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Résumé de l'article

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Transformational School Leadership from a Neo-Daoist Lens

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Introduction

We live in a changing and unpredictable world that requires leaders who are adaptable, resilient, and inspiring. As the pandemic continues to upend education systems, school leaders need to (re)act quickly and wisely to ongoing challenges and crises. It is no longer sufficient to run schools using tried-and-tested models; school leaders need to transform their schools in response to new demands. The current climate makes the theory of transformational leadership particularly salient for school leaders (Bass, 1998; Bass & Avolio, 1994; Bass, Avolio, Jung, & Berson, 2003; Berkovich, 2018; Burns, 1978; Leithwood & Jantzi, 2000; Tichy, & Devanna, 1986). Transformational leadership goes beyond the traditional mode of direct control, reward, and punishment to delivering changes in the organization through motivation and inspiration.

Despite an impressive corpus of research on transformational leadership, the extant literature is dominated by Anglo-American traditions, experiences, and discourses (Bush, 2017; Kwan, 2020). There is relatively limited research carried out on non-Western worldviews, theories, and presuppositions concerning leadership studies in general and transformational leadership in particular. This omission is regrettable, as a broader and more inclusive conceptualization of transformational leadership drawn from diverse cultural traditions would enrich our current understanding and application of this concept. Furthermore, non-Western ideas are useful for addressing a major critique of the potential for abuse of power in transformational leadership, as we shall elaborate later. Addressing this research gap, this article explores a Chinese philosophical perspective on transformational school leadership. Specifically, we focus on neo-Daoism as represented by the writings of the eminent Chinese philosopher Wang Bi (王弼) (AD 226–249), who

lived during the period of the Three Kingdoms (AD 220–280).¹ We have chosen to discuss neo-Daoism, as it stresses the importance of a communitarian vision, situational judgement, and *wuming* (namelessness)—factors, as we shall explain later, that are presently under-emphasised in the literature on transformational leadership. Among the Chinese philosophers, Wang stands out for his scholarly achievements that ushered in a new neo-Daoist philosophical thought called *xuanxue* (learning of the mysterious).² He was well recognized for his scholarly works *Commentary to the Lao Zi* (老子注), *Commentary to Zhou Yi* (周易注), and *General Remarks on Zhou Yi* (周易略例), among others. Despite having been written close to two millennia ago, Wang’s philosophical thought offers timely contemporary insights on transformational leadership for educators. Although there are recent works on neo-Daoism (see, for example, D’Ambrosio, 2016; Wang, 2018; Zhu, 2018), there has been no publication, to date, on the relation between neo-Daoism and transformational leadership.

We argue that Wang’s educational thought highlights the importance of a communitarian vision, situational judgement, and *wuming* (namelessness) for a transformational leader to respond appropriately to circumstantial changes. Although Wang’s thought arose within a collectivist culture close to 2,000 years ago, his educational thought has much to offer to the North American educational world. The first part of the paper introduces the notion of transformational school leadership. The next section elucidates Wang’s philosophical thought with respect to transformational school leadership. The last section explains how Wang’s theory is useful in extending the theoretical basis and application of transformational school leadership.

Transformational School Leadership

Transformational leadership is one of the most influential leadership models. Berkovich (2018) observes that transformational leadership was “the most investigated and debated conceptualisation of all leadership theories” between 2000 and 2012. Dóci, Hofmans, Nijs, and Judge (2020), in their review of literature, concur: “In the past 20 years, no theory of leadership has received more scholarly attention than transformational leadership theory” (p. 1). A keyword search of “transformational leadership” on Google Scholar shows close to half a million hits. Research has shown the efficacy of transformational leadership in a variety of settings (Abbas & Tan, 2019; Bass & Avolio, 1994; Bass, Avolio, Jung, & Berson, 2003; Barnett, McCormick & Connors, 2001; and Hay,

¹ Wang Bi is described as a neo-Daoist, as he took an approach of synthesizing Confucian and Daoist perspectives to interpret *change* (变).

