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Taoist leadership and employee green behaviours: A cultural and philosophical micro-foundation of sustainability

#### **Abstract**

Existing research shows that leadership behaviours can influence the pro-environment beliefs of employees and their green behaviours. However, the mechanisms that nurture the pro-environment attitudes of employees remain unclear. By juxtaposing Taoist philosophy and Aldo Leopold's land ethic, this paper explores *how* the former can theoretically advance the latter from a cultural and philosophical micro-foundational perspective. Taoism, which treats human beings and the natural environment as components of an integral oneness, has important implications for both Taoist leadership behaviours and the management of sustainability. We posit that the attributions of Taoist leadership—*rejection of domination*, *reverse thinking, and selflessness*—can nurture employee pro-environment attitudes. Using the narratives of Chinese leaders and employees, our research empirically shows that pro-the environment attitudes and green behaviours of employees can be nurtured through Taoist leadership. Our paper contributes to field of sustainability management by suggesting Taoism as a cultural and philosophical micro-foundation for sustainability.

**Keywords**: Taoist leadership, Aldo Leopold's land ethic, employee green behaviour, culture, philosophy, micro-foundation, pro-environment attitudes

#### Introduction

Globally, sustainability management has received significant attention from academics, practitioners, and policymakers (Bansal & Song, 2017; Starik & Marcus, 2000; Starik, Rands, Marcus, & Clark, 2010). Multiple global, regional, and local sustainability issues have been identified as being worthy of significant attention and action. Among many others, these include climate change, water quality and scarcity, economic inequality, and biodiversity (Brown, 2010; Winn & Pogutz, 2013).

Numerous stakeholders have been identified as being key players in the advancement of sustainable development. They exist at the "meso level" of business, government, and non-profit organizations, and at the "micro level" of individuals and small groups within these organizations—i.e., as employees (Starik, Stubbs, & Benn, 2016). With its focus on individual action-interaction, a more nuanced grasp of micro-foundations can play a critical role in enhancing macro-level sustainability management (Felin, Foss, & Ployhart, 2015). Some recent reviews have summarized and highlighted the importance of psychological micro-foundations in advancing research on sustainability and corporate social responsibility (CSR) (Gond, El Akremi, Swaen, & Babu, 2017; Rupp & Mallory, 2015). However, identifying the research gap, especially the relational driver for sustainability and social responsibility, remains an urgent priority.

Pro-environment or green employee behaviours can contribute to sustainability or sustainable development, two concepts that are often associated with one another in various bodies of academic literature (Starik & Kanashiro, 2013). While many definitions of these two latter concepts have been offered, they are generally associated with individual, organizational, and societal efforts to advance long-term quality of life, in both its environment and socioeconomic acceptations.

In the domain of employee green behaviours, previous research has suggested that leadership can influence employee moral attitudes, which, in turn, affect voluntary green behaviours (Kim, Kim, Han, Jackson, & Ployhart, 2014). Another recent study has indicated that the relationship between green behavioural intentions and subsequent employee green behaviours is positive only when employees perceive a favourable green psychological climate (Norton, Zacher, Parker, & Ashkanasy, 2017). However, the mechanisms that elicit employee pro-environment attitudes and actions remain unclear. We seek to fill this important research gap regarding the relational drivers of sustainability by investigating how business leadership affects employee green behaviours.

Aldo Leopold's "land ethic" has, at its core, the human protection, conservation, preservation, and rehabilitation of nature through the "community logic" (Leopold, 1949). In this community, human beings and nature operate as interdependent beings. However, the mechanisms that underpin this "land ethic" from a theoretical perspective remain unclear. We suggest that Chinese Taoist philosophy can fill this gap, providing insights into land ethic and sustainability from a cultural and philosophical micro-foundational perspective. A Taoist leader's attitude towards nature is not one of control but one of harmonious coexistence (Xing, 2016). Hence, the philosophy transmitted by Taoist leadership may be an important factor in underpinning employee pro-environment attitudes. Thus, our research question is: how can Taoist leadership nurture employee pro-environment attitudes?

Based on 42 qualitative in-depth interviews conducted with Chinese business leaders and employees in different industries, this paper adopts the narrative research method. Narrative is an effective tool for leaders to mobilize resources, embrace initiatives, and envisage environment and social sustainability for their respective organizations and society at large. We found that leader narrative and storytelling is a powerful tool to empower, embrace, and engage employees in achieving operational and strategic objectives towards sustainability.

Our research makes several contributions to the nascent and vibrant literature on the microfoundations of sustainability. First, it does so (Gond et al., 2017) by drawing upon traditional Chinese cultural resources. In particular, it adds to and enriches Leopold's theoretical framework of environmental action by explicating how the Taoist philosophy of treating oneself and the natural environment as one can theoretically advance Leopold's land ethic. Second, our study contributes to employee green behaviours by articulating the three attributions of Taoist leadership as potential mechanisms suited to nurture employee proenvironment attitudes. Third, Taoist leadership may trigger employee pro-environment harmonious passion, which can amplify the relationship between Taoist leadership and employee green behaviours, thereby encouraging employees to act in an eco-friendly manner. The article is organized as follows. We first review the literature on the micro-foundations of sustainability and employee green behaviours, Aldo Leopold's land ethic and Taoist philosophy, and leadership for sustainability as theoretical building blocks for our arguments. Then, we describe this study's research design and research context and present our findings. We then conclude with a discussion of its implications, limitations, and future research directions.

#### Literature review

## The micro-foundations of sustainability and employee green behaviours

In recent years, the field of sustainability management has received significant scholarly attention in relation to the existential global societal and ecological challenge presented by climate change. A recent review suggested that sustainability and corporate social responsibility (CSR) are based on different theoretical orientations (Bansal & Song, 2017). Arguably, CSR is theoretically rooted in the literature of ethics, whereas sustainability tends to adopt a systemic perspective. A nuanced understanding of micro-foundations can play a

critical role in helping us better understand the macro-level sustainability phenomenon (Barney & Felin, 2013; Foss, 2011). The micro-foundations movement emphasizes that individual action and interaction affect macro-level observations (Felin et al., 2015). Recent research has begun exploring the behavioural micro-foundations of sustainability management. For instance, one study has revealed that the organizational ethic of care can drive employee involvement in sustainability-related behaviours at work (Carmeli, Brammer, Gomes, & Tarba, 2017). Another study has found that the number of women on an organization's board of directors has a direct effect on its attitude towards environmental sustainability, wherein the female-oriented cultural effects were measured by grammatical gender marking (Shoham, Almor, Lee, & Ahammad, 2017). One recent systematic review of the psychological micro-foundations of CSR has outlined the drivers and evaluation of, and responses to CSR (Gond et al., 2017). However, little research has focussed upon the relational drivers of sustainability, especially from the perspective of the relationship between business leaders and employees.

Pro-environment behaviours have been investigated in the literature stream of environmental psychology (Bamberg & Möser, 2007). The underpinning theoretical framework is that values affect attitudes, which, in turn, influence intentions and then lead to behaviours (De Groot & Steg, 2009). This argument connects to the Theory of Planned Behaviour (TPB), which suggests that intentions can affect behaviours (Ajzen, 1991). The TPB has been the most widely used theoretical framework to examine employee green behaviours (Norton, Parker, Zacher, & Ashkanasy, 2015). Although social norms are a necessary condition for the achievement of employee green behaviours, interventions are required to bring it about (Vlachos, Panagopoulos, Bachrach, & Morgeson, 2017). For instance, one conceptual model suggests that intervention-related goals can affect the effectiveness of workplace

interventions in bringing about changes in pro-environment behaviours (Unsworth, Dmitrieva, & Adriasola, 2013).

The existing research on employee green behaviours (EGB) largely falls into two categories—namely, required employee green behaviours, or REGB, and voluntary employee green behaviours, or VEGB (Norton et al., 2015). REGB refers to the policies and organizational rules that regulate employee behaviours, such as any explicit and clearly stated rules that employees must follow regarding environmental protection; thus, the REGB literature mainly relies on the organizational design and enforcement of organization rules. By contrast, VEGB focusses on the intentions, motivations, and willingness of individuals to behave in an environmentally friendly way in the absence of explicit rules and regulations. This literature tends to leverage psychological concepts to explain voluntary workplace green behaviours (Kim et al., 2014).

