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# Examining Chief Executive Officer's Narcissistic and Humility Rhetoric[**]

## Abstract

Chief Executive Officer (CEO) narcissism has received considerable attention across academia and practitioner-orientated outlets. While the voluminous research stream of CEO narcissism is mostly linked to a dark personality trait, research indicates that humility has the potential to counterbalance the detrimental effects of CEO narcissism. Given the important individual and firm-level outcomes of both constructs, a systematic assessment of how rhetorical elements (i.e., language reflective of a construct) in CEO speech is still missing. We exploit conceptualizations of both constructs as "polar opposites" to derive the dimensions of both constructs and to distinguish them analytically. We further argue that subtle yet observable rhetorical cues reveal important aspects of CEOs' personality inclinations. Our results, based on qualitative documents from publicly available CEO speeches, suggest that CEOs differ in using narcissistic and humility rhetoric. This holds true even if we change the coding scheme (i.e., assessing alleged narcissistic CEOs with humble rhetoric and vice versa). Although alleged humble CEOs use narcissistic rhetoric, indicating a general trend towards confidence-inducing vocabulary and CEO speech, alleged narcissistic CEOs employ more than twice as much narcissistic rhetoric than alleged humble CEOs. Alleged narcissistic CEOs use a third of humility rhetoric as alleged humble CEOs do. Therefore, we conclude that these differences are more likely to stem from CEO personality inclinations. We discuss the value of these unobtrusive measures and warning signs in theory and practice.

Keywords:   content analysis, rhetoric, narcissism, humility, upper-echelons, firm strategy
(JEL: J24, L20, M12, D91, L10, C81)

"If leadership has a secret sauce, it may well be humility." The Economist (2013)

## Introduction

In 2000, Jeff Skilling, the Chief Executive Officer (CEO) of Enron, wrote in his annual letter that "performance in 2000 was a success by any measure, as we continued to outdistance the competition" and about "the astonishing success of

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EnronOnline" (Enron, 2000: 3). A few months later, Enron collapsed. Skilling, often seen as a prototypical narcissist (Craig & Amernic, 2011), uses a number of unique rhetorical tools, such as hyperboles and extreme language. What would a humbler description sound like? Therefore, we ask whether dark and bright leadership styles manifest in individual CEO speeches by using narcissism and humility as exemplary constructs. To do so, we first establish a content analytical coding scheme based on prior literature in the field and then test the coding scheme on several alleged narcissistic and humble CEOs.

Understanding how CEO narcissism and humility manifest in the language is important for at least three reasons, and we extend the literature in three ways. First, current conceptualizations employing unobtrusive measures (e.g., Chatterjee & Hambrick, 2007) to uncover dark and bright characteristics have intensively been used in the last decade. Unobtrusive measures are methods that do not involve direct elicitation of data from the research subjects but seek to use indirect reference from data to the research subject (Webb, 1996). Therefore, business and economic researchers have employed creative data sources such as the size of the CEO's picture, pay disparities in the Top-Management-Team, or the words used by a CEO in documents to refer to his/her personality dispositions (e.g., Chatterjee & Hambrick, 2007). Although applaudable because these measure characteristics are based on freely available documents (Webb, 1966) and potentially circumvent low response rates in organizational research of traditional approaches such as question-naires of Top-Managers (Anseel, Lievens, Schollaert, & Choragwicka, 2010), they are at least expensive to collect (i.e., resource intensive) and may jeopardize conver-gent and content validity (Hill, Kern, & White, 2014). For instance, large-scale Machine Learning approaches need large training data sets, intensive sub-validation with alternative measures, and technical expertise by researchers (e.g., Harrison, Thurgood, Boivie, & Pfarrer, 2019). At the same time, using indirect, quantitative archival methods and data sources to refer to direct CEO disposition is challenging, leading researchers to question whether this can be done in a valid manner (Hill et al., 2014). Therefore, it is important to exploit the nature of both constructs as "po-lar opposites" (Morris et al., 2005: 1333) to distinguish more clearly between both constructs and their consequences for the CEO. We show how both constructs can be distinguished analytically through interpretative alignment of rhetorical cues with established dimensions of CEO narcissism and humility. Therefore, we provide linguistic categories grounded in the literature that can be used for future studies.

Second, current research on CEO rhetoric provides important anecdotal evidence that CEO rhetoric matters. However, this research has been rather unsystematic by employing a linguistic lens without a clear link between constructs and established measurements (Amernic et al., 2007; Craig & Amernic, 2011; Heracleous & Klaer-ing, 2017). A loose link between a construct and its measurement hinders further elaboration, especially for content analytical approaches (Krippendorff, 1980), and

therefore may impede our understanding of why leader narcissism and humility are linked to rhetoric. A close link between a construct's theoretical dimensions and its linguistic manifestation is important for content analytical approaches (Krippendorff, 1980) and is, therefore, a prerequisite for psychometric assessments. Consequently, the approach helps future research to further elaborate on psychometric assessments.

Third, in line with current leadership theory (Chatterjee & Hambrick, 2007), we conceptualize narcissism and humility not as a binary state with pathological manifestations but as a continuum ranging from low to high states. Therefore, we argue that a qualitative approach that emphasizes contextual states is particularly suited to examine whether narcissism and humility differ rhetorically. This enables us to overcome the dichotomous assertion that CEO rhetoric can only be ethical or non-ethical (e.g., hubris versus non-hubris: Akstinaite, Robinson, & Sadler-Smith, 2019) by introducing CEO humility rhetoric. CEOs may employ different linguistic strategies and switch between more narcissistic and more humble language across time that would otherwise not be detectable to stakeholders (e.g., Board of Directors) that need to form an impression based on limited information.

To tackle these issues, we apply a longitudinal, qualitative approach to emphasize linguistic manifestations and provide a clearer disentanglement between two distinct yet related constructs. We study ten alleged narcissistic or humble CEOs that provide simplistic but "ideal" states of our two constructs to make a clearer disentanglement possible. Although CEOs use a number of rhetorical elements that can be attributed to general CEO speech, our data suggest that alleged narcissistic and humble leaders differ in several key linguistic dimensions. In particular, we find that not the presence but the absence of certain linguistic cues may help to identify detrimental leadership styles. In other words, although CEO speak is characterized by a trend towards confidence-inducing rhetoric, we provide evidence that alleged narcissistic CEOs use more than twice as much narcissistic rhetoric than alleged humble CEOs. We argue that current researchers and practitioners interested in the outcomes of positive and negative leadership styles seem to underestimate this "visibility" bias.

We first provide the theoretical background by grounding CEO narcissism and humility in the current literature. We then link both constructs to the rhetoric literature. Following the theoretical foundation, we explain the construction of the narcissism and humility rhetoric frame. We subsequently introduce the results of the analysis using qualitative examples as well as quantitative insights.

## Background Information

In recent years, researchers in the field of organizational behaviour have paid ample attention to the consequences of CEO narcissism (e.g., Aktas, Bodt, Bollaert, & Roll, 2016; Buyl, Boone, & Wade, 2017; Chatterjee & Hambrick, 2007; Petrenko,

Aime, Ridge, & Hill, 2016; Reina et al., 2014, 2014; Rijsenbilt & Commandeur, 2013; Tang, Mack, & Chen, 2018; Wales, Patel, & Lumpkin, 2013; Zhu & Chen, 2014). Most of these studies find that individual CEO narcissism has important firm-level consequences, including resource depletion (Buyl et al., 2017), performance variance (Chatterjee & Hambrick, 2007), innovation activity (Zhang, Ou, Tsui, & Wang, 2017) or fraud (Rijsenbilt & Commandeur, 2013). While these dark trait approaches (Bollaert & Petit, 2010; Judge, Piccolo, & Kosalka, 2009) have provided a wealth of insights into CEOs' narcissistic inclination, the construct of CEO humility has been proposed theoretically (Morris, Brotheridge, & Urbanski, 2005) and empirically tested as a potentially bright trait of CEOs (Morris et al., 2005; Ou, Waldman, & Peterson, 2016; Owens, Johnson, & Mitchell, 2013). Moreover, the value of humility in business practice as a potentially counterbalancing trait of narcissism and desirable alternative attitude has received constant calls to study this construct more systematically (e.g., Frostenson, 2016), meaning that it affects organizational outcomes such as team information sharing (Owens et al., 2015), Corporate Social Responsibility (Petrenko et al., 2016) or collective promotion focus (Owens & Hekman, 2016).

In this paper, we exploit the conceptualization of both individual-level constructs as possibly "[…] contradictory yet potentially complementary CEO traits" (Zhang et al., 2017: 586). Although both constructs have evolved independently in the management literature, the first studies have started to link both (Owens, Wallace, Walker, & Waldman, 2015; Zhang et al., 2017). Since both constructs have been shown to affect important organizational outcomes in several ways under various boundary conditions, outcomes and measurement belong to the longest-running issues in leadership (see Campbell, Hoffman, Campbell, & Marchisio, 2010 for a review; see Rosenthal & Pittinsky, 2006 for a review).

Given that both constructs, independently and in conjunction, can have positive and negative implications for companies, we ask the important question of how both constructs manifest in CEO speeches, thereby possibly reflecting CEO personality dispositions. For instance, companies led by relatively narcissistic CEOs in dynamic and concentrated markets benefit from fast decision-making and challenging the status quo (Engelen, Neumann, & Schmidt, 2016). At the same time, companies led by relatively narcissistic CEOs increase performance volatility and acquisition-making, which is often regarded as a negative consequence for shareholders. We draw on established literature on the CEO rhetoric (e.g., Baur et al., 2016; Den Hartog & Verburg, 1997; Heracleous & Klaering, 2014) to disentangle both constructs analytically. By doing so, we answer frequent calls in the literature to further elaborate on the CEO's rhetorical elements (e.g., Hartelius & Browning, 2008) and to identify linguistic cues of CEO personality leading to ethical or unethical decision-making (e.g., Amernic, Craig, & Tourish, 2007; Craig & Amernic, 2011, 2016).