² His metaphysical, dialectical, and epistemological approaches were widely influential, thus establishing the orthodox study of the Chinese classics. In the prologue to the *Siku Quanshu* (四库全书总目提要), a comprehensive compilation of Chinese studies completed during the reign of Emperor Qian Long (乾隆) of the Qing (清) dynasty, Wang was credited for his contributions:

Honestly speaking, credits of the convincing articulations of *Yi Li* (义理), which help circumventing Zhou Yi from other varied methods, should go to Wang Bi and Han Kangbo. (平心而论, 阐明义理, 使易不杂于术数者, 弼与康伯深为有功)

Wang’s stance was so influential as an orthodoxy that it yielded a far-reaching influence across the Jin dynasty (晋) (AD 265–420), the Northern and Southern dynasties (南北朝) (AD 420–589), the Tang dynasty (唐) (AD 618–907), and the Song dynasty (宋代) (AD 960–1279) until the Qing dynasty (清) (AD 1616–1911). His stance became conventional in the study of Chinese history known as “orthodox study” (正学).

2006). In recent years, researchers such as Hallinger and Heck (2010), Urick and Bowers (2014), Berkovich (2018), and Kwan (2020) have also examined the relations between transformational leadership and instructional leadership in schools.

The notion of transformational leadership originates with Burns (1978), who contrasts it with transactional leadership. Unlike transactional leaders, who rely primarily on the self-interest and reward–punishment mechanism of followers to motivate them, transformational leaders operate on the basis of shared vision (Yukl, 2006). Such leaders go beyond prescribing roles, expectations, and performance parameters to their followers to stimulate their thinking and inspire their performance, thereby obtaining outcomes that are beyond expectations. In this sense, transformational leaders transform or change their organization rather than maintaining the status quo. Taking as their starting point the view that a transformational leader is one who goes beyond transaction to inspire one’s followers, researchers have subsequently formulated a plurality of theories, models, and frameworks on transformational leadership (Berkovich, 2016). Despite this diversity, the broad consensus is that transformational leadership comprises the following four dimensions, or the “four I’s” (Hay, 2006, p. 5; also see Bass, 1990a, b; Bass, Avolio, Jung & Berson, 2003; Bono & Judge, 2004; Judge & Piccolo, 2004):

- Idealized influence: a charismatic vision and behaviour that inspires others to follow
- Inspirational motivation: the capacity to motivate others to commit to the vision
- Intellectual stimulation: encouraging innovation and creativity
- Individualized consideration: coaching to the specific needs of followers

In the educational context, Leithwood and Jantzi (2000) identify six behaviours that characterize transformation school leadership. First, a transformational leader provides and articulates *a vision*: identifying new opportunities for his or her school, and developing, articulating, and inspiring others with his or her vision of the future. Second, a transformational leader provides *an appropriate model*: setting an example for staff members to follow, consistent with the values the leader espouses. Third, a transformational leader *fosters group goals*: promoting cooperation among staff members, and assisting them to work together toward common goals. Fourth, a transformational leader provides *individual support*: challenging staff members and expressing concern about their feelings and needs. Fifth, a transformational leader provides *intellectual stimulation*: challenging staff members to re-examine some assumptions about their work and to rethink how they can best undertake it. Finally, a transformational leader sets *high expectations*: demonstrating their expectations for excellence, quality, and high performance on the part of staff.

In addition, a transformational leader promotes and sustains a “school as a learning organization,” also known as a “learning school” (Tan, 2020a). To do so, the leader uses processes of environmental scanning; conceptualizes shared goals; creates cooperative teaching and learning climates; welcomes new ideas and risk taking; constantly reviews all areas of, and influences on, school operation; acknowledges and reinforces good work; and provides opportunities for professional development (Silins, Mulford & Zarins, 2002; Tan, 2020a). Kools and Stoll (2016) summarize the salient features of a learning school by identifying three modes of thinking: systems thinking, which involves environmental scanning to inform the internal operations; a strategic perspective, which focuses on developing shared goals; and a learning perspective, which centres on collaborative learning and teaching environments. Overall, a transformational school leader is one who considers and expands the interests of all the educational stakeholders by spearheading the

common purposes and mission of the group, spurring everyone to look beyond their own self-interest for the good of all (Bass, 1990a, 1990b). Such a leader needs to adopt a communal mindset by ensuring that the staff are inspired and of high quality. As maintained by Kwan (2020), “the principal will not lead to considerable improvement in student outcomes unless the principal has already made available a school environment in which teachers are competent and motivated” (p. 341).