However, the existing literature does not articulate the mechanisms that foster employee green behaviours. Individual-level values in favour of sustainability can influence the green behaviours of employees (Starik & Kanashiro, 2013), but employees need to be motivated and supported to undertake pro-environment actions, making external influence and interventions a necessary step for the promotion of employee green behaviours (Renwick, Jabbour, Muller-Camen, Redman, & Wilkinson, 2016). One recent study has indicated that the relationship between green behavioural intentions and subsequent employee green behaviours is only positive when employees perceive a favourable green psychological climate (Norton et al., 2017). This study reveals that pro-environment attitudes determine employee green behaviours. Another recent study has found that genuine (self-serving) managerial CSR attributions are positively related to genuine (self-serving) employee ones, highlighting the importance of employee interpretations of CSR (Vlachos et al., 2017).

Values and beliefs need to be cultivated to promote sustainable pro-environment behaviours. Furthermore, internalized religious self-identities can influence ethical behaviours in organizations, and this relationship is moderated by identity salience and motivational orientation (Weaver & Agle, 2002). This proposition highlights the importance of microfoundations in driving ethical and pro-environment behaviours. Furthermore, individual motivations may be enhanced by inter-personal relationships, such as leadership practice. Hence, in this paper, we investigate the mechanisms that advance the "norm" of employee green behaviours, which could be either required or voluntary, or both. Therefore, our study is aimed at answering the following research question: how can employee pro-environment attitudes be nurtured through leadership?

## Aldo Leopold's land ethic as a theoretical framework

Considered to be the father of wildlife ecology, Aldo Leopold (1887-1948) is best known by his book "A Sand County Almanac" (Leopold, 1949), which reflects the evolution of a lifetime of love, observation, and thought, and led to a philosophy of action that guided the discovery of what it means to live in harmony with the land and one another (Goralnik & Nelson, 2011). As a theoretical framework, Leopold's land ethic focusses on the community logic, emphasizing the need to treat humanity and nature as a holistic, integrated community. A theory of environmental action explains the rationale behind why human beings ought to care about the preservation of wilderness, old-growth forests, and biodiversity, and articulates why they should act on behalf of the nonhuman world (Leopold, 1949). This community logic emphasizes the relationships that inspire care and empathy, while focussing on a holistic model of biotic community in which human beings and nature operate interdependently. In sustainability management studies, Leopold's land ethic resonates with the notion of biodiversity (Winn & Pogutz, 2013). For instance, one recent case study of the Barilla farming project has suggested that the creation and combination of ecological and technical

knowledge can generate economic, social, and ecological benefits for farmers, surrounding communities, and the focal company (Pogutz & Winn, 2016).

The three core dimensions of Leopold's land ethic are: (1) building a biotic community, (2) shifting the role played by human beings vis-à-vis nature from that of conquerors to that of contributors, and (3) maintaining the right to a continued existence in a natural state (Leopold, 1949). The biotic community underpins the view of wholeness, with human and nonhuman life sharing the same planet. The dimension of human beings shifting from conquering to contributing with respect to nature denotes a view towards 'others', while the boundaries of the community should be extended to "include soils, waters, plants, and animals or collectively, the land" (Leopold, 1949:204). Maintaining the right to a continued existence in a natural state implies mutual respect for other-fellow members and respect for the community.

## Taoist philosophy and sustainability from a micro-foundational perspective

We suggest that the Chinese Taoist philosophy can shed some revealing insights into the theoretical advancement of the land ethic; thus, it can provide a cultural and philosophical micro-foundational perspective for sustainability management. The seminal paper of micro-foundations for resource-based theory suggests that micro-foundations entail explanations that are rooted in individual action and interaction (Foss, 2011:1415), wherein action and interaction resonate with the philosophy of action endorsed by the land ethic. Building upon the notion of cultures as toolkits (Swidler, 1986), individual actors can use different "cultural repertoires" as resources at their disposal for their ends (Weber & Dacin, 2011). For instance, research has found that the everyday activities of organizations, such as sustainability issues and practices, may create possibilities for people to experiment with new cultural resources and invite different interpretations that potentially alter the cultural order and bring about

cultural change (Howard-Grenville, Golden-Biddle, Irwin, & Mao, 2011). Hence, we build upon the 'culture as a resource' argument by exploring Taoist philosophy as a microfoundation of sustainability.

Lao Tzu (600-470 BC), the founder of Taoism, explained his theory of natural thinking in his book *Tao Te Ching*. "Tao" refers to the natural way obeyed by the universe (Feng, 2000), whereas "Te" refers to virtue (Feng, 2000). Lao Tzu proposed the core principle of Taoism, or *Wu Wei*, translated either as *governing by doing nothing* or *non-coercive action*. Taoist integrated thinking in regard to nature and human beings indicates that harming one will subsequently harm the other (Feng, 2000; Xing & Sims, 2012). Therefore, we argue that Taoism, which values spontaneous, natural simplicity in desires and manners, may facilitate the triggering and sustainment of green behaviours by employees. Moreover, Taoism advocates the merging of the human self with nature to the end of cultivating the human world with ecological sensitivity and in harmony with nature (Xing, 2016). Taoist thinking helps human beings to develop pro-environment beliefs of living *with* nature rather than *over* it, enhancing our awareness of the importance of leading good and sustainable lives on our finite Earth.

These Taoist views of sustainability resonate with and contribute to Leopold's land ethic. Taoist leaders understand that employee green behaviours cannot be coerced (Xing, 2016). Thus, leadership should adopt *Wu Wei*, which requires leading with the flow of nature, so that subordinates will feel that their behaviours are not being coerced and thus pro-environment attitudes and behaviours will come from their perceived spontaneity and individual initiative (Xing & Sims, 2012). This is an effective way of leading by following the natural flow, one that enables leaders to achieve the best results with little effort. While Taoism strives to minimize the coercive role of leaders, it never eliminates it altogether. Taoist leaders "transform" their will into their subordinates' own perceptions (Xing & Sims, 2012). Thus,

leaders hide their leadership with the knowledge that subordinates will voluntarily bend to their will. This uncoercive action reconciles the notion of the biotic community found in Leopold's land ethic.

Taoist leadership is characterized by its reverse thinking, which Lao Tzu saw as the general principle underlying the change of things (Xing, 2016). If a thing develops to the extreme, then it necessarily transforms into its opposite. As Lao Tzu put it, "Those who would take hold of the world and act on it, never, I notice, sustained . . . thus, leaders avoid extreme, avoid arrogance, and avoid excess" (Tao Te Ching, Chapter 29). By combining flexibility and quiescence with harmony and a humble mind, leaders can perceive subtle signs of change and thus control events with little effort, 'Deal with things before they emerge; Put them in order before there is disorder.' (Chapter 64). This echoes the dimension of Leopold's land ethic that envisages human beings as contributors to, rather than conquerors of, the land.

By harmonizing with nature, Taoist leaders behave selflessly (Xing, 2016). Taoists expand their identification to the natural world, with Lao Tzu stating, "Those who esteem the nature as self will be committed to nature. Those who love nature as self will be entrusted with nature" (Chapter 13). This idea describes the mental state of the self and things being inextricably intertwined with each other and becoming a oneness, implying a harmonious relationship between them. According to this process of merging the self with nature, people will become pro-environment and behave accordingly. This resonates with Leopold's maintaining the right to a continued existence in a natural state. To summarize, Table 1 shows the three attributions of Taoist leadership and their implications on sustainability with illustrations from the Tao Te Ching.

----- Insert Table 1 about here -----

## Leadership and the role of attitude for sustainability

Leadership is a multi-faceted organizational and management topic with a long history (Denis, Langley, & Sergi, 2012) that is also fundamental to the study of human behaviour and organization (Christensen, Mackey, & Whetten, 2014). However, the leadership domain associated with sustainability scholarship, such as leader influence on employee proenvironment behaviours, has only recently emerged (Robertson & Barling, 2013). Leaders need to interpret how an organization's sustainability 'links' to the wider system, including the organization itself and its members (Metcalf & Benn, 2013). Leadership has been identified as an important intervening factor impacting green human resource management (HRM) practices (Renwick et al., 2016). Furthermore, leaders can nurture an organizational climate that rewards issue-selling behaviours from the bottom-up to embrace proenvironment initiatives (Dutton & Ashford, 1993; Morrison & Milliken, 2000).

One important aspect of leadership is that it can influence employee behaviours through employee attitudes. Recent research has argued that the moral attitudes of leaders can promote those of employees, leading the latter to take up green behaviours in the workplace on their own (Kim et al., 2014). This view suggests that ethical thought and behaviour are not the result of deliberative and intentional rational processes, but are instead driven by moral intuition (Weaver, Reynolds, & Brown, 2014). Leadership behaviours can influence the moral attitudes of employees, which determine specific types of follower behaviours, such as pro-social ones (Fehr, Yam, & Dang, 2015).