## Theoretical Background

### CEO Narcissism

Intellectual roots of CEO narcissism are grounded in social psychology with thinkers such as Otto Kernberg and Heinz Kohut (see, for an overview, Emmons, 1987). It can be traced back to a Greek methodology, Narcissus, who fell in love with his own self-reflection. According to the American Psychiatric Association (DSM-V, 2013), to qualify for a diagnosis of Narcissistic Personality Disorder, an individual must a) exhibit a pervasive pattern of grandiosity in fantasy or behaviour, b) a need for excessive admiration, c) interpersonally exploitative behaviour, d) feeling of entitlement of especially favourable treatment and e) a lack of empathy (DSM-V, 2013). Consequently, many empirical methods have been developed to measure narcissism. One is the *Narcissistic Personality Inventory* (NPI), which Raskin and Hall developed (1979) and derived from the DSM-III (Diagnostic and Statistical Manual of Mental Disorders-III) to detect non-clinical levels of narcissism. The original inventory contained 220 items. Today, inventories with fewer items, for example, the NPI-40 inventory, are more common (Chatterjee & Hambrick, 2007: 353; Raskin & Terry, 1988: 895). The American Psychiatric Association (APA) published the DSM, which contains criteria for diagnosing psychological diseases. Other measures include the *Dirty Dozen,* a 12-item measure of the Dark Triad (narcissism, psychopathy, and Machiavellianism) developed by Jonason and Webster (2010). It only uses four items from the 40-item NPI to measure narcissism and is a short method to measure socially undesirable personality traits (Jonason & Webster, 2010). Since it is beyond the scope of the paper to review the exhaustive quantitative methods of social psychology on narcissism (see for a review Tamborski & Brown, 2011), we focus on a research stream that departs from the assertion that narcissism is purely a clinical state. Many early thinkers, such as Ellis (1927), classify narcissism as "perverse" self-love and a number of studies have elaborated on its negative manifestations such as arrogance, feelings of inferiority, hypersensitivity and poor listening, amorality or irrationality (Maccoby, 2000; Rosenthal & Pittinsky, 2006). Current research goes beyond the uniquely negative trait effects of narcissism and elaborates on more nuanced positive effects of healthy levels of narcissism in general (Back, Küfner, Dufner, Gerlach, Rauthmann, & Denissen, 2013) and in the cohort of CEOs (Engelen, Neumann, & Schmidt, 2016; Judge et al., 2009). For instance, narcissistic traits overlap with other personality dimensions such as extraversion or openness (Paulhus & Williams, 2002), but the need for a) constant applause and social approval and b) the need to dominate and control others makes it a distinct personality construct that will lead to more novel, yet risky firm-level outcomes (Chatterjee & Hambrick, 2007; Chatterjee & Pollock, 2017). These behaviours may not be detrimental but are even demanded by followers who seek leaders who can lead by example (Post, 1986).

Similarly, Maccoby (2003) argues that productive narcissists exist who lead by exerting a great, inspiring vision, suggesting that CEO narcissism is not univocally good or bad. Although these mentioned social psychological approaches provide gold standards, these approaches above are unlikely to work with certain cohorts that are hard to access, such as CEOs. In addition, narcissism is a socially undesirable trait, making biases exerted by the researcher or by the CEO likely to occur. A large part of social science research is conducted with interviews and surveys (Hill et al., 2014), making classical social psychological tools unlikely to work with top managers. Typical qualitative methods, for example, interviews or surveys, are not necessarily conducive and easily manipulable by the participant, as mentioned above (e.g., Chatterjee & Hambrick, 2007: 362).

Therefore, another method to collect information about the CEO's personality is using unobtrusive measures (Webb, 1966). Chatterjee and Hambrick (2007) applied this method as the first to this specific research field and analyzed different factors to find narcissistic structures. They analyzed structural aspects that lie under the CEO's discretion, such as the CEO's photograph in the company's annual report, the CEO's prominence in the company's press releases, and the CEO's use of first-person singular pronouns in interviews. They also analyzed structural aspects that do not lie under the discretion of the CEO, such as compensation (cash and non-cash) relative to the second-highest-paid firm executive in the firm. The model of unobtrusive measures, introduced by Chatterjee and Hambrick (2007) in the context of CEOs, has been extended or modified and was used by several other researchers (e.g., Rijsenbilt & Commandeur, 2013; Patel & Cooper, 2014; Buyl et al., 2017). The use of unobtrusive measures is widespread in the research area of narcissism at management levels. Consequently, CEO narcissism found important firm-level consequences of CEO narcissism such as increased resource depletion (Buyl et al., 2017), heightened performance variance (Chatterjee & Hambrick, 2007), higher firm innovation (Zhang, Ou, Tsui, & Wang, 2017) or higher fraud activities (Rijsenbilt & Commandeur, 2013), making the construct one of the most relevant CEO-level constructs. These approaches point to a double-edged sword of the construct that may result in detrimental or favourable organizational outcomes, depending on contextual variables such as perceived importance by observers (Gerstner, König, Enders, & Hambrick, 2013), effective board monitoring, and resource slack (Buyl et al., 2017), or macroeconomic conditions (Patel & Cooper, 2014).

The unobtrusive approach provides many advantages. For instance, these characteristics are based on freely available documents or can be gathered over time to construct longitudinal samples. Hence, they potentially circumvent low response rates in organizational research of traditional approaches such as social psychological questionnaires of Top-Managers (Anseel et al., 2010). However, these approaches also have been criticized. They are expensive to collect because the coding of several variables across several years and across many firms requires ample resources (Hill et al., 2014). Unobtrusive approaches need training data sets, intensive sub-validation

with alternative measures and technical expertise by researchers (e.g., Harrison, Thurgood, Boivie, & Pfarrer, 2019), making these projects extremely complex. Unobtrusive measures may also jeopardize convergent and content validity because one threat is that they are not well grounded in theory (Hill et al., 2014). For instance, Carey et al. (2015) criticize personal pronouns as an indicator of narcissism and the structure of previous studies analyzing I-talk in general.

Furthermore, many studies in this research field use a quantitative approach (e.g., Patel & Cooper 2014; Craig & Amernic 2016). Quantitative methods can be criticized in this context as well. As an example, Loewenstein, Ocasio, and Jones (2012) criticize, among other things, that the use of standardized word lists (or dictionaries) as unobtrusive measures lack validity because a word can mean different things depending on the period of time, on different collectives and on different situations. In general, flexibility is hardly possible because of the standardization of quantitative approaches. Examining CEO dispositions such as narcissism or humility is challenging; researchers question whether this can be done in a valid manner (Hill et al., 2014) and ask whether the advantages exceed its disadvantages.

Thus, we propose a content analytical approach to mitigate the disadvantages of unobtrusive quantitative approaches (e.g., lack of theopoetical alignment) while retaining the advantages of unobtrusive measures (e.g., publicly available, time-series possible). Krippendorff (2004: 16) states that content analysis is well suited for this purpose: "I question the validity and usefulness of the distinction between quantitative and qualitative content analyses. Ultimately, all reading of texts is qualitative, even when certain text characteristics are later converted into numbers." Ultimately, it enables researchers to combine qualitative and quantitative approaches while acknowledging the deeper ingrained meaning of language: "Qualitative content analysts clearly recognize the need to respond to texts as connected discourse." (Krippendorff, 2004: 64). The mainly qualitative analysis of public documents in this study tries to give a deeper and unique insight into the topic. This method allows drawing conclusions not only in a deductive way but also in an inductive way during the analysis. It is a different approach than the frequently used quantitative approach and is able to analyze text passages in a detailed and serious manner.

More precisely, we use the DSM-IV-TR, published in 2000, for better comparability across studies (e.g., Craig and Amernic, 2011). In line with current theory (Chatterjee & Pollock, 2017), we expect narcissistic CEOs to use especially strong rhetorical elements to reinforce their need for acclaim and legitimize their actions in front of third-party observers (e.g., journalists, analysts, and other stakeholders).

## CEO Humility

In contrast to CEO narcissism, leader humility is conceptualized as an interpersonal characteristic in social contexts that is manifested by admitting mistakes and limitations, highlighting the strength of others, exercising teachability, or recognition of

knowledge and guidance beyond the self (Owens et al., 2015; Owens & Hekman, 2012). Therefore, these meta-values are key to many philosophical discussions of morality and can be traced historically to all religions, such as Judaism, Christianity, Hinduism, and Islam (Morris et al., 2005; Owens & Hekman, 2012).

While one may argue that humility is linked to low self-esteem, Richards (1992) rejects this notion and suggests that humility is centred on one's accurate assessment of abilities and achievements. Similarly, Morris et al. (2005: 1333) define humility "as the willingness to see the self accurately and a propensity to put oneself in perspective."

This distinction is crucial because narcissists have an exaggerated need for attention and need for love (Raskin & Terry, 1988); therefore, narcissists will mask their fragile self-esteem in actions to maintain a sense of positive self-regard (Raskin, Novacek, & Hogan, 1991a, 1991b). As opposed to narcissistic leaders, humble CEOs will possess a more stable self-view that is not inflated (deflated) by praise (criticism) (Owens et al., 2013). Favourable traits of humble CEOs lead them to reject to take credit for others' work and listen properly; hence, these CEOs are more likely to collaborate, share information, share a joint vision, or jointly make decisions within the top-management team (Ou et al., 2016; Ou, Tsui, Kinicki, Waldman, Xiao, & Song, 2014). At the same time, pure narcissists will discard counterfactual evidence and seek extremely high-risk and novel endeavours, such as innovative management practices, by drawing attention to themselves (Gerstner et al., 2013). Therefore, humility-related traits will make leaders appreciate other perspectives by listening to subordinates, acknowledging their own limitations, and having realistic views of the situation, an important prerequisite to facilitating novel organizational strategies (Zhang et al., 2017). Moreover, humble leaders are aware of their own faults but possess the ability to assess information about themselves from an open, non-defensive viewpoint, in particular in cases of negative environmental events and when criticized by others (Argandona, 2015). These dimensions are usually not addressed by narcissism conceptualizations. This can lead to the fact that key employees feel more appreciated and are retained longer in organizations (Owens et al., 2013) while reporting higher job engagement and perceived leader effectiveness (Owens et al., 2015). Ou et al. (2018) find that humble CEOs benefit their companies by establishing pay equality and Top-Management-Team integration, providing evidence that the trait has implications for firm performance. Mao, Chiu, Owens, Brown & Liao (2019) state that leader humility can trigger followers' self-expansion and enhance the follower's self-efficacy. This enhancement improves task performance (Mao *et al.*, 2019: 343). Research also indicates that individual-level humility orientation can spill over to organizational levels (Owens & Hekman, 2016). In other words, individual-level scores of leader humility are important to explain team-level outcomes via enhanced information sharing and other processes, influencing organizational outcomes such as collective promotion focus (Owens & Hekman, 2016). In the past, a key problem was the lack of an