A major criticism of transformational leadership is the potential for the abuse of power (Conger & Kanungo, 1998; Bass & Steidlmeier, 1999). It can be easy for successful transformational leaders to become idealized by their followers, who may then be tempted to follow their leader unquestioningly. If the power and influence of such leaders go unchallenged, these leaders may become self-serving and may end up exploiting their followers. Bass and Steidlmeier (1999) suggest the following possible problems resulting from transformational leaders: “narcissism, authoritarianism, Machiavellianism, flawed vision, a need for power coupled with lack of activity inhibition and promotion among followers of dependency, personal identification, and lack of internalisation of values and beliefs” (p. 182). Describing this as the “dark side of charisma,” Yukl (2006, p. 226) cautions against autocratic and abusive leadership, especially if the leader lacks the requisite moral qualities and encourages follower dependency (Bass, 1998; Hall, Johnson, Wysocki, & Kepner, 2002; Hay, 2006). Consequently, researchers have underlined the primacy of leading by example to complement transformational leadership. To put it another way, a transformational leader should be a role model for their staff members by behaving in ways consistent with societal values or the values of their organization (Leithwood & Jantzi, 2000).

But what does it mean for a transformational leader to be a role model, and how can that be achieved? Although increasing attention is being paid to the theories and application of transformational leadership in China and other parts of East Asia (for example, see Abbas & Tan, 2019; Liu, 2013, 2015; Retna & Ng, 2010; Song, Bae, Park, & Kim, 2013; Wu, Neubert, & Yi, 2007), the majority of the studies are empirical and focus on the application of transformational leadership in local contexts. What has remained under-explored is the theoretical analysis and philosophical justification of transformational leadership, especially with regards to the relations between ethics and transformational leadership from Chinese perspectives. The next section shall outline one such perspective by turning to the philosophy of the neo-Daoist thinker Wang Bi.

Transformational School Leadership through the Lens of Wang Bi

Wang Bi’s educational thought is pertinent to transformational leadership, as the concepts of change and leadership are at the heart of his philosophy. His approach was to synthesize Confucian and Daoist perspectives to interpret the concept of change.³ With respect to transformational leadership, three arguments are made in this segment: Wang’s ideas support a transformational leader who (1)

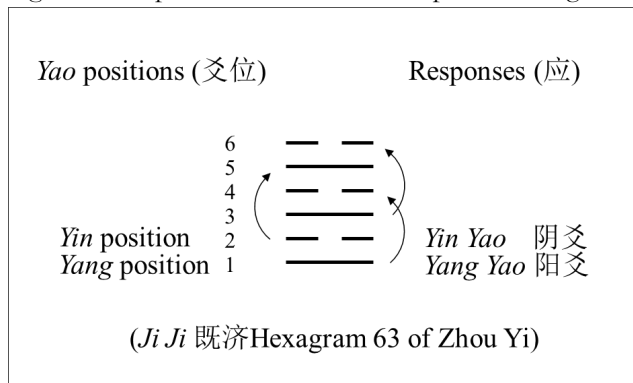
³ The concept of *xuan xue* (玄学, learning of the mysterious) was developed during the *Wei* and *Jin* dynasties (魏晋) (AD 220–420) by scholars studying Daoist philosophy in Lao Zi (老子), Zhuang Zi (庄子), and Lie Zi (列子). *Xuan* (玄) was derived from Lao Zi’s phrase *Xuan zhi you xuan* (玄之又玄, 众妙之门), which Lao Zi used in Passage 1 of the *Dao De Jing* (道德经) to describe the nature of *Dao* (道) (the Way), and the concepts of *wu* (无) and *you* (有). Lao Zi held that the concepts of *wu* (无) and *you* (有) were too profound (玄, or *xuan*) to decipher. Nevertheless, decoding the two concepts would be the approach to understanding the essence of all existing philosophical thinking (众妙之门, *Zhong miao zhi men*) about the sky (天), the earth (地), and myriad things (万物).