Leadership behaviours may assist employee self-evaluation processes geared to promote more integrative thinking, which can significantly affect individual-level support of environmental issues (Sonenshein, DeCelles, & Dutton, 2014). However, the

abovementioned study did not articulate how leadership behaviours influence employee moral attitudes. Explicitly, what attitudes that can trigger pro-environment behaviours have been reflected by employees? Therefore, we follow this line of research and further examine how leadership may nurture employee moral attitudes and, specifically, their pro-environment ones.

We join this conversation by highlighting that leadership has a very important bearing in addressing sustainability. We argue that leadership—and especially Taoist leadership—can foster employee pro-environment attitudes and evoke a pro-environment passion to promote green behaviours on their part. Research and scholarship on sustainability has carefully documented its rationale and beneficial advantages. However, this emphasis on logical reasoning seems to ignore the effectiveness of passion in facilitating green behaviours. In fact, a passion for sustainability may trigger the undertaking of spontaneous pro-environment actions by employees (Shrivastava, 2010). Leopold also emphasized the role played by attitude and passion, "No important change in ethics was ever accomplished without an internal change in our intellectual emphasis, loyalties, affections, and convictions . . . [O]bligations have no meaning without conscience, and the problem we face is the extension of the social conscience from people to land."(Leopold, 1949:209–210). Therefore, our research question centres on the following question: how can Taoist leadership nurture employee pro-environment attitudes?

#### Research method

#### Research context

Our research context focusses on leadership and employee green behaviours in Chinese companies. The rapid growth and development of the Chinese economy has had highly adverse consequences for the national natural environment. The stress on putting economic

growth first, and then repairing any environmental damage caused by such growth is not a viable option, especially given the recent rampant air pollution affecting multiple Chinese cities (Yang, 2016). Government, business organizations, and NGOs—such as environmental organizations—have taken various actions to protect the environment and raise proenvironment awareness to reduce any negative environmental impact resulting from the actions of both individuals and organizations. Recent research has also pointed out the peculiar sustainability and CSR characteristics of the Chinese context. For instance, in China, CSR reporting tends to focus on substance, as opposed to being a symbolic tool for the benefit of shareholders, which reflects the influence of the government (Marquis & Qian, 2014). The development of CSR in China has been influenced by the longstanding institutional structures both of businesses and the business system, along with the impact of new institutionalism on corporations arising from the societal pressures found in their global and national environments. Hence, the existence of a dual State-led and Society-led model (Hofman, Moon, & Wu, 2015). In a similar vein, another recent study revealed a more complex phenomenon of CSR reporting by Chinese publicly listed firms, which need to comply with the conflicting demands made by the central and local governments (Luo, Wang, & Zhang, 2017).

From a cultural and philosophical standpoint, traditional culture has an important bearing on contemporary Chinese management practice. For instance, Mr. Zhang Ruimin, Hair's CEO, is strongly influenced by Taoism in leading his employees (Xing, 2016). One previous study found that Chinese leaders in the financial services industry adopt the Taoist *Wu Wei* in practicing leadership (Xing & Sims, 2012). Recent reviews of sustainability and business ethics in the Chinese context have pointed to a growing imbalance between empirical and conceptual/theoretical development, and have suggested that traditional culture remains a salient source suited to advance future research (Marquis, Jackson, & Li, 2015; Yin & Quazi,

2016). Thus, we argue that the residual Taoist influence found in Chinese culture can affect the attitudes of the current generation of Chinese managers and employees<sup>1.</sup>

## The narrative and storytelling research methodology

The nature of our research question determines the choice of a qualitative research method for the purpose of theory building and extension (Eisenhardt, Graebner, & Sonenshein, 2016). In particular, a narrative and storytelling research methodology can reveal the nuances and the underlying reasoning logic applied in studying complex and dynamic organizational phenomena, and can sometimes produce surprisingly interesting results (Vaara, Sonenshein, & Boje, 2016). For instance, narrative and storytelling can be used to capture the conflicting emotions of individuals—by which managers can be both liked and disliked in an organization—from multiple narrative accounts (Sims, 2005). Narrative approaches to cultural analysis are particularly appealing due to their ability to capture the richness and complexity of inter-personal encounters in organizational life and their capacity to go beyond what can be assessed through more traditional sources of data such as surveys (Weber & Dacin, 2011). Furthermore, scholars have encouraged organizational researchers to use unconventional research methods to capture greater diversity and pluralism through qualitative research (Alvesson & Gabriel, 2013; Cornelissen, 2016). Therefore, we rely on a biographical narrative study (Wengraf, 2001) with an emphasis on the storytelling method, which enables leaders and employees to relate details from their work experiences. Ultimately, sustainability constitutes an urgent challenge facing humankind globally. Stories and storytelling can empower anyone to emotionally engage with the rising opportunities towards sustainability.

## Sample and data collection

The qualitative data for this study were collected by conducting in-depth narrative interviews with 42 Chinese senior and middle managers and employees of Chinese firms across a wide spectrum of industries, including, among others, solar energy, mining, chemicals, and car manufacture (see Table 2). The sectors chosen for the study have a common thread—namely, the salience of environmental protection. Some of them are strongly regulated by the government and industry associations—and this is closely related to requirements for employee green behaviours—while others may not be subject to strict regulations to protect the environment. This diverse set of industries provides the opportunity to widen the scope of the examination of our research question. The interviewee sample consisted of 18 senior-level and nine middle-level managers, and 15 employees. Most of the managers were around 40-45 years old. We conducted open-ended narrative interviews to elicit the interviewees' life stories—as they related to environmental protection—and the influence of these stories on employee pro-environment behaviours.

----- Insert Table 2 about here -----

Each interview was divided into two sub-sessions. In the first, we initially asked questions aimed at having the respondents reflect on and describe their leading experiences in dealing with employee pro-environment behaviours. The following are examples of these questions: "How do you promote green behaviour in your company/department? Please give examples."; "How do you cultivate your employees' green behaviours? Please give examples."; "What is the most effective way that you find suited to foster employee green behaviours? Please give examples"; "Have you engaged in self-reflection regarding the success and failure of promoting employee green behaviours? Please give examples of what have you learned."

This narrative approach gave managers the opportunity to reflect on their past experiences and make sense of their present leadership behaviours (Labov & Waletzky, 1998).

In the first session of employee interviews, we also asked questions such as "Do you think you harbour pro-environment beliefs and adopt green behaviours, and where did they originate? Please give examples"; "Have you ever influenced the green behaviours of others? Please give examples"; "How do you value your leaders' leadership abilities in influencing your green behaviours? Please give examples"; "From your perspective, what are the pro-environment attitudes of your senior managers and of your department head, and how do they influence your green behaviours? Please give examples." During this session, we took note of any important topics that we would like to ask interviewees to clarify afterwards. In the second session, for both managers and employees, we asked probing questions to elicit more narratives about some of the topics that had clearly become more salient (Wengraf, 2001).

During the process of analysis, we found that, for our interviewees, the principles of Taoism emerged as an organizing concept, both as an expression of the managers' leadership behaviours and of the employees' views on the latter. We brought an open mind to the data analysis process. The coding protocol was guided by the following overarching questions: What are the implications of Taoist leadership on environmental beliefs? What are the employees' pro-environment attitudes on Taoist leadership? We engaged in multiple iterations of coding; from these, six types of Taoist implications on pro-environment beliefs emerged: (1) values of non-forcing, (2) leading by following the natural flow, (3) the relationship between human beings and nature operates cyclically and human beings know how to stop, (4) dialectically balancing taking and giving, (5) human beings and nature have an integrated oneness, and (6) freeing the self from pursuing endless self-interests. Other categories, such as family and society, emerged but appeared to play less significant roles in

relation to our research focus on Taoist leadership; thus, they were not included. The robustness checks were done by an experienced independent researcher with a high bilingual Chinese-English proficiency. The analysis then moved to examining the relationships among these initial categories and aggregating them into three second-order categories, namely, rejection of domination, reverse thinking, and selflessness. Table 3 summarizes our data analysis by outlining three categories of attributions of Taoist leadership and their influence on employee pro-environment attitudes.

------ Insert Table 3 about here -----

## **Findings**

In this section, we articulate the connection between Taoist philosophy and Leopold's land ethic by referring to our empirical findings and narrative examples. Furthermore, we examine how Taoist leadership can nurture employee pro-environment attitudes from a relational perspective to engender employee pro-environment integrated beliefs. In addition, the employee passion for harmony with nature and environmentalism triggered by Taoist philosophy may amplify employee pro-environment integrated beliefs. Employee pro-environment attitudes, in turn, can lead to fostering green employee behaviours both within and without organizations, thereby reducing their adverse environmental footprints and negative environmental impacts.