accepted and widely recognized measure of humility (e.g., Morris et al., 2005: 1343). Davis, Hook, Worthington Jr, Van Tongeren, Gartner, Jennings & Emmons (2011) state that the study of humility has progressed slowly because of this problem. The authors state that, for instance, modesty has been studied in more detail because it is not as complex as humility (Davis *et al.*, 2011: 225). The authors differentiate between intrapersonal modesty and interpersonal modesty. Intrapersonal modesty is about accurate self-view, which can be measured as self-enhancement. Self-enhancement is described as the degree to which the person has a profusely positive view of self (Davis *et al.*, 2011: 225). Interpersonal modesty can be measured by observing people in studies. It is about self-portrayal in public settings and its moderation. It is important to note that the different definitions of humility include the definitions of modesty but go even further (Davis *et al.*, 2011: 225). In addition, humility is related but, at the same time, distinct from more researched constructs such as narcissism and self-esteem (Tangney, 2002: 413). Hence, narcissism and humility can share surprisingly many facets, whereas the need for external acclaim of narcissists, as shown above, distinguishes humility from narcissism. Currently, there is no uniform approach to measuring humility with CEOs. The reasons for this can be found in the uniqueness of the CEO sample, whereby social psychology approaches are often infeasible to apply to CEO cohorts. Following current management researchers (e.g., Ou et al., 2014; Owens et al., 2013), we also make use of unobtrusive measures to capture humility. A widely referred to and used measure was introduced by Owens et al. (2013) who define expressed humility as an interpersonal characteristic with the following features: a manifested willingness to view oneself accurately, a displayed appreciation of others' strengths and contributions, and the characteristic teachability (Owens et al., 2013). Ou *et al.* (2014a) extended the work measure by addressing the cognitive and motivational component of the humility construct (Ou *et al.*, 2014: 36). Their developed measure of humility contains six dimensions including the behavioral aspects, cognition and motivation and, thereby, extended the existing measure (Ou *et. al.*, 2014: 38). The six dimensions are self-awareness (items 1–3), appreciation of others (items 4–6), openness to feedback (items 7–9), low self-focus (items 10–12), self-transcendent pursuit (items 13–15), and transcendent self-concept (items 16–19).

## Narcissism, Humility, and Rhetoric

While there has been a wealth of research on how leaders use rhetorical cues to infer charismatic or favourable perceptions in followers (Antonakis, Fenley, & Liechti, 2011; Den Hartog & Verburg, 1997; Seyranian & Bligh, 2008), very limited systematic knowledge exists in the domain of narcissism and humility. For instance, Chatterjee & Hambrick (2007) and subsequent papers (e.g., Aktas et al., 2016) count the number of first-person singular pronouns to construct their quantitative measure of narcissism, while Amernic & Craig (2007) argue that narcissistic CEOs

use linguistic elements such as hyperboles or metaphors. Similarly, Craig & Amernic (2011) provide linguistic traces of three CEOs and show that these CEOs express linguistic signs of destructive narcissism (e.g., grandiose self-importance, excessive admiration, lack of empathy). Craig, Mortensen, & Iyer (2013) studied the tone changes of Ramalinga Raju, Chair of the Indian multinational company Satyam, and found that certain rhetorical strategies, such as extreme emotion and certainty variables, changed noticeably before financial misconduct. Similarly, Livonen and Moisander (2015) use a case study of the American Beverages Association to show how an industry makes a rhetorical (e.g., using denial; showing contempt) sense of negative societal events. Taken together, these anecdotal approaches indicate that CEO narcissistic rhetoric is distinct from a normal cohort of CEOs. They show that the language of (non-pathological) narcissistic CEOs differs from that of other CEOs, thereby shedding light on the differential manifestations of rhetoric via narcissism.

Similar yet fewer results can be found for CEO humility. Although authors advocate that CEO humility is composed of self-awareness or a low self-focus, very limited research exists on how humility rhetoric is used in CEO speech. Owens & Hekman (2012) provide the first in-depth inductive interview evidence from 17 leaders across hierarchies (e.g., branch managers) and across industries (e.g., manufacturing, banking, and military) to show how acknowledging limitations, faults, and mistakes or teachability (as sub-constructs of humility) manifest in the workplace. Similarly, Ou et al. (2014) provide interview quotes from CEOs with higher or lower humility orientation.

Although these statements provide the first evidence of how humility and narcissism manifest in CEO speech, we are unaware of more nuanced rhetorical elements of humility, especially in the context of shareholder letters. Although the letter to shareholders contains elements to shape readers' impressions, research indicates that the rhetorical elements go beyond symbolic action and manifest in tangible firm outcomes (e.g., Carton, Murphy, & Clark, 2014). In addition, letters to shareholders belong to the most commonly used level of analysis in organizational science (Morris, 1994), are usually published yearly, and therefore facilitate longitudinal examination. These letters are used for inference, and research shows that rhetorical elements affect an audience's perception (e.g., rating of security analysts; Fanelli, Misangyi, & Tosi, 2009). Although previous studies use Machine Learning approaches to detect linguistic cues of CEO personality (Harrison et al., 2019; Malhotra, Reus, Zhu, & Roelofsen, 2017), these large-scale quantitative methods are resource-intensive and may create a black box problem, making inferences from theory to data almost impossible (Harrison et al., 2019; McKenny, Aguinis, Short, & Anglin, 2016; McKenny, Short, & Payne, 2013; Rosé, McLaughlin, Liu, & Koedinger, 2019). In other words, providing a deductive coding scheme and applying it on a small number of cases as we do here is a prerequisite for more theory building and advanced quantitative methods such as Machine Learning.

In line with previous research (Anglin, Wolfe, Short, McKenny, & Pidduck, 2018; Iivonen & Moisander, 2015), we define narcissistic or humility rhetoric simply as language reflective of narcissistic or humility characteristics. Following this definition, for instance, it is reasonable to assume that narcissistic CEOs use language indicative of exploitativeness, superiority, leadership, or self-absorption (Emmons, 1987). Similarly, we assume that more humble CEOs will employ a language that is more indicative of humble characteristics (e.g., appreciation of others, sharing of information, and joint decision-making (Ou et al., 2014; Ou et al., 2016; Owens & Hekman, 2012).

In the remainder, we elaborate on the method, sample, and characteristics that comprise both constructs.

## Methods

We use a qualitative, longitudinal frame to assess the degree of narcissism and humility rhetoric. In the first round, we started the analysis by inductively identifying the most important topics and linguistic phrases. In the second round, we followed established literature on qualitative content analysis to conduct the coding (see Mayring, 2015). Mayring (2015: 65–67) distinguishes between three basic forms: *summary*, *explication,* and *structuralizing*. Mayring (2015) explains that structuralizing is one of the fundamental interpretation processes for content analyses. One aim of the interpretation is to assess the given material by means of certain criteria. The third interpretation process, *structuralizing,* is used for this study because this form uses categories in a deductive way. Mayring (2015) recommends the following steps to determine whether a category is appropriate or not. The steps are followed for this study. First, categories are defined. Second, model examples are listed to represent a category. Third, rules are developed to help the researcher decide when inaccuracies occur, and assigning the defined categories is challenging. For this study, further explanations are listed instead of strict rules. After that, a first test run is performed to see if the categories fit at all. Categories might need to be improved and redefined (Mayring, 2015: 97–98). The general steps can briefly be summarized as 1) determination of the unit of analysis, 2) establishment of assessment dimensions or categories, 3) determining the values, and 4) definitions, anchor samples, and encoding rules. Therefore, we can rely mainly on deductive reasoning to create the dimensions and constantly revise the categorical framework after each round. Since it is common for qualitative research to provide counts of their data (Hannah & Lautsch, 2011), after finishing the purely qualitative part, we also count our codes as "corroborative counting" (Hannah & Lautsch, 2011:16) to provide additional evidence (triangulation) for our approach. For the corroborative coding, two authors code alleged narcissistic CEOs with the narcissistic rhetoric framework, alleged narcissistic CEOs with the humble rhetoric framework, alleged

humble CEOs with narcissistic rhetoric, and alleged humble CEOs with the humble rhetoric framework.

## Sample and Data Collection Procedure

Identifying narcissistic or humble CEOs is challenging without psychometrically valid scales. Alternative measures that employ unobtrusive proxies for constructs such as overconfidence are resource-intensive and may lack convergent and content validity (Hill et al., 2014). Therefore, we rely on the term "alleged" (Craig & Amernic, 2011) to emphasize that the overlap between CEOs' constructs and language is unnecessary. We start the sampling process by identifying CEOs who have been alleged to be either narcissistic or humble. This involves an extensive search on Elsevier Scopus and Scholar by employing search strings that are related to CEO narcissism (e.g., "CEO narcissism"; "narcissistic Chief Executive Officer") or CEO humility (e.g., "CEO humility"; "humble Chief Executive Officer") with various connectors.

For instance, Stein (2013) analyzes Richard S. Fuld Jr. of Lehman Brothers and argues that he expresses an intense need for power and prestige. On the other hand, Huy (2015) argues that Mary Barra of General Motors can be seen as an exemplary, humble leader because she acknowledges the ideas of others and shares the successes of the organization. An overview of the chosen CEOs via the extensive literature search can be found in Table 1. If the included literature on the right-hand side labels the CEO as either narcissistic or humble, the company leader becomes an alleged CEO for the study. This sampling procedure yields a number of advantages. Compared to similar approaches (e.g., Akstinaite et al., 2019), this enables us to include only business leaders (e.g., neglecting politicians like Donald Trump) and non-criminal CEOs (e.g., neglecting CEOs like Jeffrey Skilling of Enron) as we are interested in healthy (non-pathological) states, neglecting extremely large differences in their tenure as well as excluding cultural effects (nationality). Finally, this approach enables us to gather communication means that can be reliably attributed to CEOs over time and that do not reflect third-party perceptions (e.g., media articles). However, we see the overlap in the selection procedure between our approach and the hubris approach by Akstinaite et al. (2019) as proof that our approach is suitable for detecting alleged narcissistic (humble) CEOs.

