An Image of Who We Might Become: Vision Communication, Possible Selves, and Vision Pursuit

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ABSTRACT

We propose a model of vision communication that emphasizes the mediating role of follower collective possible selves – self-conception in terms of what the collective (team, organization) one is a member of may become in the future that can be held by individuals but can also be shared by multiple individuals. Our model is the first to provide an integrative account of how vision communication may stimulate the pursuit of the vision by individuals and collectives, and it complements and extends prior research in three important ways. First, in contrast to an earlier emphasis on the role of individual perceptions of the *current* self, our model puts perceptions of the *future* self to the fore-front. It captures how vision communication can invite social sharedness of these perceptions, thus doing justice to visions' nature as images of a future for the *collective*. Second, in contrast to earlier work on vision communication focusing on general indicators of leadership effectiveness, our model puts what is arguably the most important outcome for vision communication center-stage: vision pursuit – followers' actions aimed at making the vision reality. We argue that the creation of collective possible selves by followers is crucial for vision communication because collective possible selves explain how vision communication relates to vision pursuit. Third, our model also addresses aspects of vision communication that may facilitate the processes through which visions become internalized as possible selves, and captures the processes through which such possible selves become shared among members of a collective and lead to *collective* vision pursuit.

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INTRODUCTION

Vision communication, motivating followers by communicating images of the future of the collective (Bryman 1992, Conger and Kanungo 1987, Kirkpatrick and Locke 1996), holds the dubious honor of being both one of the most crucial and one of the most mysterious aspects of leadership. Previous research has shown that vision communication can affect general indicators of leadership effectiveness like leadership evaluations, follower attitudes, and performance (e.g., Awamleh and Gardner 1990, Baum et al. 1998, Berson et al. 2001, Den Hartog and Verburg 1997, Shamir et al. 1994), but it lacked a specific focus on how vision communication can stimulate vision pursuit by both individuals and collectives aimed at realizing a vision. Moreover, the processes that underlie the relationship between vision communication and leadership outcomes are poorly understood (Stam et al. 2010a, b). These deficiencies preclude an integration of findings from vision communication research which is necessary for the field to move forward. In the current paper, we offer such an integrative theoretical framework that can explain how vision communication leads to vision pursuit.

Several authors argued that follower self-conception plays a critical mediating role in vision communication (Lord and Brown 2001, 2004, Lord et al. 1999, Shamir et al. 1993, van Knippenberg et al. 2004a), emphasizing how visions may affect followers' perceptions of the self as it currently is. Visions are images of the *future* of a *collective*, however, and in contrast to this earlier work, we therefore focus on how visions may affect follower perceptions of a *collective possible self* which is an individual's mental representations of what the collective could be in the future. Thus, the collective possible self is what Chan (1998) refers to as a referent-shift phenomenon. It is an individual level cognition, but the referent is the group or collective level rather than the individual level. It is the linking of the individual possible self with the collective referent (collective possible self) that imbues the vision of the collective with emotional and motivational properties for the individual.

We show how such a focus on collective possible selves in understanding vision communication provides valuable new insights on how both individual and collective processes operate. We argue that a vision for a collective may be internalized by followers when followers elaborate on the vision and when

core elements of followers' self-concept are activated and related to the vision for the collective. Both of these processes feed into the creation of a collective possible self. We propose that a focus on collective possible self is especially important because a collective possible self directly links the self to goal-directed behavior of the individual that is involved in vision pursuit. Moreover, to the extent that group members share perceptions of the collective possible self, collective vision pursuit behavior also is facilitated, and methodologically, it is possible to aggregate individual perceptions of a collective possible self to operationalize this individual-level construct at a group level (Chan, 1998). A model of vision communication emphasizing collective possible self can thus explain how vision communication results in the pursuit of the vision by individuals and groups. It provides a dual conceptual focus that translates directly into theory and measurement at multiple levels of analysis.

Our model makes several contributions to the literature on visionary leadership. By highlighting vision pursuit as the key outcome variable – in contrast to earlier work focusing on general indicators of leadership effectiveness – we aim to focus the field of vision communication on what is its essence: motivating the realization of the vision. This provides coherence and direction to a field that is currently fragmented and unfocused. Our model also provides the first conceptual framework to integrate prior research and guide future research by addressing the underlying processes that may explain how vision communication can be effective. Specification of these underlying processes may function as a basis to tie diverse research together and integrate the field, to stimulate new empirical research into these processes, and to drive the development of future research designs by emphasizing which factors should be investigated and controlled for in vision research.

Moreover, most work on vision communication is confined to the individual level of analysis whereas arguably it is the collective pursuit of visions in particular that is most crucial. In contrast to earlier work, our model bridges the individual and group levels of analysis, describing how vision communication can create shared understanding fostering collective vision pursuit. This provides the theoretical mechanisms through which many of the current findings of vision research, that focus on the individual level, can be related to the collective level. It also may drive new empirical and theoretical

research that focuses on vision communication as a multilevel phenomenon.

RESEARCH ON VISION COMMUNICATION: STATE OF THE SCIENCE

Modern organizations need to continuously change and adapt in order to survive, and many argue that the communication of a vision is crucial to motivating adaption by followers (Bass 1985, Bryman 1992, Burns 1978, Conger and Kanungo 1987, Shamir et al. 1994). *Visions* are defined as future images of the collective (Berson et al. 2001, Shamir et al. 1993). In describing possible futures of a collective, visions capture desired outcomes, and in that sense, could be regarded as a type of goal. Visions are different from most other goals, however, in that they are more long-term, abstract, and need not necessarily be achievable (Kirkpatrick and Locke 1996). An example is the 'Connect and Develop' vision of Procter and Gamble (P&G), developed by CEO A. G. Lafley. This vision described the future P&G as an open company that works closely with customers, scientists, and other companies to develop new products (i.e., open innovation). Lafley also related specific goals to this vision, such as aiming for 50% of innovations to come from outside of the company. In 2006 the percentage of innovations that had elements that came from outside the company had gone up from 15% in 2000 to 35% and research and development productivity had increased by a stunning 60% (Huston and Sakkab 2006).

Some research on vision communication differentiates between vision content and vision communication (Awamleh and Gardner 1999, Den Hartog and Verburg 1997). Content refers to the information that is embedded in the vision itself: the image of the collective future. Communication refers to the expression of a vision with the aim of convincing followers that the vision is valid and worthwhile. Vision communication is about 'selling' the future image. We focus on vision communication and on the question of how leaders can best express collective images of the future. Vision communication, however, implies the existence of vision content, and thus vision content is also relevant to our research question.

The domains of vision communication vary widely. Scholars described visions for countries (Emrich et al. 2001), task groups (Kirkpatrick and Locke 1996), companies (Baum et al. 1998), and industries (Beyer and Browning 1999). Visions can be short (e.g., a short written statement by CEOs; Baum et al. 1999) or long (e.g., Beyer and Browning 1999 identify the books written by Robert Noyce as

his vision for the semi-conductor industry). The most common form of vision communication, though, is a speech (Shamir et al. 1994), such as Martin Luther King Jr's 'I have a dream' speech, in which he pictured a future image of the US without racism, or Ratan Tata's 'A promise is a promise' at the launch of the Nano, in which he pictured a cheap car that provides transportation for poor Indians.

Empirical research on vision communication has focused on a variety of communication aspects, for instance communication style (Awamleh and Gardner 1999, Kirkpatrick and Locke 1996), specific vision themes (Baum et al. 1998, Den Hartog and Verburg 1997, Awamleh and Gardner 1999), certain vision attributes (Baum et al. 1998, Bligh et al. 2004), rhetoric devices (Awamleh and Gardner 1999, Den Hartog and Verburg 1997), image-based rhetoric (Emrich et al. 2001, Naidoo and Lord 2008), metaphors (Mio et al. 2005), and a focus on followers (Den Hartog and Verburg 1997, Sashkin 1988, Stam et al. 2010a, Tichy and Devanna 1986). The importance of these variables is evident in the effects they have on leadership evaluations (Emrich et al. 2001, Kirkpatrick and Locke 1996, Mio et al. 2005), attitudes (Awamleh and Gardner 1999), and performance (Hunt et al. 1999, Kirkpatrick and Locke 1996, Stam et al. 2010a, b), as well as venture growth (Baum et al. 1998), international involvement (Den Hartog and Verburg 1997), and media responses (Bligh et al. 2004). Two things are noteworthy here, however. First, there is no guiding framework to integrate insights from different studies. Second, research has typically understood vision effectiveness in terms of general indicators of leadership effectiveness, and has by and large ignored what arguably is most crucial – efforts to realize the vision.

Vision Communication, Vision Pursuit, and the Self-Concept

We argue that the success of vision communication lies in motivating followers to aim to realize the vision, which may differ substantially from general task motivation, performance or other general indicators of leadership effectiveness. For instance, if P&G's research and development departments had continued its closed innovation process (as opposed to the open innovation process described in 'Connect and Develop'), even if it was with success, would the vision communication have been successful? We propose that vision communication is successful to the extent that it motivates followers to strive for the realization of the vision. Therefore, the key outcome of research on vision communication should be an

understanding of vision communication's influence on behavior that is focused on achieving the vision.

We refer to this behavior as *vision pursuit*.

Two aspects of vision pursuit are important to highlight. First, often visions are so abstract and long-term that they can be impossible to fully achieve (Kirkpatrick and Locke 1996). It may therefore be helpful to conceive of visions in terms of a goal hierarchy in which the vision is a high-level goal that is hierarchically related to lower-level goals. Consider for instance the example of P&G. Open innovation is the vision, and the 50 % quota for innovations from outside is a lower-level goal related to that vision. Pursuing this lower-level goal is acting in line with the overall vision. We therefore use the term vision pursuit to refer to all behaviors that are intentionally in line with the vision. Second, visions can be pursued by collectives as well as by individuals. In the P&G example, individuals within P&G may decide to reach out to contacts from outside the company to 'Connect and Develop' (individual vision pursuit), but whole teams or departments may decide to do the same collectively (collective vision pursuit). Importantly, individual and collective vision pursuit may not be independent: Seeing an individual pursue a vision may cause others to help; likewise, pursuing a vision collaboratively may enhance the likelihood that one will also pursue the vision individually.

In sum, vision pursuit refers to goal-directed action that is hierarchically related to the vision. It can be enacted by individuals and/or collectives. We deliberately keep the definition of vision pursuit broad in order to incorporate all relevant collective and individual behaviors, but we do differentiate between persistence in vision pursuit and flexibility in vision pursuit (cf. Gutnick et al. 2012). The first category refers to putting in more effort and/or putting in effort for a longer period of time to realize the vision. Working hard and perseverance are important indicators of persistence (De Dreu et al. 2008), but persistence, more than simply putting in effort over (long) periods of time, also refers to goal striving without being distracted by other stimuli or tasks (Gutnick et al. 2012). An individual or collective high on persistent vision pursuit would experience the motivational power of goals that are hierarchically related to the vision to be high, and as such, would put a lot of effort in pursuing the vision and would not be distracted from this vision pursuit. An example of individual persistence in vision pursuit is the

individual who, over long periods of time, collects money for charity by going door to door, no matter what the weather is like. Gutnick et al. (2012, p. 193) describe flexibility as the "use of numerous, broad, and inclusive cognitive categories in problem-solving, "out of the box" thinking, and the generation of many, diverse ideas". Flexibility in vision pursuit refers to being creative in reaching the vision; flexibility in vision pursuit is the development of different means to pursue the vision. An individual or collective pursuing a vision in a highly flexible way would develop and relate many lower-level task goals to the vision and aim to realize the vision through accomplishing a diverse set of novel task goals. An example of collective flexibility in vision pursuit is the Shell creative team that aims to generate ideas that benefit Shell's vision of unlocking resources responsibly with people from across the company. Table 1 lists examples of categories of vision pursuit.

Unfortunately, research to date fails to explain how vision communication can stimulate followers to pursue a vision. We propose that research on follower self-concept and identity (Lord and Brown 2004, van Knippenberg et al. 2004a) forms an important starting point for developing this explanation. The *self-concept* is a dynamic interpretive system that consists of images, thoughts, schemas, goals, etc., that are related to the self (Markus and Wurf 1987). The self-concept, therefore, can be seen as the way that we perceive ourselves or as the knowledge we have about ourselves. The self-concept has profound effects on people's perceptions, cognitions, emotions, behavior, and motivation (Banaji and Prentice 1994, Markus and Wurf 1987). For instance, the more individuals identify with an organization (i.e., the more they define themselves in collective terms), the more motivated they are to exert themselves on behalf of the organization (Ashforth and Mael 1989, Dutton et al. 1994). Self-conception influences the information that is noticed (Grossberg 1999) and how that information is interpreted (Markus and Wurf 1987). Of specific interest to the present analysis is that self-concepts may also influence the goals that people set, enhancing the likelihood of the activation of those goals that are in line with the self (Lord et al. 2010). Thus, if leaders are able to influence follower self-conception, they can indirectly yet powerfully affect followers' behavior and motivation (van Knippenberg et al. 2004a).