## Rejecting domination and building a biotic community

Leaders influenced by Taoism tend to give prominence to its receptive and responsive character to nourish employee pro-environment attitudes. A Taoist leader's attitude towards nature is not to control it, but to remain in harmony with it (Xing, 2016). Rejecting domination resonates with Leopold's ideal of building a biotic community. This philosophical orientation underpins the approach taken by leaders in dealing with employees,

which is manifested in the cultivation of employee awareness of environmental protection without directly controlling their behaviours. It focusses on enticing employee proenvironment attitudes to form an integrated belief system in regard to human beings and nature. Rejecting domination illustrates *how* to extend the boundary of the biotic community to include human beings and other species in the nature. Furthermore, in terms of rejecting domination, leaders demonstrate consistent leadership behaviours that make their followers receptive to their values and actions. When cultivating employee pro-environment beliefs and rather than using strict training and intense teaching, leaders tend to prefer stimulating employee attitudes. An HR manager from an ocean engineering company told us:

"It [the method leaders adopt to promote employee green behaviours] comes out of discussion with employees themselves. Although our firm is environment-related, we find that dedicating time to scheduling intense training in regard to environmental awareness or so may not get the positive effect you wish it to have, but may only instead create passive employee attitudes toward nature."

Rejection of domination implies that leaders understand their employees' passive psychological reactions towards coercive instructions or the allocation of blame. Taoist philosophy asserts that coercion is persistently the cause of its own resistance and diminishes the capacity of the one who exerts it to continue to do so (Tao Te Ching, Chapter 30). When fostering employee green behaviours, coercive leader instruction may result in employees adopting passive attitudes toward sustainability. Nurturing employee pro-environment attitudes requires leaders to adopt a soft approach to initiate positive employee attitudes towards sustainability and their willingness to act for it, so as to lessen the negative environmental impacts of the companies for which they work.

One senior manager's narrative illustrates how leaders can use 'subtle influence' on fostering manager and employee pro-environment attitudes through reflection,

"In arranging each year's annual rewards, I prefer to give an energy-efficient hybrid car or an electric car to managers and employees, so as to discourage them from buying high-emission cars. We use these incentives to signal sustainability to them instead of strictly regulating them, which is more effective, like guiding a ship into a harbor."

Incentives and punishment were rarely tied to promoting environmental performance because employee pro-environment behaviours often fall outside of job descriptions and formal reward systems, which is especially true of voluntary green behaviours (Daily, Bishop, & Govindarajulu, 2009; Denton, 1999). However, this narrative suggests that incentives may be used to trigger employee adoption of pro-environment behaviours. Non-coercive pro-environment leadership is much better at fostering employees in becoming attuned with the fluidity of natural processes, instead of commanding, overpowering, or subjugating the natural world. In this way, leaders 'guide a ship into a harbour' by encouraging their subordinates' intrinsic patterns. A similar effect was noted in the story recounted by another senior manager in the textile industry,

"For instance, in our company, we post some tips on the wall, you can see tips like 'the more we double-side print, the more we save notebooks for children who live in poverty' close to printers, and, near water taps, we put a picture of a drop of water with a baby's face saying 'please treasure me' and things like that. We find this soft communication more effective than strict regulations."

Taoist *Wu Wei* (non-coercive) leadership embodies the notion of rejecting domination (Xing & Sims, 2012). This lends support to the idea that employees should not be over-

indoctrinated to value sustainability; they should instead be prompted to engage in proenvironment behaviours based on their intrinsic desires. Therefore, Taoist leadership
emphasizes nourishing the intrinsic employee desire to be pro-environment without
domination. Such leadership also rejects employees subscribing to beliefs and behaving in
ways that involve human beings dominating or overpowering nature. Instead, Taoist
leadership seeks to ensure that employees understand that following the natural flow to
harmonize with nature effectively sustains their efforts. This echoes with Leopold's biotic
community concept. One CEO from an automobile manufacturing company shared the
implication of "following the flow":

"Our vice president in charge of production is, at the same time, in charge of environmental protection. This means that the same person is concerned with both production and energy saving. The person who oversees energy consumption is also responsible for the environment. In the past, there were two departments, but now they have been harmonized into one. This avoids conflicts because it is your own responsibility and you should naturally understand yourself. In this way, it is very easy for us now to carry on the rest of our work 'in flow'."

This case illustrates how company reform can combine two potentially conflicting departments (production and environmental protection) into one. Hence, any force and resistance expressed by one department towards the other can be neutralized. As the CEO mentioned, by becoming harmonized, the two departments can better understand each other. This example illustrates that the CEO had found the crux of the problem, solved it, and then carried on the work "in flow". This case shows that organizational design can affect employee green behaviours. By adopting pro-environment attitudes, employees can reconcile production and environmental protection, thus reducing any adverse environmental impacts

of companies. The Taoist philosophy of rejecting domination by following the flow supports both organizational change and individual attitudes.

Some leaders may identify and leverage employee voluntary green behaviours with the aim of influencing the actions of co-workers. One department head manager from a recycling energy company told us:

"My department has two 20 year old boys. They are aware of environmental protection, and their beliefs are much stronger than those of other senior staff members. Once I saw one boy pick up a sheet of half blank paper from the floor; instead of throwing it into the dustbin, he reused it as draft paper. I then said to him in front of other staff members, 'Bob [the boy's name] is really good, I should learn from him.' So other employees in my department could take the hint, although I did not talk to them directly; but this way was more impressive to them."

In this story, the leader did not issue orders or purposefully educated his department staff; instead, he took advantage of an opportunity and, by praising the boy's job performance, sent a signal to other staff members. By doing this, he pushed the boat along with the current (effortlessly following "the flow"), deeply impressing on other staff members, in a non-coercive manner, the need to engage in green behaviours and lessen the company's environmental footprint. By following the natural flow, leaders can assist employees in fulfilling their potential and inspire them to proactively think and reflect on how to enhance their pro-environment behaviours. A middle manager from the solar energy industry reflected on the effectiveness of this type of leadership in his story:

"There are no written rules or explicit incentives. But our leader is good at promoting employee initiatives and encouraging employees to share them with each other. For instance, one employee suggested that we should better use peak and trough times to

economize on electricity pricing. For example, we should use trough times to wash clothes at night. This implied that our employees should always engage in thinking about environmental protection. I believe that energy saving and environmental protection are deeply rooted in our hearts."

Employees who go beyond the call of duty in assisting in environmental efforts are often intrinsically motivated to be pro-environment (Ramus, 2001). Leaders can take employee-initiated pro-environment ideas as a thread to follow and push them to encourage their colleagues to reflect on and follow as well. By doing this, employees do not feel as if they were being pushed, but appreciate the freedom offered by their leaders. This helps employees appreciate it when leaders recognize their ideas. They feel they are emotionally supported in forming integrated pro-environment beliefs on the interdependence between human beings and nature and think about saving energy and protecting the environment beyond the workplace. This also shows how Eastern culture tends to bolster a holistic and integrative world view (Liu & Almor, 2016) that is beneficial for maintaining biodiversity (Winn & Pogutz, 2013) and building a biotic community. Employee pro-environment attitudes promoted by Taoism can trigger spontaneous and voluntary green behaviours. During our interviews, a deputy manager from a renewable energy company highly valued cultivating employee spontaneity in boosting their knowledge of sustainability.

"It is very important; although in our daily life, many people do not take it (proenvironment) seriously, such as distinguishing among rubbish to recycle newspapers, etc. When you are at home, you may not realize some of your behaviour may have a negative environmental impact. Therefore, once employees start intrinsically caring about the environment, they can acquire relevant knowledge spontaneously, they share ideas with peers, and they are cautious of environmental impact before they do anything." For their part, employees often appreciate non-coercive leadership, which enables them to develop their potential in an autonomous working environment, as was noted by an employee from one renewable energy company:

"I thank this company for giving me the freedom to develop myself. My previous firm had a strong policy they forced employees to follow. Rather than leading to effective outcomes, that generated lots of complaints from employees. Now, this company offers lots of freedom without strict regulations and rules. I enjoy the free space my leader gives me to voice my opinions and carry out initiatives to protect the environment. If you feel you can exploit your potential, you will love your work. Leaders will see your performance improve naturally."

Taoist leaders understand that voluntary employee behaviours do not stem from coercion but from a natural flow. Therefore, instead of interfering with their employees' green behaviours, they nourish their activities, helping them to incubate pro-environment beliefs in their minds through reflection.

