly founded firms) may not entail strong or clearly defined social structures, a fact which should generally provide to leaders (and possibly to followers) higher degrees of freedom in selecting the form of creative leadership.

Nature of work. Another interesting direction for future research is the examination of the relationship between the manifestations of creative leadership and structural dimensions of work. For example, in a seminal comparison of the internal structuring of projects in the software and advertising industries, Grabher (2004) found that their respective focus on, respectively, cumulative and disruptive learning leads to patterned differences. Advertising projects tend to preserve the cognitive distance among members and to maintain fixed roles

and stable teams; whereas software projects tend to reduce the cognitive distance among members and to promote switching in terms of both roles and teams. Grabher (2004) argued that while both advertising and software projects benefit from economies of repetition, only software projects can benefit substantially from economies of recombination.

Reflecting on our review, we submit to future research the possibility that higher degrees of recombination are more likely to be associated with Integrative creative leadership (e.g., see our previous discussion on filmmaking, television, theatre, music production, jazz, and operas), while lower degrees of recombination are more likely to be associated with more stable (in terms of membership) contexts that tend to favor Facilitative creative leadership (e.g., see our previous discussion on advertising and more traditional industry environments). Note that high degrees of creativity in the final product may be achieved in both cases but through different pathways. For example, the originality of films is primarily achieved by recombining professionals to form a new film crew, who work intensively for a short period of time usually under an Integrative creative leader. In sharp contrast, advertising firms employ on a stable basis a number of advertising designers, who at any given time work separately on different client assignments. As a result, the originality of ad campaigns seems to be better served by *not* integrating the creative outputs of various designers, but by providing designers with generous degrees of creative autonomy, a fact which tends to favor the manifestation of Facilitative creative leadership (see also Table 2).

Another interesting observation regards the studies that have examined symphony orchestras, string quartets, jazz bands, and theatres. We found that these forms of work tend to be associated with a single Integrative creative leader in their more scripted forms, and with multiple Integrative creative leaders in their more improvisational forms. This implies the 'scripted-improvisational' continuum is associated with the presence of a single or multiple creative leaders in Integrating contexts. It is beyond our purpose in the present paper

to present a complete list of structural elements of work that might influence the manifestations of creative leadership. We note, however, that this is another promising direction for future research on creative leadership.

Nature of creativity. In our review we were not able to discern any direct association between the magnitude of creativity and the presence of Facilitating, Directing, or Integrating creative leadership. Put another way, it seems that creativity can range from incremental to radical in all three collaborative contexts. The issue, therefore, is not which manifestation of creative leadership is associated with incremental or radical levels of creativity, but rather, by *whom* and *how* these levels of creativity can be obtained *given* the social structure and nature of work in the collaborative context.

On the other hand, there seems to be a connection between the three manifestations of creative leadership and the four types of *employee creativity* proposed by Unsworth (2001). Unsworth's matrix is based on two dimensions: problem type (close to open) and driver of engagement (external or internal). Although we expect that all four types of employee creativity proposed by Unsworth (2001) manifest themselves in all three contexts of creative leadership, we submit to future research the following possibilities for investigation.

First, due to the fact that in Directing contexts the leader has more opportunities to select and frame problems, and to make more and more important creative contributions, Directive creative leadership is likely to be associated strongly with the two closed-problem types of follower creativity (responsive and contributory). Second, we expect that Facilitative creative leadership is generally associated with all four types of follower creativity but *not simultaneously or not within the same project or task*. Instead, we expect that Facilitative creative leadership interacts with the intended magnitude of creativity (incremental-radical) to elicit different types of employee creativity. Specifically, we expect that Facilitative leaders interested in incremental forms of creativity are more likely to elicit *responsive and*

contributory creativity from followers; while Facilitative leaders interested in radical forms of creativity are more likely to elicit *expected* and especially *proactive* employee creativity (the latter entails open problems and internal engagement). Finally, we submit the possibility that, due to its reliance on leader-follower creative synergy, Integrative creative leadership is the only manifestation that is likely to activate simultaneously and within the same project all four types of follower creativity. We hope that future research will develop conceptually and investigate empirically these three possibilities.

Furthermore, future research should pay more attention to the temporal dimensions of creative leadership. Most studies that we reviewed measured creative outcomes at the individual and team levels and in short-time frames. We need more longitudinal research in order to better understand the long-term effects of creative leadership. This is particularly important in Facilitative creative leadership which seeks to foster consistently (rather than episodically) the creativity of followers in stable, permanent organizations. Paradoxically, most studies in Facilitating contexts have been conducted in laboratory settings and cross-sectional field studies. Innovation research pays more attention to the unfolding of innovation over time, owing to the fact that innovation takes place in longer time frames. Unfortunately, however, many studies in the innovation literature are not concerned with leadership, evident in the smaller number of innovation studies that we reviewed in this article.

A promising direction for future research is to examine systematically and longitudinally the short-term and long-term effects of the three creative leadership contexts on individual and team creativity and organizational innovation. This will allow us to reach more informed conclusions about the comparative advantages and variables levels of contextual fit of the three manifestations of creative leadership. In addition, among the studies we have reviewed only ethnographic research conducted in Integrating contexts has shown consistent interest in examining longitudinally the role creative leadership plays in the

transformation of creative ideas into organizational innovations. In the future, we need much more longitudinal work on the unfolding of this transformation process in Directing and especially in Facilitating contexts.