Vision communication can be a key tool to activate an understanding of self that motivates needed

behaviors. For instance, Shamir et al. (1993) argue that inspirational vision communication causes followers to hold more positive self-views (self-esteem, self-worth, and self-efficacy) and to identify with the collective (i.e., self-definition in terms of "we") which translates into higher performance. However, whereas it may be argued that identification engendered by vision communication may lead to higher motivation to pursue the vision (cf. Shamir et al. 1993), this effect only holds to the extent that the follower accepts the vision as important for the collective. Similarly, whereas self-efficacy brought about by vision communication may cause followers to feel more capable to pursue a vision (cf. Shamir et al. 1993), followers will only actually pursue a vision they see as being important and valid. Finally, current research generally relates vision communication to individual level outcomes, while as we emphasized earlier, collective vision pursuit is critical for success of vision communication. Therefore, we propose a new model of vision pursuit, aimed at explaining how vision communication influences vision pursuit on the individual as well as the collective level that emphasizes possible selves concerning the collective. In the following we present this model. Terms that are central to this discussion are listed and defined in Table 2. We start by discussing the role of possible selves in vision communication. Then we continue by addressing two questions: How does vision communication lead to individual vision pursuit? How does vision communication lead to *collective* vision pursuit?

THE ROLE OF FOLLOWER POSSIBLE SELVES IN VISION COMMUNICATION

Possible selves are future-oriented parts of the self; they do not capture who one *is* (the current self) but who one *could become*. Such images, thoughts, and ideas of who a person could become are part of how one sees oneself. They are the "cognitive components of hopes, fears, goals and threats" (Markus and Nurius 1986 p. 954). For instance, becoming a partner in the firm could be a possible self for a lawyer. Possible selves are not identical to self-relevant goals (Cross and Markus 1994, Lord and Brown 2004, Markus and Ruvolo 1989). Goals are more specific and contextualized than possible selves (Oyserman and Markus 1990), and possible selves may be motivating even if they are unattainable (Markus and Nurius 1986, Markus et al. 1990). Importantly, possible selves play a key role in intentional change (Boyatzis and Akrivou 2006, Dunkel 2000, Ibarra 1999, Vignoles et al. 2008) and self-development (Lord

and Brown 2004), and possible selves offer opportunities to create identities that deviate from current reality (Markus and Kunda 1986, Markus and Nurius 1986).

Possible selves can be construed on a personal level (who I could become), but they may also refer to the *collective* future self (van Knippenberg et al. 2004a). The referent of the latter possible self is not at the personal but at the collective level (who *we* could become). We define collective possible selves as a set of internalized images, thoughts, and ideas about a future of a collective that an individual or a group of individuals holds; internalized self-images concerning the collective's future. Such images are especially important for vision communication research because vision communication is typically targeted towards collectives. For instance, becoming the group that revolutionized mobility was a strong collective possible self for members of the team that developed the Segway (an electric self-balancing human transporter now often used in airports and city-tours) under the lead of the visionary Dean Kamen. We believe that having developed a future image of the group, individuals often think about their personal role in such images as well. Thus, they may develop personal possible selves that are conducive to vision pursuit. This suggests that different individuals can develop different personal possible selves that still motivate pursuit of the same collective possible self. In the present analysis, we focus on collective possible selves, however, as the self-image most directly targeted by effective vision communication. For examples of different types of possible selves, see Table 3.

We propose that visions as images of the collective future may provide a basis for followers to develop collective possible selves. Several arguments support this proposition. First, research shows that individuals create narratives about their futures throughout their lives, and those narratives are based on cues in the environment (Ibarra and Barbalescu 2010). Visions can function as such environmental cues triggering the development of self-narratives concerning the collective future. Second, there is evidence that images that are positioned far in the future (Kivetz and Tyler 2007), like visions, may trigger a focus on identity development (e.g., possible self-development). This is because distal images are construed on a more abstract level than more proximal images (Liberman and Trope 1998). For instance, thinking about the self in the future often results in a description of characteristics of the self, while thinking about

the self in a current situation results in describing concrete behaviors. As a consequence "a more distal time perspective shifts attention inwards, towards the core and most defining characteristics of the person, activating the idealistic self" (Kivetz and Tyler 2007, p. 196). Third, Higgins (1987) argued that possible selves represent self-developed images of the future but that individuals may also come to take images that others have for them as their own (e.g., just as children may adopt the aspirations that their parents have for them). Likewise, a leader's vision may function as a collective possible self for followers. Fourth, Stam and colleagues (2010a) showed that a vision about creativity stimulated development of a possible self around creativity. Thus employees can translate information form vision communication into a collective future image and mentally experiment with this image. Eventually they can internalize the image (and the vision) and in this way, followers relate the vision to their self-concepts (see Figure 1).

Proposition 1a: Leader vision communication leads a follower to create a collective possible self. Importantly, possible selves function as self-relevant standards to be approached (Boyatzis and Akrivou 2006, Higgins 1987, Markus and Nurius 1986), and they provide a direct link between the selfconcept and ensuing motivation and goal-directed behavior (Banaji and Prentice 1994, Oyserman et al. 2004). For example, the lawyers or academics who hold dear the image of becoming partners or full professors work long hours every day in order to make this image reality. In a similar fashion, collective possible selves based on vision communication may support the development of self-relevant standards to approach these collective possible selves. Indeed, although possible selves often create high-level, abstract goals that are not easily achieved, they may also foster the approach of more attainable lowerlevel goals that are hierarchically linked to possible selves. Therefore, vision-based collective possible selves can induce individuals to approach goals that are hierarchically linked to the vision (i.e., vision pursuit). Take the 'Connect and Develop' vision of P&G (Huston and Sakkab 2006). Employees may create a collective possible self based on an image of an 'open' P&G. They might imagine having more external contacts, going to universities, setting up alliances, etc. Over time, they might start doing the things they imagined, effectively pursuing the vision. Thus, vision communication may lead to vision pursuit through the enactment of a collective possible self (see Figure 1).

Proposition 1b: A follower's collective possible self based on a vision leads the followers to pursue the vision.

We note that our analysis so far is at the individual level in that individual followers process the vision and internalize it as a possible self concerning the collective. This is important because in discussing vision pursuit, we emphasized the importance of collective vision pursuit. Although it may be seen that individual level possible selves concerning the collective lead to individual vision pursuit, the model requires further development to capture how individual level possible selves about the collective lead to *collective vision pursuit*. In the following we first discuss how vision communication can lead to individual vision pursuit. We then discuss how vision communication can lead to collective vision pursuit.

HOW DOES VISION COMMUNICATION LEAD TO INDIVIDUAL VISION PURSUIT?

In discussing how vision communication leads to individual vision pursuit, we start with addressing which characteristics of collective possible selves influence vision pursuit. We then discuss how vision communication can lead followers to individually develop collective possible selves that include these characteristics. We note that although we discuss processes that are a matter of individual cognition, the same processes may be at work on the collective level; an issue we revisit when we address the multilevel nature of the model.

How Characteristics of Possible Selves Influence Vision Pursuit

We propose that five characteristics of possible selves are especially important for translating vision-based collective possible selves into vision pursuit. First, following Vroom's (1964) Valence-Instrumentality-Expectancy (VIE) theory, we argue that collective possible selves are more strongly related to vision pursuit when they are deemed more desirable (cf. Boyatzis and Akrivou 2006, Markus and Nurius 1986). When followers deem a collective possible self as being more desirable, they will be more motivated to pursue it because its realization holds more perceived value. As a case in point, research shows that desirability of possible selves predicts behaviors based on possible selves (Stam et al. 2010a). As opposed to what seems to be a common thought in the leadership literature, this does not imply that visions and collective possible selves should necessarily be focused on *ideals*. Other foci (e.g.,

responsibilities, safety) may also be desirable, even though these foci are often not regarded as ideals but rather as oughts (cf. Higgins 1987, Markus and Nurius 1986, Stam et al. 2010b).

Second, consistent with VIE theory (Vroom 1964), we posit that collective possible selves are more strongly related to vision pursuit when they are deemed more feasible (cf. Markus and Nurius 1986). *Feasibility* refers to the extent to which a follower believes that his/her actions to pursue the collective possible self can be successful. Feasibility indicates that pursuit of the collective possible self (and the related vision) need not be in vain, but will result in the attainment of hierarchically lower or higher level goals that are associated with the vision. In line with our argument, research shows that feasibility of possible selves predicts behaviors based on possible selves (Stam et al. 2010a).

Third, we propose that collective possible selves are more strongly related to vision pursuit when they are more central in a follower's self-concept. *Centrality* in the self-concept refers to the importance of the possible self for self-definition of a follower. Centrality is related to the pursuit of visions because those elements more important for self get more attention from the individual, and they generate more activities that are congruent with the self (cf. Markus and Wurf 1987, Lord and Levy 1994).

Fourth, we argue that complexity of collective possible selves is important. *Complexity* refers to the number of different aspects that are part of the collective possible self (cf. self-complexity, Linville 1987) and the extent of relationships between them (cf. Hannah et al. 2009). For instance, a collective possible self referring to an open innovation system would be more complex to the extent that it also entails ideas about the specific work that a typical member of that collective would do in such a system, the relation of the collective with other businesses, etc. Different research streams suggest that complexity is important for possible selves to serve a self-regulatory function. Oyserman and colleagues (2004) argue that possible selves containing multiple lower-level self-relevant goals more likely serve as standards to approach. Markus and Nurius (1986) discuss a study in which students were shown different positive possible selves and were asked whether they had ever thought about these possible selves. The study found that the number of different possible selves the students had contemplated was a predictor of locus of control, self-esteem, and the perception that the future was positive highlighting the importance of

holding a diversity of conceptions regarding the possible future. Ibarra and Barbulescue (2010) theorize that people should create repertoires of different identity narratives concerning their futures to successfully adopt new identities because different narratives may be appropriate in different contexts. We argue that the more complex the collective possible self is, the more likely it is to be associated to various work-related lower-level goals (i.e., complex possible selves "suit" more contexts), and therefore, the more possibilities there are for vision pursuit and the more likely an individual is to identify these possibilities. We do note here when complexity of the collective possible self is so too high it may be hard to understand the relationship between low level goals and the collective possible self potentially leading to less vision pursuit.

Fifth, the *regulatory nature* of possible selves affects activities related to vision pursuit. Self-discrepancy theory (Higgins 1987) posits that how possible selves affect self-regulatory action depends on the type of possible self. *Ideal possible selves* refer to representations of beliefs about hopes, wishes, or aspirations. *Ought possible selves* refer to representations of beliefs about duties, responsibilities, or obligations (Carver and Scheier 1998, Higgins 1987). Self-regulation related to ideal selves, referred to as a promotion focus, concerns the eager approach of the ideal self and is associated with openness and creativity. Self-regulation related to ought selves, referred to as a prevention focus, concerns the vigilant approach of the ought self and is associated with vigilance and task-oriented persistence.

The first three characteristics of collective possible selves – desirability, feasibility, and centrality – are mainly drivers of persistence in vision pursuit because they make the collective possible self and the lower-level goals that are tied to the collective possible self more important and motivating for the individual, a prerequisite for persistence in vision pursuit. In line with the VIE theory of motivation (Vroom 1964) we propose that desirability influences persistence because it relates to the valence of the possible self and feasibility because it refers to the expectancy of accomplishing the possible self. Centrality reflects instrumentality, the expectation that accomplishment leads to outcomes (Vroom 1964), because the more central the possible self the more important its accomplishment is for the individual. Complexity refers to the scope and diversity of the goal network related to the possible self. It serves

vision pursuit because it allows pursuit in multiple contexts and in multiple ways. As a consequence an individual with a complex possible self can use a diversity of viewpoints and lower level goals in his/her pursuit of the vision. This diversity of perspective may stimulate creativity and flexibility in vision pursuit. There is also evidence that ought and ideal possible selves have differential effects on behavior to accomplish the possible self. To some extent both ideal possible selves and ought possible selves would lead to persistence in vision pursuit because ideals and oughts are future states an individual wishes to accomplish. However, because these effects are entirely dependent on desirability of the ideal and ought possible self, and we treat desirability independent from regulatory nature, we focus here on the differential effects of oughts and ideals. Importantly, ought selves are related to self-regulation in terms of vigilance and task-oriented persistence. Moreover, ought-based self-regulation is motivated by managing feelings of threat and anxiety (Higgins, 1987). Such avoidance-related motivation is a strong predictor of persistence (Gutnick et al. 2012) and we propose that ought collective possible selves relate to persistence in vision pursuit. Ideal selves, on the other hand, are related to self-regulation in terms of eagerness, creativity, and flexibility (Gutnick et al. 2012). As a consequence ideal collective possible selves will relate to flexibility in vision pursuit. Figure 2 depicts these predictions.