However, our research also shows that, in some cases, the 'reject domination' approach might be counterproductive to environmental protection, as leaders prefer not to directly interfere with employee behaviours. As a senior manager from a chemistry company put it:

"In our company, sometimes I may see behaviours that violate environmental protection, but I never directly point it out. I think that environmental protection can best be encouraged through subtle influence."

We conclude that, for employee green behaviours, rejecting domination could also engender a potential drawback. However, rejecting domination focusses on employee pro-environment attitudes; if employees can change them, then, in the long-run, their behaviours can be changed based on the Theory of Planned Behaviour. In addition, the importance of intrinsic motivation can be largely nurtured through reflection.

## Reverse thinking of the natural and human world and not contending

Taoism is marked by reverse thinking, in which strong is not always strong and weak is not truly weak. Taoist leaders believe that the natural and human worlds operate cyclically and that profit and loss are mutually complementary and inter-convertible. This reverse thinking regarding the natural and human worlds resonates with Leopold's 'conqueror to contributor' concept. In other words, reverse thinking, or 'not contending,' reflects an active philosophy, rather than a negative view of life (Feng, 1947). This does not imply standing aloof from worldly success, nor does it mean being pessimistic and fleeing society. Instead, it 'does not contend but, rather, works for others'. Only by doing this, can one make it: 'because he is not a competitor; no one in the world can compete with him' (Tao De Jing, Chapter 22). From this point of view, protecting the natural environment is protecting humankind. In believing that all natural processes are preceded by the interplay of pairs of complementary opposites, Taoist leaders dialectically treat their temporary business profit and long term cost. They possess a Yin-Yang perspective and understand that everything comes to be by virtue of the duality of Yin and Yang (Schad, Lewis, Raisch, & Smith, 2016) and is subject to the cyclical alternation of these two complementary forces. Therefore, for Taoist leaders, over-utilizing and destroying natural resources for the sake of temporary gain and short-term interests can lead to drying up resources of offspring. In this sense, Taoist leaders know when and where to stop, instead of continuously indulging their desires.

The chairman of a printing association stated his opinion by developing Lao Tzu's philosophy:

"Now we are all pro-environment by drawing on the attention of the masses in China; this means that the environment has been seriously damaged. This is what Lao Tzu said, only when Tao is lost do benevolence and righteousness appear; only when the nation is disordered do patriots spring forth; only when the environment is polluted do people advocate sustainability."

The chairman extended Lao Tzu's words in the last sentence by following Lao Tzu's logic of reverse thinking by which an optimistic perception (people start caring about the environment) reflects a pessimistic one (the environment has been badly damaged). This reverse thinking can be understood in the Taoist metaphor that constantly dripping water wears away rock. The erosive action of water upon rock implies that the meekest in the world can affect the strongest (Tao Te Ching, Chapter 43). This idea is further extended in Chapter 44, "the stronger the attachments, the greater the cost; the more that is hoarded, the deeper the loss. Know what is enough, be without disgrace; know when to stop, be without danger." In our interviews, we found that Taoist leaders tend to apply reverse thinking to business sustainability, as stated by a vice president of a petroleum and chemical company:

"I believe water flows out once it has filled up a bowl. If you look at history, you find that no dignitary was imperishable; so, how can we be sustainable? I often tell my employees that the people who can sustain their happiness are the ones who are content with their lot. Only knowing this can you sustain your business without loss."

Taoist leaders hold a reverse perception of power, in which ones who never show their power but still get others listen to them are those with the most power. Lao Tzu illustrated this reverse interaction between a leader and his/her followers in Chapter 81, "the more they do for others, the more they gain; the more they give to others, the more they possess." In reflecting on this principle and encouraging employees to reflect on this belief, reverse

thinking can help leaders promote employee green thinking and free them from any greedy behaviours that are harmful to the environment. A transportation company deputy general manager indicated:

"We should be willing to give back . . . I also cultivate my employees' awareness of balancing taking and giving. Otherwise they might never feel thankful. Knowing to give back helps control one's greedy desires. So I always tell my employees to consider giving back, giving back to your customers, to your family, and to those who need your help. In return, your customers trust you because you are not driven by making money but by caring for others. In this way, your enterprise becomes really sustainable. I believe it is very important to form a mentally healthy and caring team for enterprises to achieve sustainability. In this way, we can achieve Lao Tzu's highest state of leadership—people feel they do it for themselves, not for their leaders."

Taoist reverse thinking can help leaders and employees reflect the relationship between self and others and between the self and the natural environment and offer the reason why, to thrive for sustainability, we should be contributors to, and not conquerors of, the community. The example below illustrates a middle manager's reverse reflection towards MianZi (not losing face) and his boss's 'pettiness' over lunch, which inspired him to reflect on the proenvironment values of his childhood:

"In our tradition, we care about 'MianZi'; for example, when you invite some important people for dinner, there should be some dishes left after dinner to show that you're sincere and generous, otherwise you might lose face. However, my current boss surprised me with his 'pettiness'. Once, when our department went out for lunch, he packed up all the leftover food and shared it with other colleagues. But, gradually, we have come to accept this habit of saving food and caring about saving other

resources. When we were children, we were all familiar with a poem, 'Hoeing millet in mid-day heat, sweat dripping to the earth beneath; Do you know the food on your plate? Each grain was hard-earned.' But, after we grew up, we forgot the original values that we used to know."

In this story, the employee reflected upon contradictory conceptions regarding etiquette between his traditional understanding of 'MianZi' and his boss's 'pettiness'. This conflict pushed him to reflect and reconsider the recommendation for saving food. By further reflecting on a poem he learned as a child, he resonated with the value of saving resources.

Moreover, our research also finds that Taoist leadership can arouse an harmonious proenvironment passion in employees through the ancient Chinese scenery poems that embody Taoist philosophy. Taoist poetry can inspire people's admiration, appreciation, and action to love and protect the scene described in the poem (Xing & Liu, 2015). It helps individuals to emotionally resonate with the beauty of low-carbon footprint life;, thus making them feel what Lao Tzu valued the most—"embracing simplicity" (Tao Te Ching, Chapter 19).

A CEO from a pharmaceutical company shared his experience,

"Protecting the environment is an important task for pharmaceutical firms. Using newsletters to motivate employees to cherish and protect the environment is very helpful. In our quarterly corporate magazine, we purposefully selected some Chinese scenic poetry with relevant Chinese paintings scattered throughout the magazine. For instance, Wang Wei's poem (Mountain Villa at Autumn Dust 山居秋暝, 701-761) reflects the elegance and exquisiteness of Chinese landscape painting, underscoring the harmonious mixture between people and nature. In enjoying the poem, employees might draw lessons by their close connection to nature and the reflexivity of a deeper understanding and true love for nature. In today's contemporary society, most of us

live in a cosmopolitan world that gradually obscures the concept of nature. The poetry and paintings might trigger the employees' love for nature. When you love the natural environment, you will pay particular attention and protect it."

As is evident in the above examples, traditions from ancient poetry and allegory can hone the emotional skills of employees (Shrivastava, 2010). Some of our interviews revealed that scenery poetry can help leadership trigger the emotions of employees by inspiring their awareness and enthusiasm for pro-environment values. Consequently, the emotional appeal towards sustainability ignited by poetry can influence employee green behaviours.

## Engaging in selflessness and respect for continued existence in a natural state

Taoism advocates selflessness, which means expanding one's identification with the broader world beyond his/her own. Human beings and nature are neither exclusive nor incompatible with each other; instead, they maintain a harmonious relationship. Just like Leopold's land ethic prescribed "continued existence in a natural state", Taoist selflessness offers the philosophical underpinnings for pro-environment employee attitudes, thus pushing organizations to behave in an environmentally sustainable way. Taoism endorses a notion of oneness that involves treating the self and the rest as an integrated whole, making the self responsible for and committed to the rest of nature.

Taoism suggests forgetting both the self and the object. This means that forgetting about the difference between the self and the rest of nature can ultimately free the mind and trigger proenvironment behaviours without being hindered by personal desires and interests. In his butterfly story, Chuang Tzu cared so little for himself that he could not differentiate his own identity from that of a butterfly. In this sense, selflessness means freeing the self from endlessly pursuing self-interests.

From the perspective of implementing environmental protection policies, some leaders from State Owned Enterprises (SOEs) regard their pro-environment behaviours as a rejection of their own individual interests. They perceive their enterprises as being part of the nation and look beyond their narrow bottom lines. Some managers described their SOEs as "national sport teams" reflecting their nation's reputation. Therefore, to these managers, national interest came before the profits of their respective companies. A senior manager in a state-owned automobile manufacturing company narrated:

"My company pays significant attention to environmental protection. Our head office is in Beijing, and over 20 branch companies are mainly located north of the Huang River. As manufacturing firms, they consume energy and generate emissions during the production process. We've made energy reduction and environment protection a top priority in our overall strategy. This is because we are a state-owned company, just like a 'national sport team', so we see implementing our national strategy, including regulating industry policy and laws, as vital questions that we believe matter as much as other company issues. We aim to become a pioneering enterprise implementing pro-environment policies in our industry, and we are already leading by example."