**Table 1. Alleged Humble and Narcissistic CEOs**

|  | CEO name | Company | Example Source |
|---|---|---|---|
| **Alleged humble CEOs** | Alan Mulally | Ford | Bates, 2016; Collins, 2001 |
| | Brian Thomas Moynihan | Bank of America | Augstums, 2009; Schwartzapfel, 2010; Story, 2009 |
| | Indra Nooyi | PepsiCo. | McGregor, 2013; Nooyi |
| | Mary Barra | General Motors | Geier; Huy, 2015; Lewis, 2013; Merrill, 2014 |
| | John Mackey | Whole Foods Market | Gertner, 2004; Kowitt, 2015 Kowitt, 2015 |
| **Alleged narcissistic CEOs** | Jeffrey "Jeff" Bezos | Amazon | Amernic & Craig, 2010; Maccoby, 2003 |
| | Robert "Bob" Nardelli | Home Depot | Kausel, Culbertson, Leiva, Slaughter, & Jackson, 2015; Wasylyshyn, 2012 |
| | Paul Otellini | Intel | Jackson, 2013 |
| | James Jamie Dimon | JPMorgan Chase & Co. | Khurana, 2002; Langman & Lundskow, 2016 |
| | Richard Dick Fuld, Jr. | Lehman Brothers | Stein, 2013; Zehndorfer, 2016 |

We then proceed by obtaining bibliographic information from *Who is Who, The Official Board Biographies, SGA Executive Tracker,* and *Morningstar.* We obtain information on *age, gender, education, tenure, previous employment,* and *compensation schemes* and track those indices across employers. We chose to analyze a four-year period for both constructs. We chose a pre-crisis (2004–2007; narcissism) and a post-crisis condition (2010–2013; humility) to avoid any anomalies of the financial crisis and because CEO tenure aligns within a category. Our inductive search further motivated this frame (see Table 1), indicating that humble CEOs were mostly mentioned after the crisis. We then hand-collect letters to shareholders from annual reports using publicly available sources (i.e., *Morningstar*, company homepages). Although partially attributable to others, such as public relations staff, we chose letters to shareholders because they have been intensively used to capture the cognition of CEOs (Eggers & Kaplan, 2009; Gamache, McNamara, Mannor, & Johnson, 2015; Nadkarni & Barr, 2008; Nadkarni & Herrmann, 2010) and their content predicts important organizational outcomes such as innovation (i.e., the introduction of new technologies: Yadav, Prabhu, & Chandy, 2007). Therefore, although party designed with the help of others, the content of annual reports and shareholder letters is widely regarded as informative and predictive for individual and company outcomes (Bettman & Weitz, 1983; Michalisin, 2001). In line with this literature, other advantages include that a yearly published and personally signed document can be reliably and directly attributed to the CEO even though it contains impression management tactics. Finally, we supplement these letters with other approaches (e.g., Malhotra, Reus, Zhu, & Roelofsen, 2017) and with conference call transcripts to tap into CEOs' spontaneous reactions that we obtain

via *Seeking Alpha*. Conference calls are quarterly earning calls with key analysts in which members of the Top-Management Team discuss the financial results of public companies. It may contain scripted sessions at the beginning but a Question & Answer (Q&A) session in which a CEO typically responds to pressing issues.

For the conference calls only, we randomly choose a two-year period in the fourth quarter of the respective year to make the number of documents feasible. To strengthen intercoder reliability, two authors independently code the content of all documents in two rounds. After coding all documents, we employ the narcissism (humility) rhetoric frame on a random sample of alleged humble CEOs (narcissism) and vice versa (upon request). Although this research is qualitative, the high agreement on the scores (corroborative coding) between author one and author two provides facial evidence that the coding scheme is employed consistently and reliably across authors.[1]

## Constructing a Narcissistic Rhetoric Coding Scheme

First, we scanned all relevant literature regarding CEO narcissism by employing search strings such as "CEO narcissism," "Chief Executive Officer narcissism," or "narcissistic CEOs" in *Elsevier Scopus*. Secondly, we employed specialized search strings using "narcissistic rhetoric" or "narcissistic language" as keywords. Here, we are not interested in identifying CEOs but in the derivation of dimensions based on theory.

First, we use established literature (Chatterjee & Hambrick, 2007; Emmons, 1987) as default sub-dimensions to ensure that construct clarity between default dimensions exists (Yaniv, 2011). Second, we link a theoretical construct (i.e., narcissism) to DSM categories. Third, we use Craig & Amernic´s (2011) criteria to link DSM-IV-TR dimensions to the first four categories (E1-E4) of narcissism. We then complement the scheme by adding the categories Hyperbole (AC1), Self-Styling as an archetypal company (AC2), Language of war, sport and extremism (AC3), and Metaphors (ACM) as recommended by Amernic & Craig (2007). We also assign DSM-IV-TR dimensions to these categories. A summary can be found in table 2. Since we integrate semantically (e.g., ACM) and content categories (e.g., E1), we will likely assign several codes at once.

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1  Please see more results in the discussion of findings.

## Table 2. Narcissistic Rhetoric Coding Scheme with Interpretative Alignment to DSM Catgories

| Category | Definition | Model examples (LtS) | Model examples (Conference calls) | Further explanation |
|---|---|---|---|---|
| E1 | **Exploitativeness / Entitlement** | | | **Exploitativeness** = manipulative language, deceiving others in the pursuit of a desired goal |
| | DSM 5: Has a sense of entitlement to especially favourable treatment. | "Our integrated platforms [...] continue to provide value that customers can't get elsewhere." [Otellini, 2007]† | "We are not doing a forecast." Analyst: "[...] because the single most important variable for your company is pricing for processors, [...]" | **Entitlement** = a speaker assumes that he or she is entitled more than others because of his or her uniqueness |
| | | "The size, scale, and scope of JPMorgan Chase also offer huge advantages; [...]; the benefits of size and scale in operations and systems are vast, and they are real. [...] one of our major costs is the cost of money, the ability to raise funds cheaper, better, faster, and more effectively worldwide than other companies is a major advantage." | "We recognize that." [Otellini, Q4 2006]†† | |
| | DSM 6: It is interpersonally exploitative. | [Dimon, 2005] | | |
| | DSM 7: Lacks empathy and is unwilling to identify with the feelings and needs of others. | | | |
| E2 | **Leadership / Authority** | "Strong corporate leadership is a key element of our culture. We actively leverage our intellectual capital, a network of global relationships, and financial strength to help address today's critical social issues." | "I do not think we are in a position to give you that level of granularity. Gus. I'm sorry." | **Authority** = individuals project themselves as Leaders |
| | DSM 2: It is preoccupied with fantasies of unlimited success, power, brilliance, and beauty. | [Fuld, 2007] | [Otellini, Q4 2006] | |
| | | "We will make bold rather than timid investment decisions where we see a sufficient probability of gaining market leadership advantages." | | |
| | | [Bezos, 2005] | | |
| E3 | **Superiority / Arrogance** | "As a firm, we have a history of showing leadership during times of financial crises, and we will continue to build on that legacy." | "You will see the most commanding line-up of outdoor living that this company has ever put out there." | **Superiority** = language indicative of being extraordinary |
| | DSM 1: Has a grandiose sense of self-importance. | [Dimon, 2007] | [Nardelli, Q4, 2005] | |
| | DSM 3: Believes that he or she is special and unique and can only be understood by, or should associate with, other special or high-status people (or institutions). | "World-class, high-volume manufacturing remains crucial to our ability to deliver breakthrough products. We produce the majority of our microprocessors in our three 65-nanometer wafer fabrication facilities. In fact, we shipped more than 70 million 65 nanometer processors during 2006, with a production ramp rate that is over one year ahead of the rest of the industry." [Otellini, 2006] | | |
| | DSM 9: Shows arrogant, haughty behaviours and attitudes. | "We also launched a steady stream of innovative and distinctive new products that received a record number of accolades from leading consumer publications." [Nardelli, 2004] | | |
| E4 | **Self-absorption / Self-admiration** | "Today, our Firm is a highly diversified organization, with the breadth of capabilities necessary to help our global clients reach their objectives and to achieve best-in-class cross-cycle results for the Firm." [also, AC1] | | **Self-absorption** = stagnation and lack of empathy |
| | DSM 4: Requests excessive admiration. | [Fuld, 2004] | | — ascribing company success to oneself |
| | DSM 8: He is envious of others or believes that others are envious of him. | "We have never had a more diversified set of business or a stronger base of talent." [Fuld, 2007] | | — frequent use of "I" and "my" |
| | AC 4: Excessive self-attribution | "In the four years I have been here, our 325,000 orange-blooded associates have repeatedly proven to me that when we set our minds on something, we always get it done – the right way – and that is exactly what we intended to do in 2005." | | |
| | | [Nardelli, 2004] | | |