Organizational characteristics. Another interesting observation in our review is that Facilitative creative leadership seems to be associated with more traditional or permanent organizational forms, while Integrative creative leadership seems to be associated with temporary (e.g., film project) and networked (e.g., music record project) forms of organizations. One possible explanation is that in temporary and networked organizational forms creativity is primarily achieved through the recombination of various heterogenous creative inputs, a fact which is more likely to favor the manifestation of Integrative creative leadership. A related observation is that nearly all studies on Integrative creative leadership were conducted either in small organizations or in small (in terms of number of members) projects within large organizations. This suggests that Integrative creative leadership may be associated with smaller and less permanent forms of organizations or projects, whereas Facilitative creative leadership appears to be viable in organizations of any size and both at the level of temporary projects or at the level of regular collaboration. This further implies that these two manifestations of creative leadership may co-exist at *different levels* of the same large organization, one at the top level of the permanent organization (Facilitating) and one at the level of leading temporary creative projects (Integrating).

Directive creative leadership seems to be related more to the close association between the organization and the creative identity of the leader, and less to the size or form of the organization. That said, our review of research on orchestras, chefs, and top business leaders suggests that Directive creative leadership may be more likely in smaller organizations and relatively harder to sustain in growing and in larger organizations. In addition, we observed that Facilitating contexts may focus more on promoting more

creativity, more frequently, by more organizational members, whereas Directing contexts tend to focus more on the crafting and maintenance of a unique, authentic creative identity.

Follower characteristics. Follower characteristics, such as domain expertise, creativity skills, and motivation (Amabile, 1988), as well as creative personality (Kirton, 1976) and creative identity (e.g., Farmer, Tierney & Kung-McIntyre, 2003) can also manifest themselves differently in the three collaborative contexts. Whereas we expect the "creativity intersection" (Amabile, 1988) of followers' expertise, creative thinking skills and intrinsic interests to be vital in order for creative outcomes to be achieved in all three contexts, the leadership route through which such intersection will be unleashed may be different. For example, whereas in orchestras musicians can reach high levels of artistic performance following a Directive creative leader (Hunt et al., 2004; Marotto et al., 2007), in the jazz improvisational context musicians can achieve high levels of creative performance only through Integrative creative leadership. In this case, the follower characteristics can be the same (expertise, skills, motivation, creative identity) but the context totally changes the requirement for the creative leader.

In summary, we have made three broad suggestions: first, work contexts can be thought of as falling on a continuum from 'weakly' to 'strongly' structured in terms of how the opportunities for making creative contributions are distributed among the members of the collaborative context; second, 'stronger' contexts exert more ex ante influences on the three manifestations of creative leadership; and, third, the position of any give work context on the continuum is influenced by the dynamic interplay among (at least) five categories of factors: social structure, the nature of work, the nature of creativity, as well as organizational and follower characteristics. In addition, we have discussed other opportunities related to using and developing our tripartite framework of creative leadership in the future. In the remainder of the article we discuss more general implications for future research on creative leadership.

Implications for Research on Leadership Schemas, Social identity, and Creativity

Socio-cognitive approaches to leadership (e.g., Epitropaki & Martin, 2004; 2005; Epitropaki et al., 2013; Lord & Maher, 1991; Shondrick, Dinh & Lord, 2010; Shondrick & Lord, 2010) and creativity (e.g., Christensen, Drewsen & Maaløe, 2014; Hass, 2014; Sternberg, 1985) open up exciting possibilities for creative leadership and may help resolve the paradox indicated in our introduction: On the one hand, prior studies (e.g., Mumford et al., 2002) highlighted the importance of creative thinking skills for creative leadership; on the other hand, studies of Implicit Leadership Theories (ILTs) and Implicit Followership Theories (IFTs) have revealed a striking absence of the trait "creative" from existing lists of ILTs and IFTs (e.g., Offermann et al., 1994; Sy, 2010). As a matter of fact, in Lord, Foti, and De Vader's (1984) list the trait 'creative' was included in the non-leader attributes list which clearly implies that creativity is not perceived as a core characteristic of leadership (Epitropaki et al., 2013).

Mueller et al. (2011) took this idea further and reported a negative association between expressing creative ideas and assessment of leadership potential. They theorized that the expression of creative ideas may diminish judgments of leadership potential unless the charismatic leadership prototype is activated in the minds of social perceivers. Their first study showed that creative idea expression was negatively related to perceptions of leadership potential in a sample of employees working in jobs that required creative problem solving. Study 2 showed that participants randomly instructed to express creative solutions during an interaction were viewed as having lower leadership potential. A third scenario study replicated this finding showing that participants attributed less leadership potential to targets expressing creative ideas, except when the "charismatic" leader prototype was activated. In this situation, observers may view the idea espoused by the "charismatic" leader as more creative than an idea espoused by the "average leader." Mueller et al. (2011) further

suggested that it is possible that people under-estimate the leadership potential of creative individuals, but over-estimate the creative potential of charismatic leaders.

Their findings point towards a possible augmentation effect of creative leadership over charismatic/transformational leadership (Epitropaki, 2012), or given the severe criticism of charismatic/transformational models (van Knippenberg & Sitkin, 2013) towards the need for going 'back to the drawing board' to clearly conceptualize and measure creative leadership. As Mueller and her colleagues have identified a potential bias against selecting creative leaders, they suggested that this might have repercussions for how creative leadership is studied. For example, studying creative leadership by examining the behaviors and attributes of the average leader or even of successful leaders may yield a rather restricted range of behaviors – as the average leader may tend not to have or engage in creative thinking skills.