Proposition 2a: A follower's collective possible self based on a vision is related to persistence in vision pursuit to the extent that it is a) desirable, b) feasible, c) central, and d) related to ought selves.

Proposition 2b: A follower's collective possible self based on a vision is related to flexibility in vision pursuit to the extent that it is a) complex and b) related to ideal selves.

Characteristics of collective possible selves are likely to be related. For instance, complexity may create opportunities to relate the possible self to multiple elements of the self-concept and thus create centrality, whereas centrality may motivate an individual to broaden the possible self, leading to more complexity. This also means that these elements may influence vision pursuit indirectly as well as directly. The different characteristics may also work in concert in facilitating vision pursuit, and some minimal level on all dimensions may be necessary for vision pursuit.

How Vision Communication Influences the Development of Collective Possible Selves

To better understand the relation between vision communication and collective possible selves, we need to understand how possible selves develop. Possible selves are part of the self-concept, and the self-concept is a dynamic, interactive, interpretative system (Markus and Wurf 1987) that determines how an individual interprets and processes information. For instance, a possible self of winning a Nobel Prize may hold a different meaning for a promising young academic, for whom it might mean encouragement and trust in future accomplishments, than for an old professor, for whom it might mean recognition of past accomplishments and contributions to the field. Likewise, when becoming a parent and developing possible selves of parenthood, job-related possible selves reflecting career ambitions may change considerably. Thus, we need to take into account that the creation of possible selves is influenced by other parts of the self and especially by those parts that are activated at a specific time (the working self-concept, Lord and Brown 2004). Developing the possible self also is an effortful cognitive process (Ibarra 1999) in which complex mental structures with connections to autobiographical memory and associated goals are formed (Conway and Pleydell-Pearce 2000) – a process associated with extensive information processing and consumption of cognitive resources (Gusnard 2005). Thus, vision-related information processing may be a crucial mediator of collective possible self creation based on vision communication.

We argue that leaders, through their specific way of communicating a vision, can influence a follower's working self-concepts and information processing (other environmental cues may also affect these, but go beyond the scope of this manuscript). These processes, in turn, may foster a follower's creation of collective possible selves that are desirable, feasible, central, complex, and have a certain regulatory nature, and thus may affect vision pursuit (See Figure 2 for an overview).

Vision Communication, the Working Self-Concept, and Collective Possible Selves

The working self-concept refers to the activated part of the self, the salient elements of who one is. Those activated elements have more influence on an individual's cognitions, emotions, and behaviors than less salient elements of identity (Lord and Brown 2004). Leaders may influence the working self-concept by speaking to certain elements of a follower's identity (van Knippenberg et al. 2004a, cf.

Ashton-James et al. 2007). Because the working self-concept can not only reflect anindividual's personal sense of self ("I") but also their sense of collective self ("we"), and not only the current self but also conceptions of the future self, the working self-concept can also reflect the collective possible self that is central to our understanding of vision communication. Activation of specific parts of follower working self-concept is important in stimulating the development of collective possible selves through vision communication, because elements of the self-concept that are active during the development of collective possible selves are (automatically) related to the possible self for the simple reason that activation and development occur at the same time, creating an associative network in the brain (Lord et al. 2010). These activated elements focus attention on specific parts of the self-concept (Grossberg 1999) and cause the collective possible self to integrate these elements as well. Next, we discuss how through vision communication leaders can activate elements of a follower's identity that are conducive to vision pursuit.

Values and intermediate goals. Scholars have argued that visions should concern collective values (Berson et al. 2001, Conger and Kanungo 1987, Shamir et al. 1993, 1994), such as openness in the case of P&G's 'Connect and Develop'. In line with Lord and Brown (2004), we view values as central parts of the self-concept (so called self-relevant values). Values represent desirable end-states that are highly abstract and may link to many lower level end-states, images, and goals, such as collective possible selves. Values drive people's cognition, emotion, and behavior throughout their lives (Schwartz 1999) and as such represent key components of the perception of who one is. Research shows that when values are central to the self, they have the most impact on decision making (Verplanken and Holland 2002). Similarly, the values that are central to a collective's identity will affect the members of that collective (to the extent that they see themselves as part of that collective, a process that we discuss below).

That leaders communicate values in ways that may influence followers is evident from empirical studies. For instance, Brown and Trevino (2006) showed that leadership that emphasizes collectivity values negatively predicts deviance and that this effect is mediated by the extent to which followers share the leader's values (i.e., value-congruence). Jung and Avolio (2000) found that value congruence mediated leadership effects on performance. In a related vein, we propose that through emphasizing collective

values in vision communication, leaders may activate important values in the self-concept of individual followers. As a consequence of such activation of self-relevant values, a linkage between the collective possible self suggested by the vision and the activated self-relevant values of the follower is created due to co-occurrence. This process makes the collective possible self more central to the self because it relates to values that are central to the person's self-definition. Importantly, values transcend specific situations and time frames so they can be applied in various contexts, over long periods of time, and by different people (Lord et al. 2005, Schwartz 1999). Thus, by relating the collective vision to values, the leader also heightens the likelihood that individual followers who function in different contexts and have somewhat different conceptions about the collective are able to relate the vision to their own individual situation by creating their own personal possible selves and relating them to their conception of the collective possible self. As a result, complexity of the collective possible self is likely to be higher because multiple personal possible selves can be related to the same collective value.

Proposition 3: The more a leader emphasizes collective values in vision communication, a) the more salient self-relevant collective values will be for a follower, and thus b) the more central and complex the follower's collective possible self will be.

Not only abstract end-states but also more concrete intermediate goals are important components of self-regulatory processes. For instance, Oyserman et al. (2004) found that goals and strategies to accomplish possible selves predicted academic achievement in children. These intermediate goals translate motivation derived from more abstract possible selves (I want to become a scientist) into concrete context-specific actions (I need to pay attention in math class), causing engagement in these actions. The idea that communicating abstract possible selves *and* concrete intermediate collective goals at the same time benefits vision pursuit is corroborated by the notion that leaders should not only focus on preferred end-states, but also display behaviors that emphasize the accomplishment of more concrete, contextual goals to be effective (cf. path-goal theory; House 1971).

When self-relevant goals are active, goal-relevant information and skills become more accessible (Johnson et al. 2006), and important goals are shielded from distracting information that may otherwise

displace these goals (Shah et al. 2002). This processing advantage for goal-related information during the development of the collective possible self should lead the collective possible self to be perceived as more feasible. Furthermore, once self-relevant goals are related to developing collective possible selves, self-complexity is likely to increase, because more lower-level alternatives and options are related to the collective possible self. To see how this process may work, we revisit the example of P&G, communicating the intermediate goal of the 50% quota for outside innovations. If this goal activates a collective possible self of organizational functioning in terms of organizational boundary spanning, a lower-level goal to meet with clients and suppliers every Friday may also emerge. When this happens, evaluation of feasibility may also reflect the concrete Friday meeting goal and not only the abstract boundary spanner image. Moreover, as more goals are associated with the boundary spanner collective possible self (learning about others, developing trust, etc.), additional attributes also may become associated with the identity image, increasing its complexity.

Proposition 4: The more a leader emphasizes intermediate collective goals in vision communication, a) the more salient self-relevant collective goals will be for a follower, and thus b) the more feasible and complex the follower's collective possible self will be.

Discrepancies and consistencies. Possible selves are motivating in part because they deviate from the current self (Markus and Nurius 1986). Self-discrepancy theory (Higgins 1987) proposes that the discrepancy between a possible self and a current self is a key determinant of an individual's affective state. Specifically, a perceived discrepancy may lead to the experience of negative affect. This may lead individuals to pursue positive affect and avoid negative affect (Markus and Nurius 1986), thus inviting behavior aimed at the realization of the possible self.

The vision literature likewise argues that effective visions contrast the potential future with the current situation (Conger and Kanungo 1987), suggesting that the difference between a desirable future and a current reality influences vision pursuit. As an example, one could think of Lafley contrasting an attractive 'open' system in the future P&G, with the unsatisfactory current 'closed' system. We argue that emphasizing discrepancies between aspects of the current situation and aspects of the envisioned future

activates a motivation to enhance the self, which impacts the development of collective possible selves. Because the motivation to better the self is related to the possible self, the latter becomes a driver for self-regulation. Thus, contrasting the vision with aspects of the current reality enhances the desirability of the collective possible self. We do note, however, that if discrepancies are very high, individuals may believe that possible selves based on the vision have low feasibility.

At the same time, however, possible selves are influential to the extent that they show how the current self is related to the future self (Markus and Nurius 1986), and this relation can only be persuasively demonstrated if some present-future continuity is established. Several types of evidence support this assertion. Self-concordance theory (Ryan and Deci 2000) poses that goals reflecting people's important values and ideas are more intrinsically motivating for them than goals that are not related to the self, and Bono and Judge (2003) showed that self-concordance may partially explain leadership effects. Because collective possible selves are also part of goal hierarchies (i.e., as quite abstracted goals), this process may hold for collective possible selves as well. Mitchell and Beach (1990) also argued that individuals construct future states based on compatibility with values, principles, and goals (all elements of the self-concept, Ibarra and Barbulescue 2010), and Vignoles and colleagues (2008) show that the motives underlying the development of possible selves include continuity of the self.

The insight that possible selves are motivating to the extent that they incorporate essential features of the actual self is highly relevant for vision communication. Shamir et al. (1993, 1994) argued that effective visions portray how the future is related to the current situation. Others argued that in order to be effective change agents, leaders need to foster self-continuity as well (van Knippenberg et al. 2008a). As an example, think of the 'Connect and Develop' vision. Although Lafley contrasted the 'open' innovation system with the old, failing 'closed' innovation system, he could contend that for P&G innovation and creativity had always been essential. In this light an 'open' innovation system was a continuation of P&G's innovative identity. Emphasizing consistencies between aspects of the current situation and the envisioned future primes motivation to keep the self stable over time (van Knippenberg et al. 2004a). Consistency of the self is valuable for people because it causes others to treat them consistently which

reduces social uncertainty (Lecky 1945). Once such motivation to keep the self stable is activated, and it is subsequently related to the collective possible self, the collective possible self becomes a driver for self-consistency and this process results in a collective possible self that is more central to the self.

Thus, the leadership literature has suggested that either focusing on discrepancies or consistencies between current reality and envisioned future stimulates vision pursuit. We argue that both are important, but for different reasons (and through different processes). A key insight here is that discrepancies and consistencies are not necessarily in opposition, but could concern different elements of the vision: a leader could focus on discrepancies in the one domain (e.g., innovation practices) and focus on consistencies in the other domain (e.g., a strategic focus on innovation). A balanced linkage to the future may be particularly important when it involves a key self-defining competency of individuals. Tushman and Anderson (1986) illustrate this point, by showing that individuals have great difficulty adjusting to technological changes that marginalize their key competencies (e.g., highly skilled typists resisted using word processing systems). We suggest that visions which positively incorporate these competencies and tie them to the future will be more willingly pursued than visions that marginalize competencies.

Which vision elements should be related to discrepancies and which to consistencies? We made the distinction between more abstract (values) and more concrete elements of a vision (intermediate goals). This distinction is also relevant here. Values are abstract goals that are high and central in a goal hierarchy and therefore those values that are accepted by an individual and part of the self-concept of that individual are also generally central to his/her identity (Lord and Brown 2004). Consistencies should therefore target values because of their centrality in the self-concept. In contrast, more concrete intermediate goals that are lower in the goal hierarchy can be related to discrepancies, because they are less central to the self-concept and because multiple lower-level goals may be associated with the same value. Think, for instance, of Google. When the internet search engine company was developing its Google-phone, it defended this change in products by stating that the values of the company would remain the same even if the company would start selling phones: openness (moving forward in the digital world) and affiliation (connecting people). Thus, although the specific way of achieving these values

differed (in terms of lower-level goals: developing search engines vs. phones), the values of the company would remain the same.