| Category | Definition | Model examples (LtS) | Model examples (Conference calls) | Further explanation |
|---|---|---|---|---|
| AC 1 | **Hyperbole**<br>DSM 1,2<br>DSM 7,8,9 | *"We have built an impressive **track record** of performance and success over the past several years and have a **tremendous** amount of **momentum** as we move over into 2005."* [Nardelli, 2004]<br><br>*"We had a **great** year when measured across virtually **every** key metric. Our **outstanding** financial performance [...]"* [Nardelli, 2004]<br><br>*"Lehman Brothers delivered its **strongest** performance **ever** in 2005."* [Fuld, 2005]<br><br>*"In short, **no one** will have the breadth of product offering, as many convenient locations, or as diverse a customer base as The Home Depot."* [Nardelli, 2005] | *"[...] we thought we had the most benign consumer and wholesaler credit environment we **will ever see in our lifetimes** in '06 and early '07."* [Dimon, Q4 2007] | – company (and himself) portrayed as very special, dynamic, expanding and invincible<br><br>– over-use of self-Referential superlatives |
| AC 2 | **Self-styling as an archetypal company**<br>DSM 1,2,3 | *"Sales grew 11%, reaching $64.8 billion, making us the **youngest retailer to reach $30, $40, $50, and now over $60 billion in revenue** – a **strong achievement for a company only 24 years old**."* [Nardelli, 2003]<br><br>*"As we prepare to celebrate our 25th anniversary, [...], We have grown to become the **second largest** retailer in North America and the **youngest** ever to reach over $60 billion in revenue."* [Nardelli, 2003]<br><br>*"We have now ranked #1 in both Fixed Income and Equity Research for two years running, a feat never accomplished by any other firm during the same year, let alone for two."* [also, E3] [Fuld, 2004] | *"[...] $250 billion of deposits, so we are probably the largest corporate depository in the world because -- and as long we're sounding strong, we'll always be able to attract cost-effective deposits."* [Dimon, Q4 2007] | – company (and himself) is portrayed as an exemplary success story |
| AC 3 | **Language of war, sport, and extremism**<br>DSM 1,9 | *"This culture of teamwork and ownership enabled us to continue to build our businesses, to provide the best solutions for our clients, and to deliver **record** results."* [Fuld and Gregory, 2007]<br><br>*"These and other efforts reflecting our values earned us **prestigious recognition**, including **the 2004 Citizenship in Action Award from the U.S. Chamber of Commerce and the Freedom Award from the U.S. Department of Defense**."* [Nardelli, 2004]<br><br>*"In Capital Markets, we posted **record** revenues. Fixed Income revenues rose 28 % to $73 billion, our **seventh straight record** year."* [Fuld, 2005]<br><br>*"For the third consecutive year, Lehman Brothers ranked #1 in Institutional Investor's U.S. equity research poll. We are developing a **tradition of firsts**: no other firm has achieved a #1 ranking in both equity and Fixed Income research in the same year, and we have now done it three years running. We also achieved #1 rankings from Institutional Investor in New York Stock Exchange-listed trading, NYSE-listed sales-trading, and Nasdaq sales trading, the first time any firm has achieved top rankings in all four categories."* [also, AC2, E3] [Fuld, 2005] | *"The action in the fourth quarter was in consumer notebooks, and they sold at record numbers despite the specter of a Vista lunch in January."* [Otellini, Q4 2006] | – blatant self-touting of "success," "leadership," "Winning," archiving a "record"<br><br>– awards, rankings |

| Category | Definition | Model examples (LtS) | Model examples (Conference calls) | Further explanation |
|---|---|---|---|---|
| **AC M** | **Metaphors** | "At Amazon's current scale, **planting seeds that will grow into meaningful new businesses** takes some discipline, a bit of patience, and a **nurturing culture**."<br><br>[Bezos, 2006]<br><br>"We generate both by operating efficiently and maintaining a **fortress balance sheet**."<br><br>[Dimon, 2007]<br><br>"While we have successfully weathered the storm thus far, we face new uncertainties every day."<br><br>[Dimon, 2007] | "We don't really see, you know, people talk about whether you need **another leg** or not. We don't really see the need for **another leg**."<br><br>[Dimon, Q4 2007] | Metaphors can be warning signs and convey mismanagement. See, for example, the Enron LtS (2001) covering the fiscal year 2000 from Kenneth Lay and Jeffrey Skilling. |

+ Hereby after, we relate LTS to financial year 2007; LtS signed and published in 2008.

++ Conference calls relate to the fourth quarter of the respective financial year (2006).

## Constructing a Humility Rhetoric Coding Scheme

First, similar to the narcissism approach, we scanned all relevant literature regarding CEO humility by employing several search strings such as "CEO humility," "Chief Executive Officer humility," or "humble CEO" in *Elsevier Scopus*.

Second, after scanning the literature, we base our category derivations mainly on a subset of this literature similar to other authors (e.g., Bromiley & Rau, 2016), namely papers that appeared in very influential management journals (*Administrative Science Quarterly*, *Human Relations*, *Journal of Management*, *Academy of Management Journal*). We identified (Morris et al. 2005; Ou et al., 2014; Ou et al., 2016; Owens et al., 2013; Owens & Hekman, 2012) as key papers for the category derivation. This procedure's advantage is that it allows us to link established dimensions to established and frequently used questionnaire items (e.g., Zhang et al., 2017). Specifically, this allows us to integrate the sub-dimensions of behavioural humility (questionnaire items 1–9) by Owens et al. (2013) and cognitive-motivational humility (questionnaire items 10–19) by Ou et al. (2014) into categories.

**Table 3. Humility Rhetoric Coding Scheme**

| Category | Definition | Model examples (LTS) | Model examples (Conference calls) | Further explanation |
|---|---|---|---|---|
| H1 | **Self-awareness**<br>Items **1–3** (Owens, Johnson, Mitchell, 2013)<br>— willingness to **obtain accurate self-knowledge**<br>— the person admits it when they don't know<br>1. actively seeks feedback, even if it is critical.<br>2. Acknowledges when others have more knowledge and skills than him/herself.<br>3. admits when he/she doesn't know how to do something. | *"Yet after listening carefully to customers and relying on our own instincts, we saw an opportunity."*<br>[Barra, 2014]<br><br>*"[...] I accept responsibility for our mistakes and commit to doing everything within our power to prevent this problem from ever happening again. In a global meeting with all GM employees last June, I told them I never want anyone in the company to put what happened behind them."*<br>[Barra, 2014]<br><br>*"There are many issues weighing not only on us but on the entire financial service industry."*<br>[Moynihan, 2011] | *"In some cases, I wish we were a little faster in getting the product into the marketplace."*<br>[Barra, Q4 2013]<br><br>*"In terms of PP&R, we struggle a bit. I know that that's a number you track closely, but we struggle a little bit with how you guide people on it overall but also important how it really plays into the context that has a large credit card portfolio."*<br>[Moynihan, Q4 2010] | — *Self-awareness*: the ability to understand one's strengths and weaknesses<br>— It is an enduring orientation to objectively appraise one's abilities and limitations.<br>— Humble individuals are aware of human limitations and accept that they have both strengths and weaknesses |
| H2 | **Appreciation of others**<br>Items **4–6** (cf. Owens, Johnson, Mitchell, 2013)<br>— involves an **appreciation of others' strengths and contributions**<br>4. shows appreciation for the contributions of others.<br>5. takes notice of the strengths of others.<br>6. often compliments others on their strengths. | *"I would like to begin by appreciating our team members' hard work and dedication, as well as our customers, suppliers, and shareholders' continued support. We knew that 2009 was going to be a tough year but did not predict just how challenging the economic environment would be."*<br>[Mackey, 2009]<br><br>*"One of the principal architects of GM's success is Dan Akerson's."*<br>[Barra, 2013]<br><br>*"[...], I want to thank our employees for their tremendous focus and effort over the past year [...]"*<br>[Moynihan, 2010]<br><br>*"Our sincerest thanks..."*<br><br>*During his 20-year career at PepsiCo, Mike White contributed significantly to PepsiCo – as CFO of Frito-Lay, CFO of Pepsi-Cola Company worldwide, CFO of PepsiCo, CEO of Frito-Lay Europe, and then CEO of PepsiCo International. He served admirably as PepsiCo's Vice Chairman from 2006–2009 and played a major role in executing many of the company's acquisitions during that time. All of us at PepsiCo—from the Board to the Executive Team to the countless others he supported and mentored – thank Mike for his many contributions to PepsiCo and wish him and his family the very best."*<br>[Nooyi, 2009] | *"[...] and I would like to recognize the superb performance of our many associates around the world."*<br>[Nooyi, Q4 2010] | — An awareness of their own weaknesses and limitations<br>— allows humble individuals to appraise others' strengths generously and appreciate others' positive worth |

| Category | Definition | Model examples (LTS) | Model examples (Conference calls) | Further explanation |
|---|---|---|---|---|
| H3 | **Openness to feedback** Items **7–9** (cf. Owens, Johnson, Mitchell, 2013) — to keep an **open mind and continuously learn and improve** — teachability 7. is willing to learn from others. 8. is open to the ideas of others. 9. is open to the advice of others. | "By engaging our team members at all levels of the company, we collectively found solutions and new approaches to running our business in a more frugal way." [Mackey, 2009] "I welcome your feedback as we proceed." [Moynihan, 2010] "[...], approving more than 2,000 ideas employees submitted to improve the way we work for customers." [Moynihan, 2011] "We also have taken crowdsourcing of ideas to a new and exciting place: Our Lay's "Do Us a Flavor" campaign engages consumers directly through social media to co-create new exciting flavours." [Nooyi, 2012] | "These are all important milestones, but they are just milestones. We have more work to do, and our sense of urgency will not let one day." [Barra, Q4 2013] | — Openness: An implied aspect of knowing one's weaknesses is an awareness of personal limitations or imperfections. — Humility involves knowing that there are things that are beyond one's control — Therefore, being humble is to be open to new ideas and ways of knowing. Thus, humility also involves the willingness to learn from others. |
| H4 | **Low self-focus** Items **10–12** (Ou et al., 2014) 10. does not like to draw attention to himself/herself. 11. keeps a low profile. 12. is not interested in obtaining fame for himself/herself. | "There are countless stories, and I wish I could tell them all in tribute because I am truly proud of our associates and humbled to be their leader." [Nooyi, 2012] | | — Deep-level motivation — Humble people are less self-focused |
| H5 | **Self-transcendent pursuit** Items **13–15** (Ou et al., 2014) 13. has a sense of personal mission in life. 14. devotes his/her time to the betterment of the society. 15. his/her work makes the world a better place | "A healthy sense of "enlightened self-interest" is a cornerstone of our culture and continues to find life in our 10-year **goals for community development** ($1.5 trillion) and **philanthropy** ($2 billion), our industry-leading environmental initiatives and other endeavours." [Moynihan, 2009] "In every part of the world, we provide customers with great products, build a stronger business, and contribute **to a better world**." [Mulally, 2009] | "A recent example is our announcement in September to become the first national grocer to partner with Blue Ocean Institute and Monterey Bay Aquarium [...] to make it easy for shoppers to make informed choices with a green or best choice rating indicating a species is relatively abundant and is caught in environmentally friendly ways." [Mackey, Q4 2011] | -Deep-level motivation -humble people are more engaged in self-transcendent pursuits -Self-transcendence = is about transcending (or rising above) the self and relating to that which is greater than the self and acting accordingly |