Future research can thus examine creative leadership through the lens of schemas and implicit theories of leadership and creativity. One explanation for the paradox noted above could, for example, be the fact that when one carefully examines the traits included in existing Implicit Leadership Theories lists and those of Implicit Theories of Creativity, they are clearly antithetical. Nonentrenchment, aesthetic taste and imagination are usually found to strongly distinguish creative from non-creative people across domains, whereas traits such as responsible, sincere, reliable, understanding, logical (that are often linked with a leadership prototype) are associated with non-creative individuals (e.g., Hass, 2014; Sternberg, 1985).

Another explanation for the paradox can be the dynamic nature of schemas and Implicit Theories as recent advances in socio-cognitive psychology indicate. For example, connectionist models of leadership perception (e.g., Brown & Lord, 2001; Hanges, Lord & Dickson, 2000; Lord, Brown & Harvey, 2001) emphasize the role of contextual constraints in ILTs and suggest that prototypes are likely to exhibit variations across (as well as within)

individuals as a function of different contexts. Similarly, in creativity research, although there may be general consensus for a general implicit theory of creativity, there is evidence for domain variation and context-sensitivity (e.g., Hass, 2014; Paletz & Peng, 2008). For example, Hass (2014) found differences in creativity trait profiles among artists and scientists whereas Paletz and Peng (2008) in a study conducted in China, Japan and the US found evidence for country variations.

On a similar note on schema context-sensitivity and its implications for creative leadership, DeRue and Ashford's (2010) work on leadership structure schemas (LSS) can be of interest. DeRue and Ashford argued that LSS can range from a hierarchical conception of leadership structure and leadership exhibited by only a single individual (a hierarchical LSS) to a flatter conception of leadership structure (a shared LSS). Drawing on our tripartite framework we can, thus, argue that collaborative innovation contexts (e.g., computing industry, jazz bands) call for shared leadership structure schemas (LSS) that can make Integrating creative leadership emergence possible. Furthermore, the social identity theory of leadership (De Cremer, van Dijke, & Mayer, 2010; Hogg, 2001; Hogg & van Knippenberg, 2003; van Knippenberg, van Knippenberg, De Cremer, & Hogg, 2004) taps upon the importance of context by emphasizing that leadership effectiveness depends on the leader's similarity to the group prototype. Prototypical leaders embody group norms, are more central and important to self-definition and are perceived as more desirable and effective than non-prototypical leaders (for a recent review see Hogg, van Knippenberg, & Rast, 2012).

Hogg and van Knippenberg (2003) have commented on a 'prototypicality paradox' resulting from a stable and highly consensual group prototype of a leader. Whereas in the beginning a leader's prototypicality is associated with status, charisma and influence, over time all these elements might have the opposite effect. The leader may gradually be perceived as distant or might become reluctant to initiate changes and be creative out of fear of loss of

prototypicality. Van Knippenberg (2011) challenged the notion that group prototypicality and an emphasis on social identity would discourage creativity, innovation, and change. He suggested that this is a misconception for two reasons. First, social identity and the group norms embedded in the identity may actually embrace and emphasize creativity and innovation. For example, some teams and organizations are in a sense defined by their focus on creativity and innovation, such as those active in R & D. It is thus possible that in contexts where creativity is the desired outcome (e.g. creative industries) a different (to the general) prototype prevails that includes more creativity-related traits. In our preceding review this appears to be the case with several creative leaders including orchestra conductors, haute cuisine chefs, film, theatrical, and television directors, creative brokers, curators, and so forth. Traditional organizational contexts (e.g., banking, manufacturing) are likely to adhere to the general prototype and see creativity as counter-normative of the leadership role. As a result we expect to find more Facilitating (rather than Directive or Integrating) creative leaders to be more effective in producing creative outcomes in such settings.

Second, social identities are not static and unchanging, but develop and change over time just like individual identities. What people identifying with a group or organization seek is not unchanging identity, but continuity of identity — the sense of a clear connection between past, present, and future identity. Where it concerns innovation as change to the collective, people can be quite accepting and supportive of the pursuit of such change/innovation as long as they have a clear sense of continuity of identity.

Thus far, a limited number of studies have examined creative outcomes through a social identity lens. Hirst, van Dick and van Knippenberg (2009) found that leader team prototypicality and intrinsic motivation moderated the relationship between team identification and creative effort. Yoshida, Sendjaya, Hirst and Cooper (2014) also found that servant leadership promoted individual relational identification and collective prototypicality

with the leader which, in turn, enhanced employee creativity and team innovation. Therefore, the social identity theory of leadership opens interesting paths for future research with regard to creative leadership and the pursuit of creative outcomes in organizational settings.

Implications for Research on Paradoxes of Creative Leadership

The paradox literature has long recognized the existence of competing demands, including tensions between novelty and usefulness, idea generation and implementation, cooperation versus competition, and exploration versus exploitation. There has been extensive work on paradoxical and hybrid frames showing that the ability to embrace multiple orientations at the same time is a core feature of effectively managing creativity and innovation (e.g., Garud, Gehman & Kumaraswamy, 2011; Kark, Praisler & Tubi, in press); and that a dynamic equilibrium model can explain the ways in which seemingly contradictory elements can co-exist within organizations over time (Smith, 2014; Smith & Lewis, 2011). These works highlight the need for leadership that can effectively attend to competing expectations and manage tensions and complex organizational structures (e.g., Dacin, Dacin & Tracey, 2011; Diefenbach & Sillince, 2011; Smith, 2014). The tripartite framework that we suggest in the article can be useful for re-thinking the documented paradoxes of creative leadership.