Describing the company as a national sport team, the leader integrated the interests of the company with those of the country and took responsibility for environmental protection. It bears noting here that caring for the environment is part of the moral responsibility of leaders who are dedicated to the nation state. This shows that blurring the boundaries between responsibility and sustainability (Bansal & Song, 2017) may strengthen employee proenvironment attitude and foster employee green behaviours, thus mitigating the negative environmental impact of individuals and organizations.

Similarly, a senior manager from a state-owned energy recycling company stressed his commitment to sustainability to serve as a role model for private companies in the industry:

"We are the only Chinese state-owned company that specializes in energy recycling in industrial processes and regeneration. As an SOE in the energy sector, we must be a role model in social responsibility to guide privately-owned firms to follow in our footsteps. This [leading by good example] is more important than our firm's other strategies. We are responsible to the nation as well as to the people."

In our interviews, many SOE leaders often mentioned "leading by example" and "setting a good example for private companies". In their opinion, SOEs belong to the nation and to the people, so social responsibility trumps their narrow self-interests. When a company focusses only on its self-interest, it can easily tie its own hands. When a company frees itself from being solely driven by its narrow self-interest, it can better serve society and pay attention to global sustainability. Our analysis lends support to a recent study that found that the family-owned small and medium-sized enterprise sector worries more about local reputation, whereas the state-owned enterprise (SOE) sector seeks to meet global and national societal expectations (Hofman et al., 2015). The leaders' selflessness in regard to their own respective companies can nurture employee pro-environment reflection. During this process, employees gradually engage in selflessness, becoming less concerned about their narrow self-interest and paying attention to environmental protection. Consequently, this employee pro-environment attitude may foster employee green behaviours.

The leaders' selflessness and integrated values in regard to sustainability positively influence employees in adopting pro-environment beliefs. This was affirmed in the narrative of a middle manager in the solar energy industry:

"Our leader impresses us with the concept of 'family', which firstly refers to fostering a harmonious work environment. This is also associated with being pro-environment. Because, when talking about family, Earth is our big family, and everyone should contribute to the big family as he or she would to his or her own. We are proud and glad to see that, through our company and our brand and through the efforts of our employees, we encourage everyone to be 'big family' members committed to long-term sustainability and well-being."

This story illustrates the effects of leaders cultivating a 'big family' culture. By reflecting on this 'big family' concept, with the subsequent consideration of responsibility as a family member, the manager felt proud to be engaging in pro-environment activities. This resonates with Leopold's 'continued existence in a natural state'. Furthermore, another middle manager from a construction company told us how he was deeply touched by his previous supervisor's pro-environment behaviour:

"My strongest impression came when I was assisting the monitoring manager in a construction site. It was at the end phase of that project. Workers were cutting stone and mixing cement on the roadside and this created lots of dust, and pedestrians walking by had to cover their noses. When my supervisor saw this, he immediately stopped the construction and asked that more sprinklers be added before it could be resumed. The director of a construction company phoned our department head to persuade him not to delay the project. Doing so increased project costs, but my supervisor insisted on putting in the sprinklers. Finally, the dust disappeared. The pedestrians were therefore unaffected and failed to even notice the consideration that had been given to them. This deeply impressed me."

By having employees reflect on their selfless behaviours, leaders can recognize and strengthen the former's pro-environment beliefs. Reconciling with the leaders' selflessness towards their own companies can inspire employee willingness to consider the "big family's wellbeing". An employee from an energy recycling company told the story of a colleague's subsequent selfless behaviour related to his pro-environment values:

"There was a time when the kettle of our department was broken and a new one had to be ordered through the firm's central purchasing department; so, before the new one was purchased, we had to drink bottled water. One of my colleagues brought a kettle from his home for everyone to boil water instead of buying bottled water. The same applied to other pro-environment activities. These look like small things. But I think that nothing is small in environmental protection. The leaders' influence contributes largely by cultivating a pro-environment organizational climate. I feel pleased and proud of it."

Employees who treat their company as their home, can then proactively consider the details regarding pro-environment values and take the appropriate initiatives. Our analysis extends the argument that a pro-environment organizational and psychological climate can bridge the gap between green behaviour intentions and employee green behaviours (Norton et al., 2017) by illuminating such a pro-environment organizational and psychological climate. This, in turn, can be fostered through leadership. The story also indicates the effects of the leaders' non-hierarchical—as opposed to top-down—leadership style in initiating employee green behaviours so that ordinary employees can feel proud of themselves for behaving proactively in cultivating a pro-environment organizational and psychological climate in their company. Moreover, employees proactively committed to sustainability may reinforce their identification with the organization and integrate themselves more closely with it.

Furthermore, Taoist poetry may inspire leaders to engage in selflessness while strengthening respect for a continued existence in a natural state. A CEO from a respiratory medical equipment company shared his unique poetic way of training new staff members,

"Employee pro-environment behaviours cannot be forced, such passion can only come voluntarily. I think leaders should play an important and effective role in this process. Our company produces an air freshener machine. In each new employee training workshop, I start with Zhu Xi's [1130-1200, a famous scholar during the Ming Dynasty] poem 'Reflection from reading'. We should all have recited this poem when we were in high school. The key message is that knowledge is like spring water constantly flowing from a headstream to keep active. But it has another implication for our current environment. Now, smog engulfs many cities and water pollution is severe throughout China. We can hardly see the scene depicted in the poem. Therefore, I told employees that, although it would be difficult to immediately change the entire natural environment, our small steps must expand from one individual to a group, to more people; otherwise, our children would never understand the poem, because the scenery portrayed in it would no longer exist. Many of them have children or will have in the future, so they were emotionally touched by this message."

For the CEO, this appeal is an effective means to motivate employee emotions towards the natural environment, so as to encourage voluntary green behaviours in them. By harmonizing the self with nature, the poem depicts a placid and leisurely life. This illustrates the core thinking of Taoism, which believes that an insipid taste can be attained after all kinds of flavours are eliminated. In this way, one's character approaches simplicity and selflessness, "returning to the source is stillness" (Tao Te Ching, Chapter 16). As is said in the Tao Te Ching, "the greatest sound has sparse sounds, and the greatest form has no form." This means that the real value of life cannot be attained by luxury or grandiosity, but through

simplicity and humility. Readers who have been suffering life's burdens and a polluted environment can easily resonate with the lifestyle depicted in the poem. By reflecting on the poem and on the leader's consistent behaviour, the interviewee initiated his own low carbon lifestyle and green behaviour.

The mesmerizing natural beauty of the landscape breaks down the boundaries between 'I' and 'things', further realizing the harmony of nature and 'I', and blending feelings and things. The exquisite artistic conception constructed by ancient Chinese landscape poetry stimulates the modern people's yearning for a natural aesthetic and develops a broader space of life. The aesthetic value of Taoist poetry affects the readers' perception of life, as they long for a poetic one. For example, "While picking asters beneath the Eastern fence, my gaze upon the Southern mountain rests", by Tao Yuanming, underscores how his leisurely living stemmed from his awareness of the fabulous beauty of the words "There is the essence of hermit life here, but it is beyond my words". When reading the famous line, "Clear and bright moon cast its light on the pine woods, while creeks flow above the stones", readers can resonate with the writer about the pure state of mind. The nature depicted in the landscape poetry inspired by Taoist philosophy can cause readers to sense the existence and empathy of nature and of a natural life, influencing their mode of perception and view of the world, arousing their desire for natural beauty, and, eventually, sublimating it into a strong environmental ethic.