Proposition 5: The more a leader identifies discrepancies between intermediate goals related to the current situation and intermediate goals related to the collective future image in vision communication, a) the more a follower experiences motivation to enhance the self, and thus b) the more desirable will be the collective possible self that the follower develops.

Proposition 6: The more a leader identifies consistencies between values related to the current self and values related to a collective future image in vision communication, a) the more a follower experiences motivation to keep the self stable, and thus b) the more central will be the collective possible self that the follower develops.

Self-evaluations. Goal-directed behavior is dependent on the willingness to perform such behavior (motivation) as well as (the perception of) the ability to do so. This suggests that perceptions of one's own ability and worth (self-evaluations) are important to determine goal-directed behavior. For example, self-efficacy influences goal-directed behavior, and individuals with high self-efficacy usually outperform less self-efficacious individuals (Bandura 1997, Stajkovic and Luthans 1998). In addition to the perception that one personally is able to achieve a goal, the perception that a collective is able to achieve a goal (collective self-efficacy) has been shown to be equally important for performance (cf. Bandura, 2000).

Leadership research has paid a lot of attention to self-evaluation (self-efficacy, self-esteem) and concludes that leadership may influence a follower's self-evaluations by expressing confidence in the follower and emphasizing his/her worth (van Knippenberg et al. 2004a). These effects of leadership have not only been demonstrated for personal self-efficacy, but also for collective self-efficacy (Chen and Bliese 2002, Jung and Sosik 2002). Research also shows that vision communication may enhance self-evaluations (Kirkpatrick and Locke 1996, Shamir et al. 1994). We argue that vision communication emphasizing positive evaluations of the collective has two effects. It leads a follower to see the collective as more capable of reaching its goals, and thus the collective possible self as more attainable (i.e., greater feasibility of the collective possible self). Also, as the collective possible self is associated with a

positively evaluated collective, the follower will regard it as more desirable (cf. Vignoles et al. 2008).

Proposition 7: The more a leader emphasizes self-worth of the collective and shows confidence in the collective in vision communication, a) the more positive self-evaluations a follower experiences, and thus b) the more feasible and desirable will be the collective possible self that the follower develops.

Self-regulatory focus. Another important factor in vision internalization rooted in self-conception is the extent to which an individual is attracted to a specific type of possible self (ought or ideal). An individual tends to develop ought or ideal possible selves depending on his/her self-regulatory focus. An individual with a promotion focus is motivated more by ideal possible selves, whereas an individual with a prevention focus is motivated more by ought possible selves (Higgins 1987, 1996, 1997). Regulatory focus is not just an influence at the individual level but also at the group level, where collective regulatory focus can be an aspect of group identity (Sassenberg and Woltin, 2008) – a fact that is particularly relevant for the current analysis.

Because regulatory focus can be induced by stimuli in the environment (Higgins 1987, 1996, 1997), aspects of vision communication may influence a follower's collective regulatory focus and cause the follower to develop either ought or ideal possible selves (cf. Kark and Van Dijk 2007). In part, leaders may achieve this by communicating a vision with a clear promotion or prevention focus. Lafley's vision for P&G's open innovation paradigm focused on creativity and growth is for instance a clear example of a promotion-focused vision, whereas Robert Noyce's vision that focused on protecting the American semi-conductor industry from fierce competition of Japanese firms is a vision with a strong prevention-focus. Consistent with their vision, leaders can thus carefully choose their words to reflect the eager approach of possible gains that is reflective of promotion focus (cf. Berson et al. 2001, Shamir et al. 1994, Wood et al. 2005) or the vigilant avoidance of possible loses that is reflective of prevention focused (cf. Bruch et al. 2007, Conger and Kanungo 1987, Lord and Brown 2004).

Leaders may also communicate their vision in such a way that they render a follower more receptive to the self-regulatory focus they advocate, priming the follower with the self-regulatory focus

that would make him/her more receptive to the vision and the ought or ideal possible self implied by the vision. In this respect, leader emotional displays may be an important tool to influence follower regulatory focus. Exposure to emotional cues and displays is known to activate thoughts and behaviors associated with the emotion (Zemack-Rugar et al. 2007). Promotion and prevention systems are related to different affect regulation systems (Higgins 1987, Higgins et al. 1986). Promotion focus is related to feelings like joy, enthusiasm, and sadness, whereas prevention focus is related to feelings like relaxation and anxiety (Higgins 1987). Further, promotion (prevention) related emotions activate promotion (prevention) related thought (Roese et al. 1999). Because leaders may influence follower psychological states through the emotions they display (van Knippenberg et al., 2008b), leaders may prime follower regulatory focus by displaying promotion or prevention-related emotions in communicating a vision (e.g., enthusiasm about an envisioned bright future; Venus et al., 2013) and thus make it more likely that a follower develops and ideal or ought collective possible self based on the vision.

Proposition 8: The more a leader conveys a promotion focus and displays promotion-related emotions in vision communication a) the more activated the promotion focus of a follower will be, and thus b) the more focused on ideals will be the possible self that the follower develops.

Proposition 9: The more a leader conveys a prevention focus and displays prevention-related emotions in vision communication a) the more activated the prevention focus of a follower will be, and thus b) the more focused on oughts will be the possible self that the follower develops.

Vision Communication, Follower Information Processing, and Collective Possible Selves

Where many researchers have emphasized the automatic and subconscious influences of vision communication on attitudes and behaviors (as also reflected in our discussion of priming elements of the working self-concept), we highlight that many possible self-related processes are inherently conscious and effortful (Ibarra 1999, Markus and Nurius 1986) and thus require effortful information elaboration. Vision communication will thus be more effective in stimulating vision pursuit when it is able to stimulate vision elaboration – the processing of and integration with existing knowledge and perspective of vision information (ideas, knowledge, and insights communicated in the vision; cf. van Knippenberg et

al. 2004b; see Figure 2).

Research suggests that individuals may process information in two different ways (Chaiken et al. 1989, Chaiken and Trope 1999, Petty and Cacioppo 1986). One way is effortful, deliberate, and careful scrutiny of issue-relevant information, and is often referred to as *central processing* (Petty and Cacioppo 1986). Persuasion effectiveness for central processing is largely determined by quality of the argument (Petty and Cacioppo 1986). The second way is based on effortless, fast, and efficient processing and is more emotional and subconscious in nature than central processing. This is often referred to as *peripheral processing* (Petty and Cacioppo 1986), in which persuasion effectiveness is determined by feelings, heuristics, and rules of thumb (Chaiken et al. 1989).

All else being equal, persuasion attempts that are centrally processed produce more robust, longer-lasting persuasion effects than persuasion attempts that are peripherally processed (Petty and Cacioppo 1986) – they produce more internalization of the advocated perspective (Kelman 1958). We argue that a similar effect occurs in vision communication. Elaboration of vision communication by a follower may be crucial for vision pursuit because it leads to the creation of more robust and longer-lasting collective possible selves than peripheral processing. We argue that these effects are due to the complexity and centrality of the developed collective possible self. As a follower spends more effort consciously processing the vision and developing a collective possible self, he/she develops a more complex collective possible self that is related to more aspects of the self (i.e., more central). Because of this process, the collective possible self is more stable, harder to change, and has more influence on follower vision pursuit.

Proposition 10: The more a follower consciously elaborates on vision information, the more central and complex will be the collective possible self he/she develop.

Individuals process appeals centrally (as opposed to peripherally) to the extent that they are *able* and *motivated* to think about the appeal (Petty and Cacioppo 1986). In the following section, we discuss how elaboration motivation and ability can influence the development of possible selves and how leaders can influence elaboration motivation and ability through their vision communication (see also Figure 2).

Vision elaboration motivation. Elaboration motivation denotes a motivation to hold accurate ideas about a topic, and invites effortful scrutiny of message information to be able to come to an accurate conclusion. Elaboration motivation is directly related to a preference for central processing (Chaiken et al. 1989, Chaiken et al. 1996, Petty and Cacioppo 1986). Elaboration motivation is predicted by the extent to which individuals are involved and engaged in the issue at hand (Petty and Cacioppo 1979, 1984). The more psychologically engaged individuals are, the more motivated they are to use cognitive resources to think about the central merits of an appeal (Petty et al. 1981). This logic suggests that if a follower is more psychologically engaged in a vision, he/she may be more motivated to elaborate on it.

There are various ways in which leaders can engage a follower in vision communication. In a qualitative field study, Den Hartog and Verburg (1997) found that in their communication, successful business leaders, like Jan Timmer (Phillips) and Anita Roddick (The Body Shop), made an effort to engage individuals psychologically in the vision by relating the vision to the lives of the audience. Stam et al. (2010a) found that individuals who were exposed to a vision that directly addressed them and stimulated them to think about the personal meaning of the vision were more likely to develop a possible self based on this vision than were individuals who were exposed to a vision that did not specifically address them. Personalized visions also produced higher vision pursuit.

Research has also emphasized a sense of urgency as a facilitator of the effectiveness of leader communication (House et al. 1991, Roberts 1985, Shamir and Howell 1999). The hardship and anguish associated with times of crisis may foster a longing for change, and self-engaging visions offer an opportunity for such change. Leaders often act as sense-makers of current events and may, therefore, substantially influence perceived urgency, psychological engagement, and follower vision elaboration motivation (cf. Fiol et al. 1999). Feelings of urgency may increase psychological engagement with a message of change and lead to an increase in vision elaboration motivation. Corroborating this analysis, enduring and intense negative affect may produce motivated, central processing (Forgas and Ciarrochi 2002, Forgas et al. 1998). It has also been proposed that effective leaders emphasize the hardship and intolerableness of the current situation (Conger and Kanungo 1987). An example is Robert Noyce, who

convinced the semiconductor industry of an emerging threat from Japanese companies and used that threat to attract attention to his visionary message.

Proposition 11: The more a leader psychologically engages a follower in vision communication, the more motivated the follower will become to elaborate vision information.

Vision elaboration ability. Elaboration ability refers to the capacity to think about the central merits of an appeal. If this ability is low, individuals will be unable to scrutinize the message. Thus, a key aim in vision communication would be to make sure that the audience is able to thoroughly comprehend the message (cf. Ratneshwar and Chaiken 1991). There are several ways to accomplish this. For instance, vision elaboration ability is higher when messages are adapted to the level of comprehension of the individuals processing the message (Eagly 1974), for instance by using words that are familiar to the audience. Leaders can judge the level of comprehension because it is closely related to individuals' general and field-specific cognitive capabilities (related to, for instance, tenure and hierarchical position; Eagly and Warren 1976, Wood et al. 1995).

Also, leaders can enhance comprehension and attention from audience follower by using rhetoric devices (Den Hartog and Verburg 1997). Rhetoric refers to using words and symbols to influence others (Burke, 1950). Rhetorical devices are linguistic tools that speakers can use to frame their messages. They have been extensively studied from Aristotle to the current age and include use of specific words, metaphors, alliteration, rhyme, repetition, and many more. Willner (1984) distinguished between two types of rhetoric devices in leadership. First, devices related to sound, like repetition, rhyme, and lists, facilitate comprehension, remembering, and attention. An example of the use of lists and repetition can be found in Steve Jobs' Macworld presentation in 2007: "We're introducing THREE revolutionary new products. The first one is a widescreen iPod with touch controls. The second is a revolutionary new mobile phone. And the third is a breakthrough internet communications device." "An iPod, a phone, an internet mobile communicator.... these are NOT three separate devices!" (http://www.engadget.com/2007/01/09/live-from-macworld-2007-steve-jobs-keynote/). Repetition increases ability to process (Petty and Cacioppo 1986), and it is no surprise that

many CEOs give multiple speeches and seminars in order to communicate a particular idea. Similarly, Shell has been known to organize multiple events around themes from their vision to stimulate people to think about these themes elaborately.

Second, leaders can make rhetoric use of imagery and metaphors (Willner, 1984). Metaphors are figures of speech in which a word or phrase that usually designates one thing is used to refer to another, making an implicit comparison. Charteris-Black (2005) for instance, argues that one of the functions of metaphors is to gain access to a domain of knowledge that is easily understood by the audience, in order to make an argument more persuasive. For instance, Steve Jobs' Macworld 2007 presentation referred to the switch to Intel processors as "It was just a year ago we announced we were going to switch to Intel. A huge heart transplant. A beautiful seamless version of OS X for Intel processors. Our hardware team got to cranking out a new Mac with Intel processors every month."