According to the 'creative personality cohesion paradox' (Hunter et al., 2011), creative individuals possess traits of autonomy, need for achievement and self-expression, and at times they can be loners, hostile, and dominant (Feist, 1998). Leaders need to encourage these creative followers' personal initiative and their unique needs for self-expression, while also nurturing their creative identity and stimulating diversity in their thinking. This encouragement is likely to energize their creative efforts (Gotsi, Andriopoulos, Lewis & Ingram, 2010). At the same time, the leader must develop cohesion among team members, maintain a shared vision, and enhance commitment and effective team work (Andriopoulos, 2003; Hunter et. al., 2011). Central to this leadership paradox is that too much

cohesion can harm creativity. To spark and maintain creativity within a team some form of conflict and idea-challenging is required (Hunter et. al., 2011; Nemeth, 1997). Facilitative creative leadership is influenced by this paradox because it seeks to stimulate and strengthen the creative contributions of the team members. Creative leaders may face an even bigger challenge in actively managing the 'creative personality cohesion paradox' in Integrative contexts, where both the leader and the followers have creative aspirations and the need for leader-follower creative synergy is critical. Directive creative leaders may experience the paradox in yet another way: by aligning team members around the implementation of the leader's creative vision, leaders may often encounter the tensions associated with followers' feelings of 'entrapment' (Faulkner, 1973b).

Another major challenge faced by creative leaders is the 'intrinsic-extrinsic paradox', which posits that leaders must instill intrinsic motivation among followers when extrinsic tools are most readily available (Hunter et. al, 2011). Research has shown that while at times extrinsic motivators may harm creative behaviors and performance (e.g., Amabile, 1985; Kruglanski, Friedman, & Zeeyi, 1971), in some situations extrinsic motivators can play a role in fostering creative performance (e.g., Mumford & Hunter, 2005). Intrinsic motivation, on the other hand, has been found to have a major and consistent positive role in creative performance (Amabile, 1996). While leaders can at times control external resources and enhance external motivation, it is more difficult for them to affect intrinsic motivation that is derived from the individual and his or her internal emotions, experiences, and hopes. We suggest that in Facilitative contexts (where followers are expected to make the primary creative contributions) the key challenge for leaders is to arouse high levels of follower intrinsic motivation while at the same time effectively managing the use of external cues of rewards and punishments. In contrast, in Directing contexts leaders may be able to rely more, on balance, on external rewards to reinforce the implementation of their ideas by followers.

In the Integrative context the creative synergy between leaders and followers likely enhances the passion of both the leader and followers and contributes to higher levels of mutual intrinsic motivation, possibly limiting the need for external rewards.

A last example is that of the paradox of the 'dual expertise': Leaders must acquire domain expertise while also gaining necessary leadership skills (Hunter et. al, 2011). Various studies have shown that leaders' technical expertise is a strong predictor of team innovative performance (e.g., Barnowe, 1975; Mumford, Eubanks, & Murphy, 2007). Developing and cultivating expertise takes many years and focused efforts (Ericsson & Lehmann, 1996). Individuals who lead creative efforts, however, must also master leadership skills (Hunter, et. al., 2011). We suggest that in order to stimulate and support follower creativity in Facilitative contexts, leaders must possess strong leadership skills, while their domain expertise may be (on balance) relatively less important. In contrast, Directive creative leaders have to possess very strong domain expertise in order to act as the 'primary creators', while their leadership skills may be (on balance) relatively less important. Finally, in Integrating creative leadership contexts, where creative synergy is key, we expect that leaders will experience most sharply the need to be strong both in terms of domain expertise and in terms of leadership skills. Another option that we note in our earlier review of Integrative creative leadership is to apply different forms of shared or collective leadership in order to tackle this paradoxical tension.

It is beyond our purpose in the present article to discuss all paradoxes of creative leadership documented in the extant literature. We note, instead, that future research can use our tripartite framework in order to identify important differences in the way that these paradoxes are manifested, experienced, and managed across the three collaborative contexts.

Conclusion

Although the concept of creative leadership can be traced back to the 1950s (e.g., Selznick, 1984; Stark, 1963), in recent years it has received unprecedented degrees of attention both in

the academic literature (e.g., Dinh et al, 2014; Mumford et al., 2014; Vessey et al., 2014) and in the practitioner community (e.g., Nikravan, 2012). There appears to be a growing realization that creative leadership is probably more important today than it has ever been before (Sternberg, 2007). In the past, various streams of organizational research examined the relationship between creativity and leadership, albeit using slightly different names such as "creative leadership", "leading for creativity and innovation," and "managing creatives." In this article we synthesized this dispersed body of knowledge under a global construct of creative leadership, which refers to leading others towards the attainment of a creative outcome. We also proposed an integrative tripartite framework which suggests that creative leadership can be manifested in the forms of Facilitating, Directing, or Integrating.