| Category | Definition | Model examples (LTS) | Model examples (Conference calls) | Further explanation |
|---|---|---|---|---|
| | **Transcendent self-concept** | | | |
| | Items **16–19** (Ou et al., 2014) | | | |
| | 16. believes that all people are a a small part of the universe. | "We recognize that we have **challenges ahead of us**, but there are great opportunities as well."<br><br>[Mulally, 2011] | "Now, let me be clear on one thing. I am not suggesting **we executed everything perfectly over the last 5 years. Could we have done something differently or better? Sure**. So, we've gone back and looked at every one of our decisions and said, **what could we have done differently?** Let me give some of these things that **I think we could have done differently** [...] I also think some of the people's moves that I made perhaps could **have been made a bit earlier so that we could get on with this program faster. And lastly**, I think we **could have done a better job establishing performance expectations** with you, our investors, at a level that we could absolutely deliver on.<br><br>[Nooyi, Q4 2011] | — Cognitive core<br>— *Transcendence* = an acceptance of something greater than the self. |
| | 17. believes that no one in the world is perfect, and he/she is no better or worse than others. | "While we are **not yet where we want to be**, our results reflect the company's underlying strength and earnings potential that I believe will become even more apparent this year."<br><br>[Moynihan, 2012] | | — an understanding of the small role that one plays in a vast universe, an appreciation of others, and a recognition that others have a positive worth |
| | 18. believes that something in the world is greater than he/she. | "In an **uncertain global economy, we believe we need to control the things we can control** — while managing through turbulence. It means building on our strengths while anticipating and planning for challenges."<br><br>[Nooyi, 2011] | | |
| H6 | 19. believes that not everything is under his/her control. | | | |

## Discussion of Findings

Discussion of Findings of Alleged Narcissistic CEOs

After describing both coding schemes in detail, we now discuss the results. Jeff Bezos of Amazon uses selected references that can be linked to narcissism by employing a number of metaphorical signs (ACM). For instance, he uses the phrase "several examples of tiny seeds growing into big trees" [Bezos, 2006] or that "new businesses need a nurturing culture" [Bezos, 2006]. In addition, he uses frequent references to extreme language or hyperboles (AC1, AC3). For instance, he talks about turning the "fulfilment centre network into a gigantic and sophisticated computer peripheral" [Bezos, 2006]. We also find signs of arrogance and superiority (E3) by referring to the fact that "we have the right skill to invent and grow large-scale, high-return businesses that genuinely improve customer experience" [Bezos, 2006]. However, we also find fewer signs of narcissistic orientation in previous letters, while certain tricks remain constant, such as the use of metaphors ("The heavy lifting is done by the math") [Bezos, 2005]. This indicates that Bezos is a versatile communicator who adapts to changing conditions quickly while rarely mentioning financial data.

Robert Nardelli frequently uses hyperboles and language of war, sport, and extreme [AC1; AC3]. He talks about "record performance […] to capitalize in the exciting and growing home improvement market" [Nardelli, 2003: 2]. In addition, these tricks are often used in combination with other signs such as superiority and arrogance [E3]. For instance, he talks about how they "have grown to become the second largest retailer in North America and the *youngest ever* to reach over $60 billion in revenue. […] We have a *tremendously* proud past and an even brighter future [Nardelli, 2003: 2]. We find that Nardelli exhibits these signs across several letters and that the number of codes we can assign is noteworthy. For instance, constant themes are recorded performance of the company that "has the strongest balance sheet in the industry and tremendous potential for future growth" while "continuing to "exceed customers' expectations […]" [Nardelli, 2005: 1]. In addition, the strength of these tricks is very high by emphasizing "stellar financial results" [Nardelli, 2005: 2] or that "no one will have the breadth of product offerings, as many convenient stores, or as diverse a customer base as The Home Depot" [Nardelli, 2005: 2]. Although depreciated, we find similar examples in the conference calls by emphasizing "fantastic" performance and a "fabulous" job [Conference calls, Q4 2005]. In addition, we find that Nardelli does not elaborate on negative scenarios or areas for improvement.

Paul Otellini frequently uses hyperboles and extreme language [AC1, AC3]. For instance, Intel brings "*unmatched* […] *cutting-edge* technologies to the market year after year" [Otellini, 2007] while employing self-styling as the archetypical company [AC2] by referring to awards whereby Intel has achieved global acknowledgement. These elements remain constant across time and are complemented by signs of

Leadership and Authority [E2]. For instance, Intel "accelerated the introduction of new products, leading the industry into an era of energy-efficient, multi-core computing and ending the year with one of the strongest product line-ups in our history" [Otellini, 2006: 1]. Otellini often uses several rhetorical tricks simultaneously by painting a picture with words. For instance, "Since our founding in 1968, we have successfully *transformed from our roots* as a memory company to become the *world's largest microprocessor company*. Today, we are *reinventing* Intel once again to focus on the growth opportunities presented through platforms […]" [Otellini, 2005: 1]. In general, Otellini mentions many technical details.

Jamie Dimon uses selected rhetorical elements but also differs in style from other CEOs. While many CEOs prefer to report rather brief results, Dimon uses the provided stage to lay out the company's strategy extensively. Dimon uses few metaphorical phrases compared to the overall length, such as to "weather the ongoing storm" or to "navigate through the turbulence" [Dimon, 2007: 1] or other elements such as extreme language [AC3] by describing "record 2007 full earnings" [Dimon, 2007]. These elements remain constant across time. However, it is worth noting the high level of technical detail, length, and even the admission of previous mistakes within the letter. For instance, Dimon admits they "would have been better off had we imposed tighter controls on the outside mortgage broker business" [Dimon, 2007: 11]. Consequently, Dimon manages to skillfully craft a detailed message by emphasizing the achievements of the company while, at the same time, also admitting weaknesses and mistakes. We also find that this style is continued in conference calls by admitting frankly that "I don't know honestly what a universal bank means" [Conference Call, Q4 2007]. Dimon acknowledges negative results and what could be done to avoid future problems, elaborating on every detail of the year while showing all possible risks in each category.

Dick Fuld of Lehman Brothers shows many signs of narcissism in terms of quantity and quality. He does this by employing extreme language and hyperboles in conjunction with signs of arrogance/superiority and leadership/authority. For instance, he explains that Lehman Brothers had its "*best year* by *almost all measures*. We set new *records* for revenues in each segment and region" [Fuld, 2005: 3] and their "unwavering commitment to excellence" [Fuld, 2005: 3]. He uses the phrase *record* extremely often and relates to their extraordinary recognition while deemphasizing competitors. For instance, he argues that they have been awarded three times in a row by four institutions, "[…] the first time any firm has achieved top ranking in all four categories" [Fuld, 2005: 6]. These narcissistic rhetorical signs are extremely present across all letters, and he frequently uses the full repertoire of narcissistic rhetoric. Fuld often uses several signs at the same time and engages in constant self-praise ("our One Firm culture, client service, teamwork, and creativity have become the hallmarks of our success"; Fuld, 2004: 6) while relating to his own achievements in non-concrete ways ("drive performance to next level and reinforce our capacity to grow"; "Our results […] demonstrate tremendous progress we have

made"; Fuld 2004: 7). The qualitative (i.e., cases that have received more than one code) and quantitative numbers of narcissistic codes are very high across letters. Although when questioned regarding the strategy of the firm, Fuld maintains that […] I am confident in the earnings potential of our franchise […] Our core business is sound" [Conference call, Q2 2008]. We argue that Fuld's letters can be seen as prototypical narcissistic speeches by exhibiting linguistic signs of unreasonable confidence and exaggerated self-praise while discarding counterfactual evidence despite the organizational decline.

## Discussion of Findings of Alleged Humble CEOs

Indra Nooyi of PepsiCo generally uses a few selected humility rhetorical elements across time. It is noteworthy that Nooyi mentions several times that PepsiCo's success is "[…] inextricably linked to society's success. […] If our financial success comes at the expense of the environment, our consumers, or our communities, we will not be viable in the long run" [Nooyi, 2013: 9]. Moreover, Nooyi generally uses Self-transcendent Pursuit regularly [H5], for instance, by lowering "our costs through energy and water conservation, as well as reduced use of packaging material; providing a safe and inclusive workplace for our employees globally; and by resting, supporting and investing in the local communities in which we operate" [Nooyi, 2012: 8]. Nooyi employs the usage of Self-transcendent Pursuit [H5] across years. For instance, she further elaborates on the "Performance with Purpose" program by emphasizing a program to fight obesity [Nooyi, 2010: 13] as well as PepsiCo's program to increase "[…] U.S. beverage container recycling rate from 38 percent in 2009 to 50 percent by 2018" [Nooyi, 2010: 13].

Generally, we find Nooyi's sentiment across the year to be neutral compared to the considerable length of her letters. Furthermore, the allocation of humble and narcissistic coding categories to sources is balanced. For instance, Nooyi's assessment of the company's performance in her 2011 [Page 2] letter is "solid" instead of outstanding.

She selectively uses strong value statements regarding the Appreciation of Others [H2] category by mentioning the associates' success. This is being done extensively. For instance, "one area that deserves mention is the great courage and humanity demonstrated by other associates" [Nooyi, 2012: 8] referring to the employee's contribution during Hurricane Sandy, the flooding in the Philippines, or the unrest in Egypt. "There are countless stories, and I wish I could tell them all in tribute because I am truly proud of our associates and humbled to be their leader" [Nooyi, 2012: 9]. Furthermore, she wants to "pay tribute to every one of the associates who have done, as they always do, a magnificent job during trying circumstances. We all owe every one of them a debt of gratitude!" [Nooyi, 2010: 14]. This continues in conference calls by stating, "I have the unusual benefit of having 4 sector heads

who each of them can be Chairman and CEO in their own right and a phenomenal CFO" [Nooyi, Conference call, 2011].

Furthermore, Indra Nooyi uses a Transcendent Self-Concept [H6] to emphasize that not everything is under her control while focusing on other aspects of the business. "In an uncertain global economy, we believe we need to control the things we can control – while managing through turbulence [Nooyi, 2011: 6]. We find that many strong value statements are continued in conference calls. For instance, self-awareness [H1], Nooyi admits that a reset of the product portfolio could have happened earlier. "I'll be honest with you. Had we not had this macroeconomic meltdown and this commodity cost volatility, this whole transformation would have happened earlier. The problem is that we faced the worst crisis and had to rest in the middle of this crisis. [...] And so we had to address that structural problem we had with the bottling systems so that we didn't have 2 companies fighting over a shrinking profit or a flat profit pool" [Nooyi, Conference call, 2011].