To sum up, rejecting domination enables individuals to respect nature's rules and live in harmony with the natural environment, following the flow of nature to build a biotic community. Reverse thinking enables employees to dialectically balance short-term interests with long-term considerations to develop integrative thinking, and to shift from conquering to contributing to the natural environment. Selflessness regards the self as an integral part of the natural environment, considers the well-being of others, and respects a continued existence in a natural state. Our narrative analysis illustrates that, from a cultural and philosophical

perspective, these three attributes of Taoist leadership can serve as micro-foundations for Leopold's land ethic. This, in turn, can guide employees to reflect and recognize the oneness of the self and nature, thereby promoting an integrated environmental belief system among the workforce of a company. In this holistic way of thinking, if one part is damaged, the rest will not function well. Furthermore, employee passion for harmony with and improvement of the environment can be triggered by leaders who invoke Taoist scenic poetry. In this way, through reflection, employees can recognize that their green behaviours are the result of their own beliefs, enhancing their stability. This follows the ideal way of leading endorsed by Lao Tzu "when the leader's will is fulfilled, the followers all say, we do it naturally." (Tao Te Ching, Chapter 17)

#### **Discussion**

#### Theoretical implications for sustainability management

This study makes several contributions to the nascent literature on the micro-foundations of sustainability. It does so by (1) exploring the cultural and philosophical micro-foundations of Leopold's land ethic in connection with Taoist philosophy, (2) articulating the mechanisms by which Taoist leadership can influence the pro-environment integrated beliefs and harmonious passions of employees' through reflection, and (3) explicating that Taoist leadership can affect employee green behaviours.

First, by drawing upon Chinese traditional cultural resources, our research contributes to the nascent and vibrant micro-foundations of person-centric CSR and sustainability (Gond et al., 2017). In particular, our research contributes to Leopold's philosophy of environmental action by explicating *how* the Taoist philosophy of treating oneself and the natural environment as a oneness can theoretically advance three dimensions of Leopold's land ethic (Leopold, 1949). In so doing, our study may significantly advance the contemporary

understanding on the micro-foundations of sustainability by juxtaposing Taoism with Leopold's land ethic from a behavioural micro-foundational perspective. Our study lends further support to the notion of integrative thinking (Sonenshein et al., 2014) and to the importance of context in investigating how employee behaviours can affect sustainability (Strauss, Lepoutre, & Wood, 2017) by offering a cultural and philosophical micro-foundation. Furthermore, our findings extend the argument of the cultural construction of organizational life (Weber & Dacin, 2011) by showing that Taoist leadership stemming from traditional cultures can influence employee pro-environment attitudes and green behaviours. This approach of viewing culture as a resource contributes to advancing our understanding of the micro-foundations for resource-based theory and sustainability research (Felin et al., 2015; Foss, 2011; Howard-Grenville et al., 2011). Second, our study contributes to research on the formation of employee green behaviours by articulating the three attributions of Taoist leadership as potential mechanisms influencing pro-environment attitudes among employees. Recent research has identified the importance of moral attitudes for voluntary employee green behaviours (Kim et al., 2014). Our finding extends this understanding by showing how employee pro-environment attitudes can be nurtured from a relational perspective. Our findings shed light on the importance of the pro-environment attitudes of employees affecting their green behaviours. By articulating the role played by Taoist leadership, we expand on a recent study that emphasized how the relationship between green behavioural intentions and subsequent employee green behaviours is only positive when employees perceive a positive green psychological climate (Norton et al., 2017).

Third, our research contributes to the notion of passion for sustainability (Shrivastava, 2010) by showing that Taoist leadership may trigger employee pro-environment passion. The harmonious pro-environment passion of employees can amplify the relationship between Taoist leadership and employee green behaviours, while also triggering voluntary expressions

of the latter. Awareness of the importance of environmental protection can be attributed to social norms and leader and group requirements; however, daily behaviours might not involve a consistent engagement in pro-environment reflection and behaviour. Thus, our main contribution is in explicating how Taoist philosophy can promote pro-environment values by realizing that the integration of human beings and the natural environment is fundamental and determines the formation of both required and voluntary employee green behaviours. Existing research shows that transformational leadership can influence employee pro-environment passion and behaviours (Robertson & Barling, 2013) and foster proenvironment attitudes, and that such positive effects among employees can promote proenvironment behaviours in the workplace (Bissing - Olson, Iyer, Fielding, & Zacher, 2013). Our study significantly extends this line of inquiry by identifying how leadership can influence employee pro-environment passion. Our findings illustrate that Taoist leadership may also use scenic poetry to inspire a love of nature among employees. Reflecting on the oneness of self and nature and on the reconciliation between nature and human beings can emotionally inspire employees to intrinsically cherish and protect nature. The combination of passion for sustainability and pro-environment beliefs can make employees not only value the environment in their beliefs, but cause them to then act on these views through green behaviours.

# A conceptual framework on Taoist leadership, employee pro-environment attitudes and employee green behaviours

We aim to contribute to sustainability management theory (Starik & Kanashiro, 2013) by proposing a conceptual framework on how to cultivate employee green behaviours through leadership. As shown in Figure 1, we suggest that having Taoism serve as the microfoundation for Leopold's land ethic can trigger employee pro-environment attitudes through three mechanisms: (1) rejection of domination, (2) reverse thinking, and (3) selflessness.

Through reflection, the attributions of Taoist leadership can influence the pro-environment beliefs of employees, and affect their pro-environment passions. Collectively, employee pro-environment attitudes can lead to their adoption of both required and voluntary green behaviours.

----- Insert Figure 1 about here

Taoism is known for its natural perspectives, which highly value harmonizing the self with nature and leading without violating the natural flow of things. Our findings revealed that Taoism can influence employee green behaviours. Our findings suggest that there are two levels of reflection. One is related to how leaders reflect on the uses of Taoism to influence pro-environment employee behaviours, while the other pertains to the employees' reflection in regard to the impact of Taoist leadership in promoting their own pro-environment behaviours. We propose a Taoist view on sustainability that integrates human beings and the natural environment as a harmonious oneness. In forming such an attitude, the reflections of employees include rejecting domination by their leaders and embracing reverse thinking, and selfless leadership behaviours. Reflecting on the non-coercive techniques used by their leaders to get them to follow the flow, employees feel that their potential is being developed and their initiatives are respected and valued; thus they adopt pro-environment behaviours on their own. Reflecting on a leadership style characterized by reversal thinking, employees justify transpositional considerations leading to sustainability and reject overpowering the natural environment. Reflecting on a leadership engaged in selflessness, employees may form an integrative view and a sense of responsibility towards the well-being of others while downplaying their own self-interests.

Our findings suggest that employee pro-environment reflection can be nurtured through Taoist leadership. Hence, we posit Proposition 1: Taoist leadership can trigger employee proenvironment attitudes. This can affect employee green behaviours in various degrees. Employee pro-environment attitudes can further strengthen the formation of pro-environment values through Taoist leadership; in turn, these can affect both required and voluntary employee green behaviours. Hence, we posit Proposition 2: pro-environment integrated employee beliefs can lead to both required and voluntary employee green behaviours. Furthermore, when employees are aware of the importance of sustainability and are emotionally motivated to cultivate a passion for sustainability, Taoist leadership offers the freedom and supporting atmosphere for them to engage in pro-environment action. Hence, we posit Proposition 3: pro-environment harmonious employee passion moderates the relationship between pro-environment integrated employee beliefs and employee green behaviours. Combining the pro-environment beliefs and passion embedded in Taoist philosophy, stable pro-environment behaviours become an integral part of an individual's daily activities with the belief in the oneness of human beings and the natural environment. In particular, the passion for sustainability can trigger voluntary employee green behaviours both in the workplace and beyond. Hence, we posit Proposition 4: the pro-environment harmonious passion of employees can activate their voluntary green behaviours.

## Limitations and future research direction

By examining how Taoist leadership can nurture the pro-environment attitudes of employees, affecting their green behaviours, this paper is an early attempt to explore the cultural and philosophical micro-foundation of sustainability through the theoretical framework of Leopold's land ethic. Even though our theoretical elaboration is supported by narratives of Chinese leaders, we view our findings as tentative and suggest that future research further enrich our conceptualization by studying philosophical and cultural resources as toolkits.

Future research could also identify other micro-foundations to complement our conceptualization and, by using quantitative approaches to capture the behavioural micro-foundations of sustainability, provide an enhanced and contextualized understanding about the fostering of employee green behaviours. The shift from required to voluntary employee green behaviours is beyond the scope of this paper. Future sustainability research may examine the mechanisms by which required employee green behaviours can be transformed into voluntary ones. We suggest that the emotional motivation and ambiguity carried by poetry might be a revealing and unconventional path for future research endeavours. Furthermore, a recent review has pointed to the diverging trend of responsibility and sustainability research (Bansal & Song, 2017); our study addresses this divergence, suggesting that this divide may be reconciled on the organizational-level. We do this by analysing the philosophical and cultural micro-foundations through the lens of Taoist philosophy and Leopold's land ethic, showing how they can affect employee green behaviours, thereby limiting the negative impact of business activity on the environment.