Our integrative review brings together multiple and distant research strands that have rarely exchanged insights, to date. This article offers to these research strands a common conceptual platform for connecting and cross-fertilizing their perspectives. In addition, our multi-context framework offers to future research a conceptual tool for strengthening its contextual sensitivity and for shedding new light on the paradoxes of creative leadership. We hope that the integrative review and the tripartite framework that we presented in this article will serve in the future as springboards for developing novel empirical investigations, more nuanced theories, and more synthetic portrayals of creative leadership in organizations.

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Figure 1   **A Multi-Context Framework of Creative Leadership**
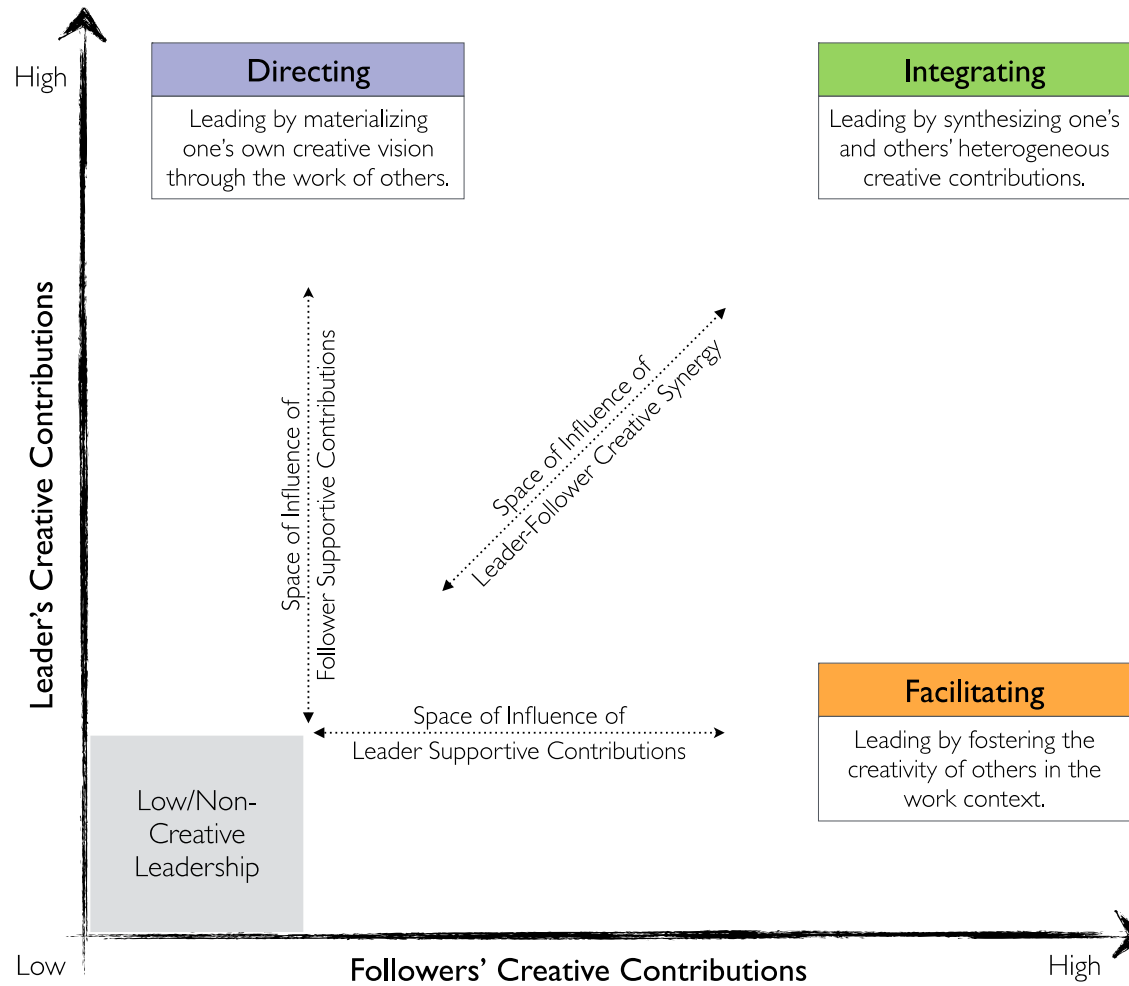
Table 1   **Creative Leadership in a Facilitating Context**

Research Descriptions	Reports From The Field
"…Leadership as evident as the exercise of influence to increase the likelihood of idea generation by followers and the subsequent development of those ideas into useful products." (Mumford, Scott, Gaddis, & Strange, 2002: 706)	"Advertising is a business of big ideas. The objective of the copywriter and art director is to develop the big idea. But the creative director's objective is to help others develop big ideas. I begin by explaining the potential of an assignment to the creative people, so they're excited about what can be done. Then, I'll try to take them right to the edge of the big idea. Once they've begun to generate work, my job is to help them identify the truly big idea and bring it to the top. So I must enthuse, energize and, when truly big ideas begin to emerge, help to identify and nurture them." (John Ferrell[1] in Oliver and Ashley, 2012: 342)
"…Leaders, at least as the occupants of a role where they direct creative people, will not be the ones generating new ideas. Instead, the leader is more likely to evaluate follower ideas." (Mumford, Connelly, & Gaddis, 2003: 414)	
"Creative leadership means leading people through a common process or method of finding and defining problems, solving them, and implementing the new solutions." (Basadur, 2004: 111)	"We're committed to letting our people go their own way, to the largest degree feasible. We're like a jazz band. Individual players do their own riffs." (Jeff Goodby[2] in Oliver and Ashley, 2012: 342)
"We take as an exemplar of creative leadership the behaviours associated with the role of the team facilitator in the implementation of creative problem-solving systems such as the Parnes-Osborn brainstorming." (Rickards & Moger, 2000: 276)	"A designer's not a machine. They don't always produce ideas of the same quality. Nonetheless, a top designer produces a certain number of great ideas every year. If suddenly the number goes down over a year or two, it means there's some sort of problem and I try to solve it. I think that's the sine qua non condition of being a good manager." (Jacques Seguela[3] in Haag & Coget, 2010: 280)
"…The role leaders play in the facilitation of creative production in their subordinates." (Reiter-Palmon & Illies, 2004: 56)	
"…The capacity to foster employee creativity." (Tierney, 2008: 95)	"Cool idea—you earned your cookie." (Brainstorming facilitator at IDEO, in Sutton & Hargadon, 1996: 696)