(http://www.engadget.com/2007/01/09/live-from-macworld-2007-steve-jobs-keynote/). Imagery or image-based rhetoric (Emrich et al. 1999) refers to rhetoric that "quickly and easily arouses a sensory experience such as a mental picture or sound" (Friendly et al. 1982 p. 376). Image-based rhetoric is easy to comprehend, which enhances the ability of a follower to elaborate on the vision (cf. Emrich et al. 1999, Naidoo and Lord 2008). For an overview of rhetoric devices, see Den Hartog and Verburg (1997), Willner (1984), and Burke (1950).

Proposition 12: The more a leader uses easily processed rhetoric in vision communication, the more a follower will be able to elaborate vision information.

HOW DOES VISION COMMUNICATION LEAD TO COLLECTIVE VISION PURSUIT?

So far we have dealt with the question of how vision communication can stimulate an individual follower to develop a collective possible self and how this collective possible self translates into individual vision pursuit. Now we turn to the important issue of how such individual perception of the collective's future can translate into collective vision pursuit by a group of people (see Figure 3). We start by discussing how collective possible selves can be shared by multiple individuals promoting a collective vision pursuit. We then address the processes through which the collective possible selves of individuals

can become shared within a collective. Finally we consider the importance of these cross-level effects for the model as a whole to arrive at our full multilevel model of vision communication.

Possible Selves, Sharedness, and Collective Vision Pursuit

Heretofore, our analysis was limited to individual conceptions of a collective possible self. To capture how vision communication may motivate collective vision pursuit, we now extend our model to include shared collective possible selves as a group level construct – where sharedness is understood as similarity between individuals in their conceptions of the collective possible self (cf. Chan 1998; Salas and Fiore, 2004). Comparable to team cognition, which is a group level constructs to the extent that it is shared by team members (e.g., Cannon-Bowers et al. 1993), collective possible selves are collective level constructs to the extent that they are shared by the members of the collective (Chan 1998). Collective possible selves thus are multilevel constructs which can be what Chen, Mathieu, and Bliese (2004) call isomorphic multilevel constructs that keep the same meaning across levels (see also Chan 1998; for examples of shared possible selves related to visions, see Table 3). Alternatively, due to their emergent nature they can be fuzzy compositional constructs which have somewhat different meanings at individual and collective levels (Dyer et al. 2005).

To some extent collective possible selves' multilevel nature is similar to that of social identities. Ashforth and colleagues (2011) provide an analysis of how identities can exist on various levels, including the individual or intrasubjective level ("I think"), the collective or intersubjective level ("we think"), and the enacted, institutionalized, "real", or generic subjective level ("it is"). These levels are comparable to what we call the individual conception of the collective possible self, the shared conception of the collective possible self, and collective vision pursuit to realize the possible self. An important part of Ashforth et al.'s model is that one cannot go from the intrasubjective to the generic subjective without going through the intersubjective. Based on their analysis, we propose that for individual possible selves concerning the collective to lead to collective vision pursuit, the possible selves first need to be shared among members of the collective. In other words, *collective* vision pursuit is more likely to happen the more collective possible selves are shared by group members. Moreover, research in team cognition on

the coordination benefits of a shared understanding of the team and its task also implies that when group members have similar internalizations of a vision, they can be expected to work towards the same goal and also to do so in a more coordinated fashion (e.g., van Ginkel and van Knippenberg 2008).

Proposition 13: Followers' collective possible self based on visions is related to collective vision pursuit to the extent that it is shared.

How Individual Perceptions of the Collective Possible Self become Shared

We propose that two processes are important for individual conceptions of collective possible selves to become collectively shared conceptions. The one pertains to information processing (collective elaboration) and the other pertains to the working self-concept (identification).

Collective elaboration. Vision elaboration is not just an individual level, within-person process, but also a collective level, between-persons process. Collective information elaboration refers to exchange, discussion, and integration of ideas, knowledge, and insights (van Knippenberg et al. 2004b). One important consequence of collective elaboration of goal-related information (cf. visions) is that it may create sharedness of members' understanding of collective objectives and the means to achieve these (van Ginkel and van Knippenberg 2009). As members discuss a vision for the collective and learn about each others' perspectives, they may come to emphasize the same aspects of the vision and draw the same conclusions from the vision, in effect converging on a shared understanding of the vision. Moreover, as this shared understanding emerges from collective vision elaboration, members will be aware that the understanding is shared, which serves to socially validate the understanding and bolster intentions to act on the understanding (cf. van Ginkel and van Knippenberg 2008). It is also important to note that this process takes place over time and can change individual perceptions of the collective possible self, so that rather than having pure compositional aggregation of perceptions, we have an emergent construct that reflects a fuzzy composition for which the factor structure can differ between the individual and collective levels (Hanges and Dickson 2006). Such aggregations should be modeled simultaneously at the individual and collective levels to account for the non-independence of individual data and help clarify the consistency of the construct at individual and collective levels (Dyer et al. 2005).

Proposition 14: The more followers collectively elaborate vision information, the more shared will be the collective possible self they develop.

We note that collective elaboration and individual elaboration can be expected to mutually influence each other (see Figure 3). The more information is discussed collectively, the more individual members will ponder the information individually. Also the more an individual thinks about information, the more likely it becomes that he/she will discuss it with others. Importantly, collective elaboration just like individual elaboration is driven by motivation and ability (van Knippenberg et al. 2004b). As a consequence, the same communication elements that affect individual elaboration may also influence collective elaboration: psychologically engaging followers and using easily processed rhetoric. We argue, however, that motivation and ability to elaborate are not enough for collective elaboration to occur, since they may also just lead to individual level elaboration without involving others to interactively discuss collective possible selves (see Propositions 11/12). It is here that identification plays a crucial role.

Identification. We propose that identification with the collective plays an important role in the process of creating collective elaboration and subsequently sharedness of collective possible selves for three interrelated reasons: first, identification is conducive to the creation of collective possible selves, second identification makes individuals care about the extent to which the collective possible self is shared in the group, and third identification is likely to be at least to a degree socially shared among members of a collective (Tanghe et al. 2010). Identification reflects self-definition in terms of the collective – a sense of unity between self and collective (Ashforth and Mael 1989, Dutton et al. 1994). Such self-definition leads individuals to experience the collective interest as their self-interest (Ashforth and Mael 1989, van Knippenberg 2000) and renders individuals more sensitive and attentive to information concerning collective goals and interests (van Knippenberg et al. 2006). As a result, identification with the collective should render individuals more open to vision communication invoking a desirable future for the collective.

Also, identification may prompt internalization of the vision and especially when the vision is understood to serve the collective's interest. A reason for this is that the higher an individual's

identification is, the more central the collective is for him/her self-concept and thus the more important the collective's interest is to him/her. Moreover, by inducing a focus on collective interests, identification also leads an individual to focus on the collective interests of other members of the collective (a process well-established for reactions to leadership; van Knippenberg and Hogg, 2003). For vision communication, this means that identification will invite followers to discuss the vision with other followers and to persuade them to embrace the vision. We note here, that although some argue that identification may also be a motivation to elaborate (collectively or individually), there is also evidence that identification actually may impede motivation to elaborate and rather lead to automatic conformity and peripheral processing (cf. van Knippenberg and Wilke 1992). It is exactly for this reason that we argue motivation/ability to elaborate and identification interactively determine the level of collective elaboration.

Proposition 15: The more followers identify with the collective, the more positive is the relationship between motivation/ability to elaborate and the collective elaboration of vision information.

Identification at root is an individual level construct, but there is reason to believe that in organizational contexts it is often shared at least to some degree, and moreover that leadership can influence shared identification. Identification can often be expected to be shared, because several of the more important influences on identification such as the prestige and distinctiveness of the collective (Ashforth and Mael 1989, Dutton et al. 1994) are influences to which all members of the collective are susceptible (even though some are perhaps more susceptible than others). In addition, through interaction members may mutually reinforce psychological states that are based on shared experiences, and thus lead them to converge into or perhaps develop shared collective states (Morgeson and Hofmann, 1999).

Leadership may be an important influence in both respects. Leadership appealing to the collective (e.g., emphasizing collective worth, collective values, collective goals and interests) may enhance follower identification with the collective (Dutton et al. 1994, Shamir et al. 1993, 1994, 1998; van Knippenberg et al. 2004a). For instance, Robert Noyce emphasized unity and cooperation between American semi-conductor companies to accomplish his vision (Beyer and Browning 1999). Moreover, the effects of

leadership may spread through follower interaction as followers engage in collective sense-making (Kraus et al. 2012, Pastors et al. 2002, Wieseke et al. 2009). This implies that by emphasizing the collective in vision communication leaders may build shared identification with the collective among followers.

Proposition 16: The more a leader emphasizes the collective in vision communication, the more followers identify with the collective.

The Multilevel Nature of Vision Communication

Isomorphic processes. Propositions 14 and 15 refer to cross-level effects. They explain how the conception of a collective possible self can be aggregated from the individual to the collective level. Extending this analysis, we note that Proposition 2 to 12, which were initially described as individual level effects, should also extend to the collective level and be isomorphic across levels (i.e., effects on the collective level are similar to effects on the individual level). For instance, similar to how at the individual level a more desirable collective possible self leads to more persistence in individual vision pursuit, at the collective level a more desirable shared collective possible self will affect persistence of collective vision pursuit. That is, similar to how content of current identities is considered isomorphic over levels of analysis (Ashforth et al. 2011), we argue that content of possible selves (in terms of desirability, centrality, feasibility, complexity, and regulatory nature) is also isomorphic over levels and, moreover, that how they are affected by vision communication as well as how they affect vision pursuit are isomorphic across levels. The reason for this is that it is the content of the individual conception of the collective possible self that is the basis for developing a shared conception of the collective possible self. The individual level can thus be regarded as enabling and restraining the collective level. Accordingly, it is more accurate to refer to the processes in Figure 2 as isomorphic processes rather than purely individual level processes. We do note that the shared conception of the collective possible self, will also enable and constrain the individual conception of the collective possible self (cf. Ashforth et al. 2011). These dynamics are captured in the reciprocal arrow between individual and shared conception of the collective possible self in Figure 3.

The effects of sharedness on content. We propose that collective possible selves lead to collective

vision pursuit to the extent that they are shared among individuals in a collective. Interestingly, sharedness of collective possible selves may do more than only drive collective vision pursuit. When collective possible selves are shared, individuals likely hear similar stories regarding a vision from others, thus socially validating this shared understanding of the vision. As a result, individual members may experience vision-based possible selves as more central, desirable, and feasible to the extent that collective possible selves are shared. If the sharedness of the collective possible self makes the collective possible self more central, desirable, and feasible, it may also encourage the development of associated personal possible selves. When a collective possible self is especially important (because it is shared) an individual may be prone to develop personal possible selves that are related to the collective possible self. This individual identity extension creates a more complex and durable collective possible self because it is related to various different individual level possible selves. These two effects make sharedness a key property for translating vision communication into vision pursuit.

Together these isomorphic effects and cross-level effects describe how vision communication affects the development of collective possible selves and vision pursuit through processes related to the collective self-concept and information elaboration (Figure 2). In addition, they explain how vision communication can stimulate followers to share collective possible selves and collectively pursue a vision through processes of identification and collective elaboration (Figure 3). In a dynamic process in which isomorphic and cross-level effect co-occur and reciprocally influence each other, visions are enacted through vision pursuit and become "real" organizational phenomena. Thus, the resulting content of individual and collective level perceptions of the collective possible self emerges over time as a result of individual and collective identification and elaboration processes.

DISCUSSION

Although vision communication is widely believed to be crucial for leadership, an integrative conceptual framework for studying vision communication was lacking. Developing such an integrative model was the aim of the current study. In doing so, we emphasized that the ultimate indicator of vision communication effectiveness is follower vision pursuit – especially collective vision pursuit. Key to our

analysis is the proposition that vision communication derives its effectiveness in motivating vision pursuit from its ability to stimulate the development of vision-based collective possible selves. We highlighted the importance of vision communication to stimulate collective vision elaboration and identification to invite the development of collective possible selves that are shared among members. In terms of content, we underscored the importance of visions speaking to the desirability, feasibility, centrality, complexity, and regulatory focus of collective possible selves suggested by the vision. In developing this model, we provide the first integrative framework to study vision communication that is able to relate vision communication to vision pursuit, tie together prior findings in vision communication research, and address not only the individual but also the collective level of analysis.

This integrative framework has important implications for research on vision communication. First, the model provides a set of new propositions that are strongly anchored in the current literature and can be tested in empirical studies. In addition, by specifying vision pursuit as the key outcome of vision communication, we provide research on vision communication with a common focus on the dependent variable side – an element in which the field is currently lacking. Although conceptual arguments frequently focused on implied effects of vision pursuit such as organizational change, in practice the empirical study of vision communication has by and large revolved around general indicators of leadership effectiveness that do not necessarily reflect vision pursuit (e.g., leadership evaluations). By specifying that the core focus of vision communication research should be on the relation between vision communication and vision pursuit, the field has a better chance to generate coherent and useful findings.