Mary Barra of GM uses rhetorical humility signs that are remarkable in magnitude but relatively unstable across time. She uses extreme value statements in cases of extraordinary events such as the recall of about 800000 vehicles due to ignition switch problems or the U.S. treasury bailout. She shows signs of Self-Awareness [H2] by stating that GM "accept[s] responsibility for our mistakes and commits everything within our power to prevent this problem from ever happening again" [Barra, 2014: 15]. These high-value statements of Appreciation of Others [H2] are continued in 2013 by stating that "the U.S. Treasury sold its remaining stake in the company toward the end of the year, and we will be forever grateful for the extraordinary assistance we received" [Barra, 2013: 3]. She also uses extremely strong value statements regarding Openness to Feedback [H3]. "In a global meeting with all GM employees last June, I told them I never wanted anyone in the company to put what happened behind them. This experience must be permanently etched in our memories because we never want it to happen again" [Barra, 2014: 15].

She selectively mentions Appreciation of Others [H2] by saying that she "[....] is very proud of the more than 200000 men and women around the world who make GM what it is today. Our employees are talented, passionate, and highly committed to working and winning for our customers" [Barra, 2015, no pages indicated]. We find that Barra's Appreciation of Others [H2] is exceptional in quality and quantity within the CEO cohort we studied. She devotes half a page of the letter to praise Dan Akerson, a former chairman who stepped down. He is being described as the "quintessential car guy because he drove us to refocus our entire organization around the customer, saying that is what the world's most successful companies do. At the same time, he changed how we operate by challenging the status quo in every area and promoting or recruiting change agents who helped us learn that best practice isn't always best practice. Under Dan's leadership, the GM Board of

Directors has become one of the strongest boards in corporate America." [Barra, 2013: 11].

Generally, we find the sentiment of Mary Barra to be neutral. She uses signs of Self-Awareness [H1] by stating that "our performance wasn't perfect, but we delivered solid returns" [Barra, 2014].

John Mackey of Whole Foods uses many signs of humility rhetoric. He uses Appreciation of others [H2] to state across years that "our more than 78000 team members are the heart and soul of our company, and our "not-so-secret" sauce" [Mackey, 2013].

Moreover, strong evaluative signs of Appreciation of Others [H2] are continued by describing employees' financial and non-financial support during the Haiti earthquake. "While not surprised by the outpouring of cash donations, we were humbled and grateful that our customers and Team Members contributed to help so many others in need" [Mackey, 2010].

At the same time, Mackey uses strong evaluative humble signs of "Self-Awareness" [H1] that are continued across the years. "When the first Whole foods Market Store opened in 1980, we had no idea that we would become the 8th largest public food and drug retailer in the U.S., ranking #232 on the Fortune 500" [Mackey, 2013]. Mackey makes use of the Self-Transcendent Pursuit [H5] while also stating that this pursuit is not disentangled from business objectives by stating that "we are more passionate than ever about our future and the positive impact we can make in the world by helping the natural and organic foods industry grow and succeed, educating our customers about healthier lifestyles, and by offering a different kind of business model where profits and integrity positively impact all of our stakeholders" [Mackey, 2012].

Mackey uses frequent signs of Transcendent Self-Concept [H6] by stating that "I suppose as the economy melts down again, Whole Foods is vulnerable like every other corporation in the world […] There are always circumstances out of any corporation leadership' s control and certainly, some type of total economic meltdown or cataclysmic event, I mean, things happen." [Mackey, Conference calls, Q4 2011]. Furthermore, he states, "[…] and yes, we've had some years, where we got double digits over double digits, and we'd like nothing better than to have that continue. But we're not sure we want to bet on that yet in this uncertain economic environment" [Mackey, Conference calls, Q4 2011].

Alan Mulally of Ford expresses very few signs of humility rhetoric. In fact, Mulally describes that Self-transcendent Pursuit [H5] across years is an additional part of the firms' strategy without elaborating whether or how this is aligned with business objectives. "In addition to creating great products and a strong business, we have a proud heritage of making the world a better place. We expand and realign globally and introduce new products contributing solutions to economic development,

energy security, independence, and environmental sustainability" [Mulally, 2013: 5].

In addition, he states that "community service is another important part of our heritage. Ford Motor Company Fund and Community Services, our philanthropic organization, has donated more than $1.5 billion in its 65-year history. The continued distinction across years between "great products, a strong business, and a better world" [Mulally, 2012: 3] is noteworthy.

Brian Moynihan of Bank of America uses selected signs of humility by Appreciation of Others [H2]. He states that "every day I hear from customers and clients about how our employees have made a difference – helping a small business get up and running, advising a family on a financial plan for college, or by bringing a large deal to a successful close" [Moynihan, 2012: 5]. He also uses this rhetoric to shed light on employees' contributions to the community. "We strongly believe in the importance of employee engagement in our communities, and we encourage employees to take up two hours per week of company time for volunteer activities" [Moynihan, 2011: 5].

At the same time, Moynihan uses Self-Transcendent Pursuit [H5]: "Every day our team is hard at work proving it, taking advantage of all the capabilities, expertise and resources at our disposal to make financial lives better" [Moynihan, 2012: 3].

Moynihan shows Self-Awareness [H1] by stating, "there are many issues weighing not only on us but on the entire financial services industry. These include concerns about the global economy, a sustained period of record-low interest rates, the implementation of new regulations and capital requirements, and how these new rules may affect our ability to deliver for our customers and clients" [Moynihan, 2011: 1].

Self-Awareness [H1] continues to be an issue, stating that "While our results in 2011 were lower than we would expect in a more normal environment, we are making progress in rebuilding profitability in all our core businesses" [Moynihan, 2011: 5].

By referring to the Troubled Asset Relief Program (TARP), Moynihan states that "TARP, and other actions by public officials, stabilized our financial system, and we're grateful to U.S taxpayers for making these funds available" [Moynihan, 2009: 3].

These signs of Self-Awareness [H1] can also be found in conference calls. For instance, by stating, "I question every day whether we get it right, can it go a little faster, a little slower. But the areas are really market sensitive; we move pretty quickly on cost" [Moynihan, Conference call, 2011].

## Discussion of Findings of the Quantified Results

Since we aim to provide additional evidence on the qualitative results (Hannah & Lautsch, 2011), we count the number of codes attributed to the CEOs. Table 4 shows the overall results on the alleged narcissistic codes and narcissistic rhetoric of author 1. It becomes evident that author 1 assigned 422 narcissistic rhetoric codes to narcissistic CEOs in LTS. Within the categories, AC 1, AC 2, and AC M account for more than 50 % of the codes. Table 5 shows the overall results of the alleged humble CEOs with the humble rhetoric frame. It becomes evident that author 1 assigned 150 codes. Codes H2 and H5 represent the most codes.

The results indicate that alleged humble CEOs use humility rhetoric, which is more than twice as much as alleged narcissistic CEOs use humility rhetoric (51: see Table 7). Table 6 shows the codes of alleged humble CEOs with narcissistic rhetoric. The overall count of 214 indicates that alleged humble CEOs do make use of confidence-inducing vocabulary such as narcissism, but they use these vocabularies about as half as much as CEOs with aligned personalities and rhetoric. One can argue that alleged humble CEOs are also forced to engage in this kind of rhetoric. Table 7 indicates the overall count of codes of humility rhetoric with narcissistic CEOs. Unsurprisingly, alleged narcissistic CEOs use a few humility rhetorics (51). The results suggest that these CEOs engage in CEO speak, meaning that humble CEOs also need to engage in rhetoric consistent with the overall cohort (i.e., confidence-inducing vocabulary), but alleged narcissistic CEOs engage more than twice in this rhetoric than alleged humble CEOs. Table 8 (narcissism) and Table 9 (humility) show a generally satisfying level of agreement on the total number of codes as well as within categories between author one and author two across both tables.

Interestingly, a generally higher agreement on the humility coding compared to narcissism can be observed in Table 9, which could be due to the less complex coding of the construct. It is observable that most disagreement stems from the narcissism categories E3 and AC1 in Table 8. The former describes the content category Superiority/Arrogance, whereas the latter describes stylistic means of hyperboles. Hyperboles might be a sign of arrogance as opposed to distinct categories, thereby shedding light on the importance of definable empirical categories that affect the empirical results.

**Table 4. Coding Allocation Narcissism Codes Alleged Narcissism**

| Category | *LtS* Codes Percentage Composition | *LtS* Number of Codes |
|---|---|---|
| E1 | 1.18 % | 5 |
| E2 | 8.77 % | 37 |
| E3 | 15.88 % | 67 |
| E4 | 8.29 % | 35 |
| AC 1 | 22.51 % | 95 |
| AC 2 | 10.90 % | 46 |
| AC 3 | 23.70 % | 100 |
| AC M | 8.77 % | 37 |
| total | 100 % | 422 |

**Table 5. Coding Allocation Humility Codes Alleged Humility**

| Category | *LtS* Codes Percentage Composition | *LtS* Number of Codes |
|---|---|---|
| H1 | 10.67 % | 16 |
| H2 | 27.33 % | 41 |
| H3 | 15.33 % | 23 |
| H4 | 0.67 % | 1 |
| H5 | 33.33 % | 50 |
| H6 | 12.67 % | 19 |
| total | 100 % | 150 |

**Table 6. Coding Allocation Narcissism Codes Alleged Humility**

| Category | *LtS* Codes Percentage Composition | *LtS* Number of Codes |
|---|---|---|
| E1 | 0.93 % | 2 |
| E2 | 1.40 % | 3 |
| E3 | 32.24 % | 69 |
| E4 | 0.00 % | 0 |
| AC 1 | 0.93 % | 2 |
| AC 2 | 9.35 % | 20 |
| AC 3 | 40.19 % | 86 |
| AC M | 14.95 % | 32 |
| total | 100 % | 214 |