[1] John Ferrell is President & Chief Executive Officer of Ferrellcalvillo in New York.
[2] Jeff Goodby is Co-Chairman of Goodby, Berlin & Silverstein in San Francisco.
[3] Jack Sequela is Vice President of Havas in Paris.

Table 2 **Creative Leadership in a Directing Context**

Research Descriptions	Reports From The Field
"Creativity is important for leadership because it is the component whereby one generates the ideas that others will follow." (Sternberg, 2003: 391) "Some of the most admired companies…appear to be those whose *leader* had the creative idea. Under these conditions, a strong corporate culture emphasizing uniformity, loyalty, and adherence to company expectations would be advantageous… This is not the same as promoting creativity from within the organization. Cohesion, convergent thought, and loyalty help to *implement* an idea but tend not to enhance the *production* of a creative idea." (Nemeth, 1997: 66, italics in the original) "There is only the conductor-CEO, with occasional technical and question clarification from the concertmaster and principal players in carrying out the conductor's vision and technical desires… In the idea generation stage, we expect the conductor to present interpretive vision and direction to the orchestral musicians…. the musicians respond to this vision and… they must solve creatively the individual technical issues in the music individually while remaining flexible and motivated enough to change artistic direction at the request of a conductor." (Hunt, Stelluto, & Hooijberg, 2004: 148-149)	"A chef is an excellent artisan who is able to create the perfect prototype for the perfect dish, to enable those who work with him to perfectly replicate it many times. This is crucial, because no chef works directly on every dish prepared in his kitchen. In order to make my business succeed and grow, I have to become a mentor and share my knowledge with the people working with me." (Davide Scabin[1] in Slavich, Cappetta, & Severino, 2014: 37) "Essentially it's the conductor who creates the performance, who actually creates the interpretation of the music… It has to be, I mean, it's got to be one person's interpretation. So there's a tremendous tension between players' individual creativity and the conductor's direction…. The conductor is deciding absolutely how that piece of music is going to be. He'll decide all the speeds. He'll decide the loud and the soft. He may decide just how passionate and how the phrases are going.… The outcome is the conductor's interpretation largely, with varying degrees to which, depending on the conductor, they enable the individual player to shape a certain piece of music where they player has the main solo line. Most of the other players don't have that freedom. When you go to a concert and you say that was a great performance, yes, the orchestra has a huge amount to do with it but, in the end, it's really the conductor whose interpretation you've listened to and you either like or don't like." (Sir Clive Gillinson[2] in Mainemelis & Ronson, 2002)

[1] Davide Scabin is chef and owner of the 2 Michelin stars restaurant Combal.Zero in Turin.

[2] Sir Clive Gillinson is Executive & Artistic Director of Carnegie Hall in New York and past cello player (1970-1984) and Managing Director (1984-2005) of the London Symphony Orchestra.

Table 3   Creative Leadership in an Integrating Context

Research Descriptions	Reports From The Field
"Brokers in a collaborative context must not just have a good idea themselves, they must be able to elicit and synthesize the ideas of others." (Lingo & O'Mahoney, 2010: 64)	"One might say that the director is the author of the theatrical production, except for the fact that in the collaborative art of the theatre no one can be more than a crucial collaborator." (Harold Clurman[1], in Dunhan & Freeman, 2000: 115)
"The collaborative nature of creativity is even more apparent in filmmaking… The typical feature film is the product of the separate contributions of directors, screenwriters, actors, cinematographers, film editors, composers, art directors, costume designers, and a host of specialists in makeup, special effects, and sound. What makes these cinematic collaborations especially intriguing is that the individual contributions are not completely submerged or blended in the final product… Truly creative directors leave their personal stamp on virtually every movie they make." (Simonton, 2004a: 163-170)	"You're not working for a committee, but you're using a committee. And that's very complex. You're using everybody to get this vision. You cannot expect a result for that work that is some predetermined thing. You can see it, but then you have to let it go." (Television director in Murphy & Ensher, 2008: 343)
"Members of orchestras, for instance, are bound by the conductor's decisions. Each member of a string quartet, however, can theoretically have one-fourth of the input in musical and business decisions... At the same time, the first violinist has most of the musical opportunities and responsibilities in traditional compositions." (Murnighan & Conlon, 1991: 169)	"So, you, know, the sound guy will come with this idea. The effects person will have this idea. And one of the qualities of a director is to be able to decide quickly. You have to be able to say, 'yes on that sound idea, no on the special effect, I want to do it live.'" (Television director in Murphy & Ensher, 2008: 346)
"…a rather unique solution to this paradox is simply not to have a single leader, but rather share the responsibility between individuals who possess the requisite skills and expertise." (Hunter, Thoroughgood, Myer, & Ligon, 2011: 56)	"The label wanted one thing; the artist another. . . So I found myself acting as the referee. . . . It's tricky, if I butt heads with the artist, I get fired. If I don't butt heads with the artist, the label fires me. I was up a creek. I also have allegiance to me, where I don't believe this is a good song for [the artist] to play. That's the hardest part, as producer, you're hired to have a strong musical opinion and with three points of view, none of them lining up . . . I didn't know what to do." (Music producer in Lingo & O'Mahoney, 2010: 64)

[1]Harold Clurman was an American theatrical director and drama critic.