Second, we specified the processes through which vision communication leads to vision pursuit — the development of (shared) collective possible selves through vision elaboration and a focus on collective self-conception. Our focus on these processes has the potential to integrate many findings in the literature and to suggest areas that should be investigated. It also identifies constructs that should be controlled for if only part of the model is investigated. For instance, while investigating the effects of metaphors on vision pursuit mediated by vision elaboration, researchers should take care to control for elements of the working self-concept to be sure that it is metaphors and elaboration that drive the effect.

Third, our model has implications for models of leadership that emphasize the role of follower self-conception (Lord et al. 1999, Shamir et al. 1993, van Knippenberg et al. 2004a). Not only may our model's focus on possible selves complement the emphasize on the current self in this earlier work, our treatment of multilevel dynamics may also provide a jumping off point to develop such a multilevel understanding in analyses of the current self and leadership, making self-concept models of leadership better suited to explain collective action.

Fourth, our model also extends work by Meindl (1995) on the spread of leadership evaluations through social networks of followers. Meindl outlined how perceptions of leader charisma may become socially shared among followers as followers interact and discuss their perceptions of the leader. Our analysis move beyond this idea by capturing both how such social sharedness feeds into collective action and what leaders can do to stimulate such elaboration to create social sharedness.

Future Research

Aside from the obvious implication that it would be valuable if future research would put our model to test, there is one extension of our approach which we briefly address. Some leadership theories emphasize the dyadic relationship between leaders and followers (e.g., LMX-theory; for an overview see Dulebohn et al. in press). Similarly, some authors have argued that relational aspects of identity play a role in leadership (Lord and Brown 2004, van Knippenberg et al. 2004a). Discussing the relational level goes beyond the scope of this article, but a brief comment on this identity level is warranted.

For the current model, the relational level would suggest that we discuss *relational possible selves*, internalized images, thoughts, and ideas about a future of the leader-follower dyad that an individual or dyad holds. It is important to understand that compared to collective possible selves, relational possible selves are different on two aspects. First, the referent of relational possible selves would be the leader-follower dyad rather than the collective. Second, sharedness for relational possible selves would mean that leader and follower (rather than a collective) would share their relational possible self. To some extent, one could interpret the relational level as embedded between the collective and individual level, and following Ashforth and colleagues (2011) and our earlier analysis of isomorphic effects, we may thus

propose that identity process and content effects of these identity levels would also be isomorphic for the relational level. In a related vein, where collective elaboration and identification are the mechanisms through which collective possible selves become shared, elaboration in the leader-follower dyad and relational identification (cf. Shamir et al. 1993, van Knippenberg et al. 2004a; Wang and Howell 2012) would be the mechanism conducive to the emergence of sharedness of relational possible selves.

Moreover, considering findings by Wang and Howell (2010, 2012) that individual oriented transformational leadership that causes followers to identify with the leader (as opposed to group oriented transformational leadership that caused identification with the group, see also Kark and Shamir 2008) subsequently lead to more individual performance and personal initiative, we would argue that relational possible selves would result in individual vision pursuit rather than collective vision pursuit.

There are several other important avenues for future research. One pertains to the methodology suggested by research on possible selves. This literature may not only inform research on vision communication inspired by our model, but it may also illustrate the use of qualitative methods to assess possible selves. We believe that qualitative studies of how visions are internalized and pursued by followers are important because of the potential of qualitative studies to facilitate new theory development. Also, there are multiple ways to quantitatively measure possible selves. For instance, Markus and Nurius (1986) developed a survey that provided participants with a range of possibilities for the self (e.g., intelligent, having an active social life, etc.) from six categories (e.g., physical descriptors, lifestyle possibilities, etc.). They asked several questions regarding these items, including whether the item was ever considered as a possible self, how probable the possible self was for them (feasibility), and how much they would like the item to be true for them (desirability). Similarly, Stam et al. (2010b) provided an example of an ideal possible self (self as an innovative manager) and then investigated the feasibility and desirability of this possible self for participants. We note that most empirical studies so far have focused mainly on regulatory nature, desirability, and feasibility. We believe centrality could be measured in a similar fashion to feasibility and desirability. For quantitative assessment of possible selves, the team cognition literature provides ample options to capture sharedness of these selfconceptions (e.g., standard deviation of the measure across group members; Mohammed et al. 2010).

We described a model that focuses on how vision communication translates into vision pursuit. Although the model focuses on visionary leadership, it could also stimulate other research areas. For instance, Propositions 1a-2b posit that follower collective possible selves play a central role in vision communication. We also propose that possible selves mediate the relation between leader vision communication and follower vision pursuit, and in addition, possible selves tie follower working self-concepts and information processing to vision communication. These insights may inform the study of how other leader behaviors, aside from vision communication, influence follower behavior. For example, role modeling is often mentioned as an important leader behavior (Conger and Kanungo 1998, Shamir et al. 1993). Moreover, there is evidence that the motivating effects of role modeling are mediated by possible selves (Lockwood and Kunda 1997, Lockwood et al. 2002). This possibility implies that the processes that we have described for vision communication may, in a different form, also apply to role modeling.

Although the current model explicitly views followers as active information processors, it does not discuss the active role of followers in creating the vision's content. That is, through collective elaboration processes followers can influences which elements of the vision become shared and thus shape vision pursuit. We have not depicted followers as co-developer of the vision itself, but this topic may be important because theories of motivation (Ryan and Deci 2000), research on shared leadership (Carson et al. 2007, Pearce and Conger 2003), as well as theories of justice (Tyler 1999) emphasize the importance of followers in leadership processes (cf. Howell and Shamir 2005). Our current model implies that followers who are involved in the creation of visions may be more motivated and able to process these visions centrally. For example, U.S. presidential candidates' skillful use of the internet to gather preferences (and financial resources) from followers may, in part, be a means to permit their involvement in vision creation. Moreover, when followers help to create the vision's content, it may better reflect followers' ideas and ambitions. As a consequence, the perceived quality of the vision may be increased. The role of followers as vision co-creators is an exciting area for future research.

CONCLUSION

In conclusion, we propose a model of vision communication in which the follower collective possible self is the key component. Several interesting new directions flow from the use of this model. Given how central leader visions are to leadership effectiveness, and especially to leaders' ability to engender change, pursuing these directions in future research may be highly instrumental in advancing our understanding of effective leadership. Our vision of the vision communication field is that one day every leader and every researcher will recognize that collective possible selves and their role in vision pursuit are crucial to effective vision communication.

REFERENCES

- Ashforth, B. E., F. A. Mael. 1989. Social identity theory and the organization. *Acad. of Management Rev.* **14** 20-39.
- Ashforth, B. E., K. M. Rogers, K. G.Corley. 2011. Identity in organizations: Exploring cross-level dynamics. *Organ. Sci.* **22** 1144-1156.
- Ashton-James, C., R. B. van Baaren., T. L. Chartrand., J. Decety., J. Karremans. 2007. Mimicry and me: The impact of mimicry on self-construal. *Social Cognition* **25** 518-535.
- Awamleh, R., W. L. Gardner. 1999. Perceptions of leader charisma and effectiveness: The effects of vision content, delivery, and organizational performance. *Leadership Quart.* **10** 345-373.
- Banaji, M. R., D. A. Prentice. 1994. The self in social contexts. Ann. Rev. of Psych. 45 297-332.
- Bandura, A. 1997. Self-efficacy: The exercise of control. Freeman, New York.
- Bandura, A. 2000. Exercise of human agency through collective efficacy. *Current Directions in Psych. Sci.* **9** 75-78.
- Bass, B. M. 1985. Leadership and performance beyond expectations. Free Press, New York.
- Baum, J. R., S. A. Kirkpatrick, E. A. Locke. 1998. A longitudinal study of the relation of vision and vision communication to venture growth in entrepreneurial firms. *J. of Appl. Psych.* **83** 43-54.
- Berson, Y., B. Shamir, B. J. Avolio, M. Popper. 2001. The relationship between vision strength, leadership style, and context. *Leadership Quart.* **12** 53-73.
- Beyer, J. M., L. D. Browning. 1999. Transforming an industry in crisis: Charisma, routinization, and supportive cultural leadership. *Leadership Quart*. **10** 483-520.
- Bligh, M. C., J. C. Kohles, J. R. Meindl. 2004. Charisma under crisis: Presidential leadership, rhetoric, and media responses before and after the September 11th terrorist attacks. *Leadership Quart.* **15** 211-239.
- Bono, J. E., T. A. Judge. 2003. Self-concordance at work: Towards understanding the motivational effects of transformational leaders. *Acad. of Management J.* **46** 554-571.
- Boyatzis, R. E., K. Akrivou. 2006. The ideal self as the driver of intentional change. J. of Management

- *Development* **25** 624-42.
- Brown, M. E., L. K. Trevino. 2006. Socialized charismatic leadership, value congruence, and deviance in work groups. *J. of Appl. Psych.* **91** 954-962.
- Bruch, H., B. Shamir, G. Eilam-Shamir. 2007. Managing meanings in times of crisis and recovery: CEO prevention-oriented leadership. R. Hooijberg, J. Hunt, J. Antonakis, K. Boal, N. Lane, eds. *Being there even when you are not: Leading through strategy, structures, and systems.* JAI Press, Oxford, 131-158.
- Bryman, A. 1992. Charisma and Leadership in organizations. Sage, London.
- Burns, J. 1978. Leadership. Harper and Row, New York.
- Burke, K. 1950. A rhetoric of motives. Englewood Cliffs, NJ: Prentice Hall.
- Cacioppo, J. T., R. E. Petty. 1989. Effects of message repetition on argument processing, recall, and persuasion. *Basic and Appl. Psych.* **10** 3-12.
- Cannon-Bowers, J. A., E. Salas, S. A. Converse. 1993. Shared mental models in expert decision making teams. Castellan Jr., ed. *Current Issues in Individual and Group Decision Making*. Hillsdale, NJ: Erlbaum.
- Carson, J. B., P. E. Tesluk, J. A. Marrone. 2007. Shared leadership in teams: An investigation of antecedent conditions and performance. *Acad. of Management J.* **50** 1217-1234.
- Carver, C. S., M. F. Scheier. 1998. *On the self-regulation of behavior*. New York: Cambridge University Press.
- Chaiken, S., A. Liberman, A. H. Eagly. 1989. Heuristic and systematic processing within and beyond the persuasion context. J. S. Uleman, J. A. Bargh, eds. *Unintended thought*. Guilford Press, New York, 212-252.
- Chaiken, S., Y. Trope. 1999. *Dual-process theories in social psychology*. Guilford Press, New York.
- Chan, D. 1998. Functional relations among constructs in the same content domain at different levels of analysis: A typology of composition models. *J. of Appl. Psych.* **83** 234-246.
- Charteris-Black, J. 2005. Politicians and rhetoric: The persuasive power of the metaphor. Palgrave

- MacMillan, New York.
- Chen, G., P. D Bleise. 2002. The role of different levels of leadership in predicting self- and collective efficacy: Evidence for discontinuity. *J. of Appl. Psych.* **87** 549-556.
- Chen, G., J. E. Mathieu, P. D. Bliese. 2005. A framework for conducting multilevel construct validation.