# **Concluding remarks**

As is true in modern China, the total human domination and disruption of nature has brought into serious focus noxious and toxic air pollution as well as other major environmental hazards that pose an existential threat to life on the planet. People need to revalorize Taoist thinking regarding the relationship between human beings and the natural environment. Doing so would help us rediscover what "harmonizing with nature" means. We believe that reversible Taoist thinking and subtle non-coercive Taoist leadership may offer a plausible solution to the dilemma of surviving in a tough competitive economic system and returning to the genuine process of realigning people with nature. Furthermore, Taoist philosophy may advance sustainability management research from a theoretical standpoint, whereas the land ethic could be used as an analytical perspective to connect with the cultural and philosophical

micro-foundations provided by Taoism. The encouragement of pro-environment employee behaviours can be considered one of many strategies suited to advance sustainability management within organizations, with the intended result of contributing to the many other efforts (and, hopefully, outcomes) made to achieve global sustainability goals.

In particular, Taoist philosophy seems to offer an alternative approach to the problem of cultivating the human mind and bring about deep changes in beliefs and pro-environment behaviours through reflection. Turning to Taoism could be an effective choice for leaders to develop employee green behaviours in response to our current ecological predicament. However, we acknowledge that nature is not always benign and can also bring negative consequences to human beings, so that the land ethic of caring for humans and nature may not be valid in cases of natural disasters, pandemics, cosmic radiation, and other 'natural negatives'. Therefore, as this paper has stressed, human beings need to find the right balance to live in harmony with nature.

#### Footnotes

1. We thank the anonymous reviewer for suggesting the influence of the residual Taoism found in Chinese culture on the attitudes of the current generation of Chinese managers.

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Table 1 Three attributions of sustainable Taoist Leadership in Tao Te Ching and its implications for sustainability

Attributions of sustainable Taoist leadership	Chapters in Tao Te Ching	Excerpts from Tao Te Ching	Implication for sustainability
Rejection domination	2, 5,7,8,10,17,20,30,43,51,54	Force persistently creates its own resistance and diminishes the capacity of the one who exerts force to continue to exercise it ( <i>Tao Te Ching, Chapter 30</i> )	To respect natural rules, live in harmony with the natural environment, and follow the flow of nature
Reverse thinking	3,9,11,18,22,26,29,34,42,43,44, 63,81	'The stronger the attachments, the greater the cost,	To dialectically balance short-term interests with long-term considerations to develop integrative
		The more that is hoarded, the deeper the loss.	thinking
		Know what is enough, be without disgrace.	
		Know when to stop, be without danger.' (Tao Te Ching, Chapter 44)	
Selflessness	13,4,19,48,64,66	And the people must have something to which they can attach themselves: Exhibit the unadorned and embrace the uncarved block, Have little thought of self and as few desires as possible. (Tao Te Ching, Chapter 19)	To regard the self as an integral part of the natural environment and consider the wellbeing of others

**Table 2 Sample of participants** 

	Breathin g medical equipme nt	Pharmace utical firm	Recycli ng energy (SOE)	Constructio n company	Solar energ y	Automobile manufacturin g company (SOE)	Mining compan y (SOE)	Transportatio n company (SOE)	Petroleu m & Chemical company	Printing Associati on (SOE)	Renewabl e energy company	Spin industr y	Ocean Engineeri ng company (SOE	Total
Senior manager	1	1	2	1	1	2	1	2	2	1	2	1	1	18
Middle manager			1	1	2	1	1	1			1		1	9
employee	1	1	1	1	1	2	1	1	1	1	2	1	1	15

Table 3 Attributions of Taoist leadership and influence on employees' pro-environment attitudes

Attributions of Taoism regarding naturalness and 'Wu Wei' leadership	Implication for pro- environment belief	Excerpts from Tao Te Ching	Leadership embodying philosophy of Taoism on influencing employee green behaviours	Employees' pro-environment reflection on Taoist leadership
Rejection of	Values of non	Force persistently creates its	In our company, sometimes I	Although we make
domination and	forcing	own resistance and diminishes the capacity of the one who	may see behaviours that violate environment protection, but I never point it out directly. I think the environment protection can best be encouraged through subtle influence.	environment protection products, our leader will never force us to adopt pro- environment behaviours. There are no written rules or explicit incentives. But our leader is good at promoting
following the natural flow		exerts force to continue to exercise it (Tao Te Ching, Chapter 30)		
		'To give birth without possession, to accomplish without holding on to, to nurture without lording over' ( <i>Tao Te Ching, Chapter 51</i> )		employee initiatives and encouraging employees to share with each other.
		the more restrictions and limitations there are, The more impoverishes men will beThrough my non-interfering,  Men spontaneously increase their wealth. Through my non-willing,	We find these soft forms of communication more effective than strict regulations. Because you cannot fire employees due to wasting water so it is no use to harangue them. But a soft way achieves significant effect.	Therefore, once employees start intrinsically caring about being pro-environment, they can acquire knowledge of it spontaneously, they share some ideas with peers and they are mindful of environment intervention before they do anything.

	Leading by following the natural flow	Men spontaneously return to original simplicity.' (Tao Te Ching, Chapter 54)  The most submissive thing in the world can ride roughshod over the hardest in the world; That which is without substance entering that which has no crevices. That is why I know the benefit of resorting to no action	I then said to him in front of other staff members, 'Bob [the boy's name] is really good, I should learn from him.' So other employees in my department take the hint although I did not talk to them directly but this way is more impressive to them.	I enjoy the free space my leader gives me to voice my opinions and carry out initiatives. If you feel you can exploit your potential, you will love your work. Leaders will see your performance naturally.
Reverse thinking of the nature and human world	Human-nature world operate cyclically, know to stop	'The stronger the attachments, the greater the cost,  The more that is hoarded, the deeper the loss.  Know what is enough, be without disgrace.  Know when to stop, be without danger.' (Tao Te Ching, Chapter 44)	I believe water flows out once it is full in a bowl. If you look at history, you find no one dignitary imperishable, so how to be sustainable? I often tell my employees that people who can sustain their happiness are the ones who are content with their lot. Only knowing this can you sustain your business without lost.	When I was pupil in primary school knew that we are a country full of resources with huge geographical coverage. However, after starting working in our company, I got to know that when you drink water, you should think of its source-our resources are not sufficient. By that time, I started to think about what we should do when we run out of resources. We should think stopping over-developing and try alternative resource and

	D: 1 .: #			recycling.	
	giving	'The more they do for others, the more they gain; the more they give to others, the more they possess.' (Chapter 81)	They need to give back when they receive. Otherwise they might never feel thankful. When they drive Opels, they envy others driving BMWs. Knowing to give back helps	We should be willing to give back. I love to take out my bonus or rewards to donate to society. My boss has a strong	
		Thus, leaders avoid extreme, avoid arrogance, and avoid excess.' (Tao Te Ching, Chapter 29)	controlling one's greedy desires. So I always tell my employees never be greedy and consider giving back, giving back to your customers, to your family, and to those who need your help.	influence on me. He founded a school and engages in fundraising for children.	
		The myriad creatures depend on it for life yet it claims no authority. It accomplishes its task yet lays claim to no merit. It is because it never attempts itself to become great that it succeeds in becoming great. (Chapter 34)			
Engage in selflessness	Human and the nature are integrated oneness  Free the self from pursuing endless self interests	'Those who esteem the world as self will be committed to the world. Those who love the world as self will be entrusted with the world.' (Tao Te Ching, Chapter 13)	This is because we are state- owned company, just like 'national sport team', hence we see implementing national strategy, including regulating industry policy and laws, as vial question that we compare	Our leader impresses us with the concept of 'family', which firstly refers to fostering a harmonious work environment. And this is also associated with pro- environment. Because, when	

Blunt the sharpness; Untangle the knots; Soften the glare; Let your wheels move only along old ruts. (Tao Te Ching, Chapter 4) with the other company issues. We aim to become a pioneering enterprise implementing pro-environment policies in our industry, and we are already leading by example.'

talking about family, earth is our big family, everyone should contribute to the big family as his or her own family.

Be willing to take responsible for others (both human being and the nature) well-being

And the people must have something to which they can attach themselves: Exhibit the unadorned and embrace the uncarved block, Have little thought of self and as few desires as possible. (Tao Te Ching, Chapter 19)

As SOE in the energy sector, we must be a role model in social responsibility, so to guide other privately-owned firms to follow this direction. This (leading by good example) is more important than our firm's other strategies. We are responsible to the government as well as to the people.'

My department head was even angry with him but in the end they gave in. Finally, the floating dust disappeared but passengers did not even notice his consideration of them. This very deeply impressed me.

Figure 1. A conceptual framework on Taoist leadership, employee pro-environment attitudes, and employee green behaviours