Table 4   Facilitative Creative Leadership: Themes and Contributions

Key Themes	Selected Contributions
I. Competency Perspectives	
Expertise	Amabile, Schatzel, Moneta, & Kramer (2004); Krause (2004); Mumford, Connelly, & Gaddis (2003); Mumford, Gibson, Giorgini, & Mecca (2014); Mumford, Scott, Gaddis, & Strange (2002).
Creative thinking skills	Mumford, Connelly, & Gaddis (2003); Mumford, Scott, Gaddis, & Strange (2002).
Creative process management skills	Basadur (2004); Basadur & Basadur (2011); Byrne, Shipman, & Mumford (2010); Mumford, Connelly, & Gaddis (2003); Mumford, Gibson, Giorgini, & Mecca (2014); Reiter-Palmon & Illies (2004); Richard & Moger (2002); Stenmark, Shipman, & Mumford (2011).
Awareness of temporal complexity	Halbesleben, Novicevic, Harvey, & Buckley (2003).
Emotional intelligence	Zhou & George (2003).
II. Behavioral Perspectives	
Leader support	Amabile (1988); Amabile & Conti (1999); Amabile, Conti, Coon, Lazenby, & Herron (1996); Amabile, Schatzel, Moneta, & Kramer (2004); Baer & Oldham (2006); Basadur (2004); Ford (1996); Frese, Teng, & Wijnen (1999); George & Zhou (2007); Hunter, Bedell, & Mumford (2007); Janssen (2005); Krause (2004); Lin, Mainemelis, & Kark (2014); Madjar, Oldham, & Pratt (2002); Makri & Scandura (2010); Mumford, Scott, Gaddis, & Strange (2002); Oldham & Cummings, (1996); Oliver & Ashley (2012); Reiter-Palmon & Illies (2004); Rice (2006); Rickards & Moger (2002); Unsworth, Wall, & Carter (2005); Woodman, Sawyer, & Griffin (1993); Zhang & Bartol (2010).
Assigned goals	Baker & Nelson (2005); Carson & Carson (1993); Chua & Iyengar (2008); Dane, Baer, Pratt, & Oldham (2011); Ford (1996); Litchfield (2008); Litchfield, Fan, & Brown (2011); Shalley (1991, 1995); Sutton &

	Hargadon (1996).
Monitoring	Amabile, Schatzel, Moneta, & Kramer (2004); Choi, Anderson, & Veillette (2009); George & Zhou (2001); Gevers & Demerouti (2013); Zhou (2003).
Expected evaluation	Shalley (1995); Shalley & Perry-Smith (2001); Yan & Zhou (2008).
Feedback	George & Zhou (2001); Mumford, Gibson, Giorgini, & Mecca (2014); Zhou (1998, 2003, 2008).
Play	Andriopoulos & Gotsi (2005); Filis & Rentschler (2010); Jaussi & Dionne (2003); Kark (2011a); Kauanui, Thomas, Sherman, Waters, & Gilea (2010); Heracleous & Jacobs (2008); Mainemelis & Ronson (2006); Oliver & Ashley (2012); Statler, Heracleous, & Jacobs (2011); Statler, Roos, & Victor (2009).
Empowerment	Somech (2006); Sun, Zhang and Chen (2012); Zhang & Bartol (2010).
Authentic leader behaviors	Rego, Sousa, Marques, & Pina e Cunha (2012, 2014).
Ethical leader behaviors	Palanski & Vogelgesang (2011); Gu, Tang & Jiang (2013); Yidong & Xinxin (2013).
Networks	Elkins & Keller (2003); Kanter (1988); Mumford, Gibson, Giorgini, & Mecca (2014); Mumford, Scott, Gaddis, & Strange (2002); Richard & Moger (2002); Venkataramani, Richter, & Clarke (2014).
III. Relational Perspectives	
Leader-Member Exchange	Atwater & Carmeli (2009); Basu & Green (1997); Clegg, Unsworth, Epitropaki & Parker (2002); Hammond, Neff, Farr, Schwall, & Zhao (2011); Liao, Liu, & Loi (2010); Olsson, Hemlin, & Pouusette (2012); Scott & Bruce (1994); Tierney, Farmer & Graen (1999); Volmer, Spurk, & Niessen (2012).
IV. Transformational Perspectives	
Transformational leadership	Aryee, Walumbwa, Zhou & Hartnell (2012); Eisenbeiss, Van Knippenberg, & Boerner (2008); Eyal & Kark (2004); Gong, Huang & Farh (2009); Jung (2001); Kark & Van Dijk (2007, 2014); Ling, Simsek, Lubatkin & Veiga, (2008); Rosing, Frese & Bausch (2011); Shin & Zhou (2003, 2007); Si & Wei

(2012); Sosik, Kahai & Avolio (1998, 1999); Wang, Courtright & Colbert (2011); Wang & Rhode (2010).