 F. J. Yammarino, F. Dansereau eds. *Multi-level issues in organizational behavior and processes*(research in multilevel issues, volume 3). Emerald 273-303.
- Conger, J. A., R. N. Kanungo. 1987. Toward a behavioral theory of charismatic leadership in organizational settings. *Acad. of Management J.* **12** 637-647.
- Conger, J. A., R. N. Kanungo. 1998. Charismatic leadership in organizations. Sage, Thousand Oaks, CA.
- Conway, M. A., C. W. Pleydell-Pearce. 2000. The construction of autobiographical memories in the self-memory system. *Psych. Rev.* **107** 261-288.
- Cross, S. E., H. R. Markus. 1994. Self-schemas, possible selves, and competent performance. *J. of Educational Psych.* **86** 423-438.
- De Dreu, C. K. W., M. Baas, B. A. Nijstad. 2008. Hedonic tone and activation level in the mood-creativity link: Toward a dual pathway to creativity model. *J. of Personality and Soc. Psych.* **94** 739-756.
- Den Hartog, D. N., R. M. Verburg. 1997. Charisma and rhetoric: Communicative techniques of international business leaders. *Leadership Quart.* **8** 355-391.
- Dulebohn, J. H., W. H. Bommer, R. C. Liden, R. Brouer, G. R. Ferris. In press. A meta-analysis of the antecedents and consequences of leader-member exchange: Integrating the past with an eye toward the future. *Journal of Management*.
- Dunkel, C. S. 2000. Possible selves as a mechanism for identity exploration. *J. of Adolscence*. **23** 519-529.
- Dutton, J. E., J. M. Dukerich, C. V. Harquail. 1994. Organizational images and member identification. *Admin. Sci. Quart.* **39** 239-263.
- Dyer, N. B., Hanges, P. W., & Hall, R. J. (2005). Applying multilevel confirmatory factor analysis

- techniques to the study of leadership. Leadership Quarterly, 16, 149-167.
- Eagly, A. H. 1974. Comprehensibility of persuasive arguments as a determinant of opinion change. *J. of Personality and Soc. Psych.* **29** 758-773.
- Eagly, A. H., R. Warren. 1976. Intelligence, comprehension, and opinion change. *J. of Personality.* **44** 226-242.
- Emrich, C. G., H. H. Brower, J. J. Feldman, H. Garland. 2001. Images in words: Presidential rhetoric, charisma, and greatness. *Admin. Sci. Quart.* **46** 527-557.
- Fiol, C. M., D. Harris, R. J. House. 1999. Charismatic leadership: Strategies for effecting social change. *Leadership Quart.* **10** 449-482.
- Friendly, M., P. E. Franklin, D. Hoffman, D. C. Rubin. 1982. The Toronto Word Pool: Norms for imagery, concreteness, orthographic variables, and grammatical usage for 1,080 words. *Behavior, Res. Methods, and Instrumentation*. 14 375-399.
- Forgas, J. P., J. V. Ciarrochi. 2002. On managing moods: Evidence for the role of homeostatic cognitive strategies in affect regulation. *Personality and Soc. Psych. Bull.* **28** 336-345.
- Forgas, J. P., R. Johnson, J. V. Ciarrochi. 1998. Affect control and affect infusion: A multi-process account of mood management and personal control. M. Kofta, G. Weary, G. Sedek, eds. *Personal control in action: Cognitive and motivational mechanisms*. Plenum, New York, 155-196.
- Grossberg, S. 1999. The link between brain learning, attention, and consciousness. *Consciousness and Cognition*. **8** 1-44.
- Gusnard, D. A. 2005. Being a self: Considerations from functional imaging. *Consciousness and Cognition*. **14** 679-697.
- Gutnick, D., F. Walter, B. A. Nijstad, C. W. K. De Dreu. 2012. Creative performance under pressure: An integrative conceptual framework. Org. Psych. Rev. 2 189-207.
- Hannah, S. T., R. L. Woolfolk, R. G. Lord. 2009. Leader self-structure: A framework for positive leadership. *J. of Organ. Behavior* **30** 269-290.
- Higgins, E. T. 1987. Self-discrepancy: A theory relating self and affect. Psych. Rev. 94 319-340.

- Higgins, E. T. 1996. The 'self digest': Self knowledge serving self-regulatory functions. *J. of Personality and Soc. Psych.* **71** 1062-1083.
- Higgins, E. T. 1997. Beyond pleasure and pain. Amer. Psych. 52 1280-1300.
- Higgins, E. T., R. N. Bond, R. Klein, T. Strauman. 1986. Self-discrepancies and emotional vulnerability: How magnitude, accessibility, and type of discrepancy influence affect. *J. of Personality and Soc. Psych.* **51** 5-15.
- House, R. J. 1971. A path-goal theory of leader effectiveness. Admin. Sci. Quart. 16 321-338.
- House, R. J., W. D. Spangler, J. Woycke. 1991. Personality and charisma in the U.S. presidency: A psychological theory of leadership effectiveness. *Admin. Sci. Quart.* **36** 364-396.
- Howell, J. M., B. Shamir. 2005. The role of followers in the charismatic leadership process: Relationships and their consequences. *Acad. of Management Rev.* **30** 96-112.
- Hunt, J. G., K. B. Boal, G. E. Dodge. 1999. The effects of visionary and crisis-responsive charisma on followers: An experimental examination of two kinds of charismatic leadership. *Leadership Quart*.10 423-448.
- Huston, L., N. Sakkab. 2006. Connect and develop: Inside Proctor and Gamble's new model for innovation. *Harvard Bus. Rev.* **84** 58-66.
- Ibarra, H. 1999. Provisional selves: Experimenting with image and identity in professional adaptation. *Admin. Sci. Quart.* **44** 764-791.
- Ibarra, H., R. Barbulescu. 2010. Identity as narrative: prevalence, effectiveness, and consequences of narrative identity work in macro work role transitions. *Acad. of Management Rev.* **35** 135-154.
- Johnson, R. E., C. Chang, R. G. Lord. 2006. Moving from cognition to behavior: What the research says. *Psych. Bulletin.* **132** 381-415.
- Jung, D. I., B. J. Avolio. 2000. Opening the black box: An experimental investigation of the mediating effects of trust and value congruence on transformational and transactional leadership. *J. of Organ. Behavior* **21** 949-964.
- Jung, D. I., J. J. Sosik. 2002. Transformational leadership in work groups: The role of empowerment,

- cohesiveness, and collective efficacy on perceived group performance. *Small Group Research* **33** 313-336.
- Hanges, P. J., & Dickson, M. W. (2006). Agitation over aggregation: Clarifying the development of and the nature of the GLOBE scales. *Leadership Quarterly*, 17, 522-536.
- Kark, R., D. Van Dijk. 2007. Motivation to lead, motivation to follow: The role of self-regulatory focus in leadership processes. *Acad. of Management Rev.* **32** 500-528.
- Kark, R., B. Shamir. 2008. The dual effect of transformational leadership: Priming relational and collective selves and further effects on followers. In B. J. Avolio and F. J. Yammarino, Eds. *Transformational and charismatic leadership: The road ahead*, Vol. 2, Amsterdam: JAI: An imprint of Elsevier Science, 67-91.
- Kehr, H. M. 2004. Integrating implicit motives, explicit motives, and perceived abilities: The compensatory model of work motivation and volition. *Acad. of Management Rev.* **29** 479-499.
- Kelman, H. C. 1958. Compliance, identification, and internalization: Three processes of attitude change. *J. of Conflict Resolution.* **2** 51-60.
- Kirkpatrick, S.A., E. A. Locke. 1996. Direct and indirect effects of three core charismatic leadership components on performance and attitudes. *J. of Appl. Psych.* **81** 36-51.
- Kivetz, Y., T. R. Tyler. 2007. Tomorrow I'll be me: The effect of time perspective on the activation of idealistic versus pragmatic selves. *Organ. Behavior and Human Decision Processes*. **102** 193-211.
- Kraus, F., M. Ahearne, S. K. Lam, J. Wieseke. 2012. *Organ. Behavior and Human Decision Processes*118 122-178.
- Lecky, P. 1945. Self-consistency: A theory of personality. New York, Island Press.
- Liberman, N., Y. Trope. 1998. The role of feasibility and desirability considerations in near and distant future decisions: A test of temporal construal theory. *J. of Personality and Soc. Psych.* **75** 5-18.
- Linville, P. W. 1987. Self-complexity as a cognitive buffer against stress related illness and depression. *J. of Personality and Soc. Psych.* **52** 663–676.

- Lockwood, P., C. Jordan, Z. Kunda. 2002. Motivation by positive or negative role models: regulatory focus determines who will best inspire us. *J. of Personality and Soc. Psych.* **83** 854-864.
- Lockwood, P., Z. Kunda. 1997. Superstars and me: Predicting the impact of role models on the self. *J. of Personality and Soc. Psych.* **73** 91-103.
- Lord, R.G., D. J. Brown. 2001. Leadership, values, and subordinate self concepts. *Leadership Quart.* **12** 133-153.
- Lord, R. G., D. J. Brown. 2004. Leadership processes and follower self-identity. Erlbaum, Hillsdale, NJ.
- Lord, R. G., D. J. Brown, S. J. Freiberg. 1999. Understanding the dynamics of leadership: The role of follower self-concepts in the leader/follower relationship. *Organ. Behavior and Human Decision Processes.* 78 167-203.
- Lord, R. G., S. T. Hannah, P. L. Jennings. 2010. A framework for understanding leadership and individual requisite complexity. Org. Psych. Rev. 1 104-127.
- Lord, R. G., R. Hall, L. Naidoo, C. Selenta, M. Medvedeff. 2005. Value structures, identity, and affectivity: Interrelations and implications for organizations. *Paper presented at Affect and Emotions in Organ. Behavior Small Group Meeting*, Rotterdam.
- Lord, R. G., P. E. Levy. 1994. Moving from cognition to action: A control theory perspective. *Appl. Psych.* **43** 335-398.
- Markus, H. R., S. E. Cross, E. Wurf. 1990. The role of the self-system in competence. R. J. Sternberg. J. Kolligian Jr. eds. *Competence considered*. New Haven, CT: Yale University Press 205-226.
- Markus, H. R., Z. Kunda. 1986. Stability and malleability of the self-concept. *J. of Personality and Soc. Psych.* **51** 858-866.
- Markus, H. R., P. Nurius. 1986. Possible Selves. *Amer. Psych.* **41** 954-969.
- Markus, H. R., A. Ruvolo. 1989. Possible selves: Personalized representations of goals. L.A. Pervin ed. Goal concepts in personality and social psychology. Hillsdale, NJ: Erlbaum 211-241.
- Markus, H. R., E. Wurf. 1987. The dynamic self concept: A social psychological perspective. *Ann. Rev. of Psych.* **38** 299-337.

- Meindl, J. R. 1995. The romance of leadership as follower-centric theory: A social constructionist approach. *Leadership Quart.* **6** 80-109.
- Mio, J. S., R. E. Riggio, S. S. Levin, R. Reese. 2005. Presidential leadership and charisma: The effects of metaphor. *Leadership Quart*, **16** 287-294.
- Mitchell, T. R., L. R. Beach. 1990. "...Do I love thee? Let me count..." Towards and understanding of intuitive and automatic decision making. *Organ. Behavior and Human Decision Processes*. **47** 1-20.
- Mohammed, S., L. Ferzandi, K. Hamilton. A metaphor no more: A 15-year review of the team mental model construct. *J. of Man.* **36** 876-910.
- Morgeson, F. P., D. A. Hofmann. 1999. The structure and function of collective constructs: Implications for multilevel research and theory development. *Academy of Man. Rev.* **24** 249-265.
- Naidoo, L., R. G. Lord. 2008. Speech imagery and perceptions of charisma: The mediating role of positive affect. *Leadership Quart.* **19** 283-296.
- Oyserman, D., D. Bybee, K. Terry, T. Hart-Johnson. 2004. Possible selves as roadmaps. *J. of Res. in Personality*. **38** 130-149.
- Oyserman, D., H. R. Markus. 1990. Possible selves and delinquency. *J. of Personality and Soc. Psych.* **59** 112-125.
- Pastor, J. C., J. R. Meindl, M. C. Mayo. 2002. A network effects model of charisma attributions. *Acad. of Management J.* **45** 410-420.
- Pearce, C. L., J. A. Conger. 2003. Shared leadership: Reframing the hows and whys of leadership. Sage, Thousand Oaks, CA.
- Petty, R. E., J. T. Cacioppo. 1979. Issue-involvement can increase or decrease persuasion by enhancing message-relevant cognitive responses. *J. of Personality and Soc. Psych.* **37** 1915-1926.
- Petty, R. E., J. T. Cacioppo. 1984. The effects of involvement on response to argument quantity and quality: Central and peripheral routes to persuasion. *J. of Personality and Soc. Psych.* **46** 69-81.
- Petty, R. E., J. T. Cacioppo. 1986. The elaboration likelihood model of persuasion. *Adv. in Experiment.*Soc. Psych. 19 123-205.