**Table 7. Coding Allocation Humility Codes Alleged Narcissism**

| Category | *LtS* Codes Percentage Composition | *LtS* Number of Codes |
|---|---|---|
| H1 | 17.65 % | 9 |
| H2 | 33.33 % | 17 |
| H3 | 0.00 % | 0 |
| H4 | 1.96 % | 1 |
| H5 | 29.41 % | 15 |
| H6 | 17.65 % | 9 |
| total | 100 % | 51 |

**Table 8. Consistency of Coding Allocations Across Authors: Narcissism Codes Applied to Alleged Narcissistic CEOs**

| Category | *LtS* Number of Codes | *LtS* Codes Percentage | *LtS* Number of Codes | *LtS* Codes Percentage | Consistency Rate |
|---|---|---|---|---|---|
| | **Author 1** | **Author 1** | **Author 2** | **Author 2** | *LtS Code* |
| **E1** | 5 | 1.18 % | 2 | 0.47 % | 2.50 |
| **E2** | 37 | 8.77 % | 26 | 6.09 % | 1.42 |
| **E3** | 67 | 15.88 % | 175 | 40.98 % | 0.38 |
| **E4** | 35 | 8.29 % | 12 | 2.81 % | 2.92 |
| **AC 1** | 95 | 22.51 % | 59 | 13.82 % | 1.61 |
| **AC 2** | 46 | 10.90 % | 49 | 11.48 % | 0.94 |
| **AC 3** | 100 | 23.70 % | 85 | 19.91 % | 1.18 |
| **AC M** | 37 | 8.77 % | 19 | 4.45 % | 1.95 |
| total | 422 | 100 % | 427 | 100 % | 0.99 |

**Table 9. Consistency of Coding Allocations Across Authors: Humility Codes applied to Alleged Humble CEOs**

| Category | *LtS* Number of Codes | *LtS* Codes ercentage | *LtS* Number of Codes | *LtS* Codes Percentage | Consistency Rate |
|---|---|---|---|---|---|
| | **Author 1** | **Author 1** | **Author 2** | **Author 2** | *LtS Codes* |
| **H1** | 16 | 10.67 % | 12 | 8.70 % | 1.33 |
| **H2** | 41 | 27.33 % | 35 | 25.36 % | 1.17 |
| **H3** | 23 | 15.33 % | 23 | 16.67 % | 1.00 |
| **H4** | 1 | 0.67 % | 1 | 0.72 % | 1.00 |
| **H5** | 50 | 33.33 % | 60 | 43.48 % | 0.83 |
| **H6** | 19 | 12.67 % | 7 | 5.07 % | 2.71 |
| total | 150 | 100 % | 138 | 100 % | 1.09 |

## Theoretical Implications

By adopting a perspective that views narcissism and humility as polar opposites, we contribute to the literature on strategic management, particularly CEO narcissism and humility. In particular, the absence and not presence of linguistic signs may have greater magnitude than previously assumed because CEOs differ in a number of key linguistic dimensions. For instance, while most CEOs may often mention the contribution of employees generally, they differ starkly in the absolute amount they shed attention to these issues (i.e., the number of lines in a document devoted to a particular issue in relation to the overall length) as well as the magnitude and granularity of their contributions that are being mentioned. For instance, CEOs describe the same topic differently depending on their personality and disposition. Therefore, we provide linguistic cues that can be seen as warning signs in the literature (e.g., Amernic et al., 2007; Amernic & Craig, 2007; Craig & Amernic, 2011). Moreover, we show not *that* but *which* linguistic dimensions within a disposition are more likely to be employed by alleged leaders. For instance, alleged narcissistic

CEOs are more likely to employ the language of war, sports, and extremes as well as hyperboles than other dimensions. We show that alleged narcissistic CEOs use metaphors selectively, providing evidence that narcissistic rhetoric is distinct from transformational rhetoric. This indicates that metaphors, a key rhetorical element of leaders, are part of the standard rhetorical repertoire rather than characteristics of alleged narcissistic leaders.

More generally, we offer a framework that provides a more systematic approach to studying narcissism and humility by providing established dimensions grounded in the current literature. To our best knowledge, it is the first study to examine both traits in conjunction in letters to shareholders and conference calls. Since these organizational narratives remain an important source of information retrieval in management research (Morris, 1994), we show how humility and narcissism rhetoric appear in shareholder letters and conference calls. Therefore, we show that these rhetorical signs act as cues for observers and hence can be theoretically independent of individuals' personality disposition. We go beyond the assumption that alleged narcissistic CEOs should employ more narcissistic rhetoric. Our data indicate that alleged narcissistic CEOs use more than twice as much narcissistic rhetoric than alleged humble CEOs (422 versus 214). This indicates that alleged humble CEOs also utilize confidence-inducing vocabulary and can be labelled as CEO speech, a genre effect of CEOs. However, the magnitude of this effect is much smaller, showing surprisingly high discrepancies in CEO speeches. Furthermore, we show that alleged narcissistic CEOs use a third of humility rhetoric as alleged humble CEOs do (51 versus 150).

## Practical Implications

The findings have important implications for practice. Certain CEO styles may be more appropriate under certain boundary conditions (e.g., industry effects, market volatility). For instance, more narcissistic CEOs may be more suited to act quickly and confidently in cases of market volatility and in cases where fast product innovations are needed, while more humble CEOs are needed in mature companies and stable environments in which listening to subordinates and having realistic views of the situation is the key. Therefore, inferring signs of CEO styles from unobtrusive measures such as language and its change over time is very important to detect for shareholders- and stakeholders. Especially since alternative information sources for shareholders- and stakeholders are limited in quantity and quality. The provided approach may help lower the information asymmetries by considering linguistic signs of CEO styles. For instance, a board of directors in a stable and mature company preparing a vetting process for a relatively humble CEO might find it helpful to acknowledge the presence of humility rhetoric of a candidate, whereas, at the same time, the relative absence of narcissistic rhetoric provides an equally important cue for the board of directors.

We provide a scheme that is independent of the organizational narrative (e.g., letters to shareholders and conference calls). However, we advocate that our schemes are not used in isolation but as a complementary source in the information-gathering process. In addition, the schemes can be used for "at a distance" measures of extreme cases of narcissism or humility rhetoric (i.e., scoring on very high or very low levels along a continuum) but not for isolated inference of personality inclination. Since personality attributes of CEOs are usually hard (i.e., resource intensive) to obtain but have consequences for a number of key firm-level decisions, these unobtrusive measures can be one pillar of information retrieval to validate CEO personality dispositions. The absence or dampened usage of extreme linguistic cues (i.e., narcissistic rhetoric) might be sufficient for shareholders to refrain from destructive leadership of CEOs that are not aligned with shareholder preferences, such as performance variance or increased acquisition activities (Chatterjee & Hambrick, 2007). We find that the chosen CEOs differ in a number of key dimensions linguistically. For instance, signs of self-awareness *that performance wasn't perfect, but we delivered solid returns* are in stark contrast to linguistic cues that relate to *stellar* or *extraordinary performance.* We also find a few cases in which CEOs blend both humility and narcissism rhetoric constructs. For instance, by admitting that "results are not yet where we want them to be, [but] we believe the progress we have made during the past year will ultimately be reflected in our performance." [Dimon, 2005: 2]. However, in line with our counting of the codes, the analysis indicates that alleged narcissistic CEOs employ more than twice as much narcissistic vocabulary as humble CEOs do. Therefore, these cues can be seen as severe corporate warning signs (Craig & Amernic, 2011, 2016) that are not just genre effects (CEO speak) but reflect personality inclinations.

Finally, narcissism and humility can be seen as malleable qualities rather than fixed dispositions (Dweck, Hong, & Chiu, 1993; Owens et al., 2015). Therefore, managers may actively seek to develop these traits or, at least, use linguistic cues to invoke a certain impression with the audience to benefit from causal attribution of the audience (i.e., journalists, analysts, employees, etc.) towards the decision-maker.

## Limitations and Further Research

Our research has important avenues for future research. First, we neglect, other than previous research (Owens et al., 2015; Zhang et al., 2017), a paradox perspective in which humility and narcissism interact. It might be that narcissism and humility have a sequential manner or are moderated by certain characteristics. For instance, some CEOs may have more latitude to exert their latitude due to firm- or industry-level characteristics (Hambrick & Finkelstein, 1987). Since a qualitative frame is generally unsuitable for controlling for these characteristics, future research could further elaborate on these time- and context variables. Qualitative content analysis can not easily be standardized, and different interpretations by different

researchers are possible, likely, and intended (Krippendorff, 2004: 88). Therefore, the assignment of the categories is not always easy and clearly possible due to overlaps. Second, we neglect the fact that CEOs may use linguistics strategically to project certain impressions. Although this distinction is irrelevant since we are interested in narcissism/humility rhetoric, it would be interesting to supplement linguistic analyses with other archival or expert data to infer actual narcissism or humility orientations. In other words, the primary objective was to provide observable cues for share- and stakeholders to trace linguistic signs across time but *not* to engage in normative statements whether, when or for whom narcissism/humility is more appropriate. Third, we do not elaborate on an even more fine-grained operationalization of narcissism or humility rhetoric. For instance, future research could look at different forms of narcissism rhetoric to better understand how more nuanced descriptions of productive or unproductive narcissism (Maccoby, 2000; Wasylyshyn, 2012) and how related constructs such as hubris interact with humility rhetoric. In particular, it is likely that our narcissism rhetoric measure is related to attributed charisma (e.g., Galvin, Waldman, & Balthazard, 2010). It would be interesting to assess how narcissism and humility rhetoric jointly affect charisma perception. Researchers should be aware that the employed coding scheme consists of already validated and previously used humility/narcissism dimensions, making it clear that a precise differentiation between constructs is needed. Finally, although we use two very central and established sources of CEO speech, CEOs might still behave differently in certain organizational narratives. Therefore, it would be interesting to complement the analysis with other sources of CEO speech, for instance, video/audio-metric approaches (e.g., Petrenko et al., 2016). For instance, audio transcripts of CEOs from conference calls may provide spontaneous insights into the CEO's cognition and provide an additional means for research by incorporating hearing into human senses. Despite this, content analysis of the text is context-sensitive and, therefore, an effective way to portray the big picture and the conceptions of the data source. It acknowledges the holistic qualities of text sources and allows the researcher to go deeper into the whole body of a text (Krippendorff, 1980).

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