Table 5   Directive Creative Leadership: Themes and Contributions

Key Themes	Selected Contributions
Intelligence, creativity, and wisdom	Faulkner (1973a); Mumford, Zaccaro, Harding, Jacobs, & Freishman (2000); Selznick (1984); Sternberg (2003, 2007).
Creative vision	Anand, Gardner, & Morris (2007); Bouty & Gomez (2010); Conger (1995); Eisenmann and Bower (2000); Faulkner (1973); Hunt, Stelluto, & Hooijberg (2004); Kamoche, Kannan, & Siebers (2014); Nemeth (1997); Selznick (1984); Sternberg & Kaufman (2012); Sternberg, Kaufman, & Pretz (2001, 2003); Svejenova, Mazza, & Planellas (2007); Svejenova, Planellas, & Vives (2010).
Follower evaluation	Bennis (2003); Faulkner (1973a); Hunt, Stelluto, & Hooijberg (2004).
Identity	Cardinal & LaPierre (2007); Gomez & Bouty (2011); Fauchart & von Hippel (2008); Hunt, Stelluto, & Hooijberg (2004); Inversini, Manzoni, & Salvemini (2014); Jones (2011); Messeni Petruzzelli & Savino (2014); Svejenova, Mazza, & Planellas (2007); Svejenova, Planellas, & Vives (2010).
Social, symbolic & technical capital/ Broad behavioral repertoire	Bouty & Gomez (2010); Cousins, O'Gorman, & Stierand (2009); Gomez & Bouty (2011); Hunt, Stelluto, & Hooijberg (2004); Jones (2010, 2011); Messeni Petruzzelli & Savino (2014); Marotto, Roos, & Victor (2007); Mumford, Zaccaro, Harding, Jacobs, & Freishman (2000); Slavich, Cappetta, & Salvemini (2014); Svejenova, Mazza, & Planellas (2007); Svejenova, Planellas, & Vives (2010).
Creative freedom & renewal	Cousins, O'Gorman, & Stierand (2009); Slavich, Cappetta, & Salvemini (2014); Svejenova, Mazza, & Planellas (2007); Svejenova, Planellas, & Vives (2010).
Apprenticeship & mentoring/ Follower entrapment	Bennis (2003); Bouty & Gomez (2010); Cardinal & LaPierre (2007); Faulkner (1973b); Inversini, Manzoni, & Salvemini (2014); Paris & Leroy (2014).
Communication & involvement	Bennis (2003); Faulkner (1973); Hunt, Stelluto, & Hooijberg (2004); Marotto, Roos, & Victor (2007); Mumford, Zaccaro, Harding, Jacobs, & Freishman (2000); Selznick (1984); Strubler & Evangelista (2009); Vaccaro, Jansen, Van Den Bosch, & Volberda (2012).

Table 6   **Integrating Creative Leadership: Themes and Contributions**

Key Themes	Selected Contributions
Role structure	Allen & Lincoln (2004); Baker & Faulkner (1991); Bechky (2006).
Creative vision	Dunham & Freeman (2000); Litchfield & Gilson (2013); Mainemelis & Epitropaki (2013); Murphy & Ensher (2008); Simonton (2004a, 2004b); Obstfeld (2012).
Team selection & attraction	Delmestri, Montanari, & Usai (2005); Lampel & Shamsie (2003); Mainemelis, Nolas, & Tsirogianni (2008); Perretti & Negro (2007); Obstfeld (2012).
Ability to inspire & elicit creative performances	Dunham & Freeman (2000); Faulkner & Anderson (1987); Ibbotson & Darse (2010); Morley & Silver, (1977); Murphy & Ensher, (2008).
Communication and involvement	Dunham & Freeman (2000); Ibbotson & Darse (2010); Morley & Silver, (1977); Murphy & Ensher, (2008); Perretti & Negro (2007); Obstfeld (2012).
Charismatic leadership	Dunham & Freeman (2000); Mainemelis & Epitropaki (2013); Murphy & Ensher (2008).
Social, symbolic, and technical capital	Delmestri, Montanari, & Usai (2005); Ferriani, Corrado, & Boschetti (2005); Litchfield & Gilson (2013).
Social, political, and emotional skills	Coget, Haag, & Gibson (2011); Kramer & Crespy (2011); Lingo & O'Mahony (2010); Murnighan & Conlon (1991); Murphy & Ensher (2008); Obstfeld (2012).
Creative freedom	Alvarez, Mazza, Pedersen, & Svejenova (2005); Alvarez & Svejenova (2002); Baker & Faulkner (1991); Mainemelis, Nolas, & Tsirogianni (2008).
Flexibility	Dunham & Freeman (2000); Lingo & O'Mahony (2010); Obstfeld (2012).
Collective leadership	Contractor et al. (2012); Denis, Lamothe & Langley (2001); Hargadon & Bechky (2006); Harvey (2014);

	Harvey & Kou (2013); Nicolaides et al. (2014); Wang, Waldman & Zhang (2014),
Rotating leadership	Davis & Eisenhardt (2011).
Improvisation	Barrett (1998); Vera & Crossan (2004).
Dual leadership	Hunter et al. (2012); Sicca (1997); Reid & Karambayya (2009).