- Petty, R. E., J. T. Cacioppo, R. Goldman. 1981. Personal involvement as a determinant of argument-based persuasion. *J. of Personality and Soc. Psych.* **41** 847-855.
- Ratneshwar, S., S. Chaiken. 1991. Comprehension's role in persuasion: The case of its moderating effect on the persuasion impact of source cues. *J. of Consumer Psych.* **18** 52-62.
- Roberts, N. C. 1985. Transforming leadership: a process of collective action. *Hum. Rel.* 38 1023-1046
- Roese, N. J., T. Hur, G. L. Pennington. 1999. Counterfactual thinking and regulatory focus: Implications for action versus inaction and sufficiency versus necessity. *J. of Personality and Soc. Psych.* 77 1109-1120.
- Ryan, R. M., E. L. Deci. 2000. Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *Amer. Psych.* **55** 68-78.
- Salas, E. E., S. M. Fiore. 2004. *Team cognition: Understanding the factors that drive process and performance*. American Psychological Association.
- Sashkin, M. 1988. The visionary leader. J. Conger, R. Kanungo, eds. *Charismatic leadership: The elusive factor in organizational effectiveness*, Jossey Bass, San Francisco, CA, 122-160.
- Sassenberg, K., K. Woltin. 2008. Group-based self-regulation: The effects of regulatory focus. *Eur. Rev. of Soc. Psych.* **19** 126-164.
- Schwartz, S. H. 1999. A theory of cultural values and some implications for work. *Appl. Psych.: An Internat. Rev.* **48** 23-47.
- Shah, J. Y., R. Friedman, A. W. Kruglanski. 2002. Forgetting all else: On the antecedents and consequences of goal shielding. *J. of Personality and Soc. Psych.* **83** 1261-1280.
- Shamir, B., M. B. Arthur, R. J. House. 1994. The rhetoric of charismatic leadership: A theoretical extension, a case study, and implications for research. *Leadership Quart.* **5** 25-42.
- Shamir, B., R. J. House, M. B. Arthur. 1993. The motivational effects of charismatic leadership: A self-concept based theory. *Organ. Sci.* **4** 577-594.
- Shamir, B., J. M. Howell. 1999. Organizational and contextual influences on the emergence and effectiveness of charismatic leadership. *Leadership Quart.* **10** 257-283.

- Shamir, B., E. Zakay, E. Breinin, M. Popper. 1998. Correlates of charismatic leader behavior in military units: Subordinates' attitudes, unit characteristics, and superiors' appraisals of leader performance.

 **Academy of Man. J. 41 387-409.
- Stajkovic, A. D., F. Luthans. 1998. Self-efficacy and work-related performance: A meta-analysis. *Psych Bull.* **124** 240-261.
- Stam, D., D. van Knippenberg, B. Wisse. 2010a. Focusing on followers: The role of possible selves and regulatory focus in visionary leadership. *Leadership Quart.* **21** 457-468.
- Stam, D., D. van Knippenberg, B. Wisse. 2010b. The role of regulatory fit in visionary leadership. *J. of Organ. Behavior.* **31** 499-518.
- Tanghe, J., B, Wisse, van der Flier, H. 2010. The formation of group affect and team effectiveness: The moderating role of identification. *British J. of Management*. **21** 340-358.
- Tichy, N. M., M. A. Devanna. 1986. The transformational leader. John Wiley and Sons, Toronto.
- Tyler, T. R. 1999. Social justice in a diverse society. Westview Press, Boulder.
- Tushman, M. L., P. Anderson. 1986. Technological discontinuities and organizational environments. *Adm. Sc. Quart.* **31** 439-465.
- van Ginkel, W. P., D. van Knippenberg. 2008. Group information elaboration and group decision making:

 The role of shared task representations. *Organ. Behavior and Human Decision Processes*. **105** 82-97.
- van Ginkel, W. P., D. van Knippenberg. 2009. Knowledge about the distribution of information and group decision making: When and why does it work? *Organ. Behavior and Human Decision Processes*. **108** 218-229.
- van Knippenberg, D. 2000. Work motivation and performance: A social identity perspective. *Appl. Psych.* **49** 357-371.
- van Knippenberg, D., C. W. K. De Dreu, A. C. Homan. 2004b. Work group diversity and group performance: An integrative model and research agenda. *J. of Appl. Pscyh.* **89** 1008-1022
- van Knippenberg, D., M. A. Hogg. 2003. A social identity model of leadership effectiveness in organizations. *Res. in Organ. Behavior.* **25** 243-295.

- van Knippenberg, D., E. Sleebos. 2006. Organizational identification versus organizational commitment: Self-definition, social exchange, and job attitudes. *J. of Organ. Behavior.* **27** 571-584.
- van Knippenberg, D., B. van Knippenberg, A. Bobbio. 2008a. Leaders as agents of continuity: Self continuity and resistance to collective change. F. Sani, eds. *Self-continuity: Individual and collective perspectives*. Psychology Press, New York, 175-186.
- van Knippenberg, D., B. van Knippenberg, D. De Cremer, M. A. Hogg. 2004a. Leadership, self, and identity: A review and research agenda. *Leadership Quart.* **15** 825-856.
- van Knippenberg, D., B. van Knippenberg, G. A. van Kleef, F. Damen. 2008b. Leadership, affect, and emotions. N. Ashkanasy, C. Cooper, eds. *Research companion to emotions in organizations*. Edgar Eldar, Cheltenham, UK, 465-475.
- van Knippenberg, D., H. Wilke. 1992. Prototypicality of arguments and conformity to ingroup norms. *Eur. J. of Soc. Psych.* **22** 141-155.
- Venus, M., D. Stam, D. van Knippenberg. 2013. Leader emotion as a catalyst of effective leader communication of visions, value-laden messages, and goals. *Organ. Behavior and Human Decision Processes* 122 53-68
- Verplanken, B., R. W. Holland. 2002. Motivated decision making: Effects of activation and self-centrality of values on choices and behavior. *J. of Personality and Soc. Psych.* **82** 434-447.
- Vignoles, V. L., C. Manzi, C. Regalia, S. Jemmolo, E. Scabini. 2008. Identity motives underlying desired and feared possible future selves. *J. of Personality*. **76** 1165-200.
- Vroom, V. H. 1964. Work and motivation. Oxford, UK: Wiley.
- Wang, X. H. F., J. M. Howell. 2010. Exploring the dual-level effects of transformational leadership on followers. *J. of Appl. Psych.*, **95** 1134.
- Wang, X. H. F., J. M. Howell. 2012. A multilevel study of transformational leadership, identification, and follower outcomes. *Leadership Quart.* **23** 775-790.
- Wieseke, J., M. Ahearne, S. K. Lam, R. van Dick. 2009. The role of leaders in internal marketing. *J. of Marketing* **73** 123-145.

- Willner, A. R. 1984. *The spellbinders: Charismatic political leadership*. New Haven, CT: Yale University Press.
- Wood, B. D., C. T. Owens, B. M. Durham. 2005. Presidential rhetoric and the economy. *J. of Politics*. **67** 627-645.
- Wood, W., N. Rhodes, M. Biek. 1995. Working knowledge and attitude strength: An information processing analysis. R. E. Petty, J. A. Krosnick, eds. Attitude strength: Antecedents and consequences. Erlbaum, Mahwah, NJ, 283-313.
- Zemack-Rugar, Y., J. R. Bettman, G. J. Fitzsimons. 2007. The effects of nonconsciously priming emotion concepts on behavior. *J. of Personality and Soc. Psych.* **93** 927-939.

Table 1: Example of different types of vision pursuit

	Individual vision pursuit	Collective vision pursuit
Persistence	Vision: The Dutch Cancer Society finances cancer research and aims to create a world where no one dies from cancer.	Vision: The Dutch labor union for education (CNV onderwijs) aims to enhance working conditions of Dutch workers in education.
	Pursuit: An individual collects money for the Cancer Institute in her weekends. This individual invests effort to accomplish the vision of the Cancer Institute.	Pursuit: After months fighting with the government, on the 6 th of March 2012, more than 50.000 CNV members collectively protested against government cuts to special education. Despite serious hurdles and distractions CNV kept its eye on the prize. This collective invests effort to pursue the CNV vision over time and despite difficulties.
	Vision: Shell emphasizes unlocking resources responsibly.	Vision: Shell emphasizes unlocking resources responsibly.
Flexibility	Pursuit: " a toy rubber dinosaur that grew when placed in water proved an inspiration for Shell Senior Research Scientist Erik Cornelissen. As a result, he invented a synthetic rubber seal that swells on contact with water and can withstand enormous heat and pressure underground." (http://www.shell.com/home/content/fut ure energy/innovation/game changer/sparking innovation/) This individual pursues the vision of	Pursuit: The Shell creative team is an internal initiative to collaboratively generate ideas that benefit Shell's vision with people from across the company. This team tries to pursue the vision of Shell in a creative, new way.
	Shell in a creative, new way.	

Table 2: Important terms and their definitions

Term	Definition	
Vision communication	Motivating of followers by communicating collective images of the future	
Vision pursuit	Goal-directed actions that are hierarchically related to the vision.	
Individual vision pursuit	Vision pursuit of one single individual	
Collective vision pursuit	Vision pursuit of multiple individuals together	
Collective possible self	A set of internalized images, thoughts, and ideas about a future of a collective.	
Individual perception of the collective possible self	The collective possible self that one single individual holds.	
Shared perception of the collective possible self	The collective possible self that multiple individuals share together.	
Individual elaboration	Processing vision information (ideas, knowledge, and insights communicated in the vision), reflecting upon it, and integrating it with current knowledge, ideas, and insights.	
Collective elaboration	Exchange, discussion, and integration of ideas, knowledge, and insights.	
Self-concept	Dynamic interpretive system that consists of images, thoughts, schemas, prototypes, theories, goals, etc. that are related to the self.	
Working self-concept	The activated part of the self-concept.	
Collective working self-concept	Those parts of the working self-concept that relate to the collective	

Table 3: Example of different types of possible selves related to the 'Connect and Develop' vision of CEO A. G. Lafley for Proctor and Gamble that focused on open innovation

	Personal possible self (referent)	Collective possible self (referent)
Individual perceptions (Level of analysis)	Possible self: A team member conceives of him/herself as more open and innovative in the future	Possible self: A team member conceives of his/her team as more open and innovative in the future
Shared perceptions (Level of analysis)	Possible self: Each team member conceives of him or herself (i.e., highly similar conceptions among team members) as more open and innovative in the future	Possible self: Each team member conceives of the team (i.e., highly similar conceptions among team members) as more open and innovative in the future

Figure 1: The proposed general model of vision communication

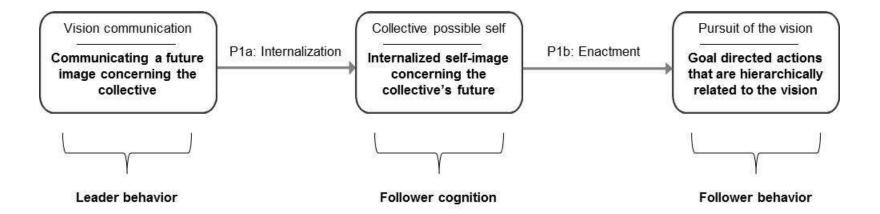


Figure 2: How does vision communication lead to follower vision pursuit?

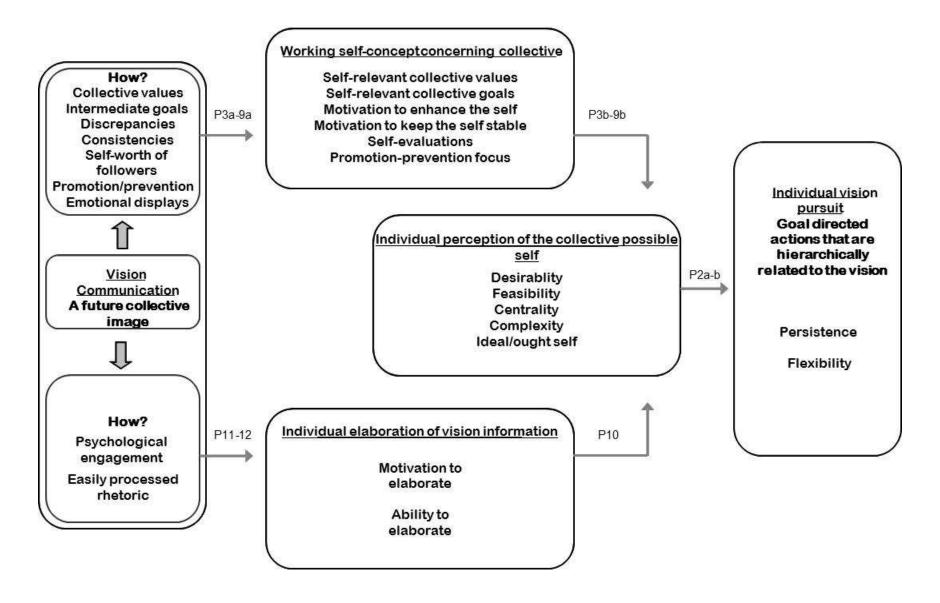


Figure 3: How does vision communication lead to shared follower vision pursuit?