leads by effecting change, (2) inspires all of the staff to work towards a communitarian vision, and (3) demonstrates situational judgement and namelessness (*wuming*). Our contention is that Wang's philosophy extends the existing literature on transformational leadership by interpreting it from a neo-Daoist viewpoint. In addition, his insights are useful in addressing a major critique of transformational leadership regarding abuse of power.

Leading by Effecting Change

Drawing attention to change as the focal point, Wang (1980), in his *General Remarks on Zhou Yi (Zhouyi Lueli)*, stated: "A hexagram represents a situation, while *yao* presents appropriate responses to the *changes in the situation*" (italics added; all translations are by the first author unless otherwise stated).⁴ A hexagram comprises six stacked horizontal lines (爻 *yao*) that may be unbroken (known as yang) or broken (known as yin). In analyzing the position of the lines in a hexagram, Wang interpreted them as follows (see Figure 1):

Figure 1. *Yao* positions and relationships in a hexagram



According to Wang, the first line, at the bottom of a hexagram, stands for the beginning of the development of a situation. The middle lines, at the centre of the lower trigram and the upper trigram of the hexagram respectively, stand for centrality, that is, the balancing force in the interactions amongst the lines. The fifth line stands for the ruler, the leadership or noble position representing the one taking charge of a given scenario. The three pairs of lines of the lower and upper trigrams in the hexagram reveal either harmonious relationships (resonance) or unfavourable relationships (dissonance) between the ruler and the people, and among the people in an organization. Situations are fluid: according to Wang, leadership varies from hexagram to hexagram, and lines never show the interactions among the people because their positions and status are never fixed.

It follows that a leader should not be a transactional leader who adheres rigidly to established rules, regulations, and incentives. Good leaders, for Wang, are not aloof, amoral, and lacking in

⁴ The version of Zhou Yi (周易) (also known as *Yi Jing* or *I Ching*) on which Wang Bi based his exegeses was the original text of Zhou Yi (周易) regarding the 64 hexagrams (卦, or *Gua*), known as *Jing* (经, the Classic), which came about in the early years of the Zhou dynasty (周) (1046 BC–256 BC), as well as the first five commentaries of *The Ten Wings* (十翼), known as *Zhuan* (传), written by Confucian scholars during the period of the Spring and Autumn (春秋, or *Chun Qiu*) (770 BC–476 BC).

charisma. Instead, they are “sages” or ethical leaders who draw others to themselves and help others transform themselves in morally upright ways (Zhang & Ng, 2009). Wang maintained: “Thus, if one holds fast to the Great Image, the whole world will come to him, and if one uses the Great Note, folkways and customs will undergo moral transformation” (*General Remarks on the Subtle and Profound Meaning of the Laozi*, in de Bary & Bloom, 1999, translators). Neither should a good leader champion changes in one’s followers or the organization through coercive means. Wang cautioned that a leader “does not think that the forcing of It [the Way] should be the means to carry out affairs, ... he does not hold on to It as a means of control” (ibid.). It follows that a good leader should be a transformational leader who responds to changing circumstances, as represented by the fluidity of the lines in the hexagram, in a timely and appropriate manner. Applying the principles of transformational leadership, the leader manifests *idealized influence* by inspiring others to follow him or her spontaneously. Leaders set high expectations for their followers to aim at excellence, quality, and high performance (Leithwood & Jantzi, 2000).

Bringing about changes entails not only being aware of past and present developments, but also preempting future changes. Wang explained that the “things” in the hexagrams resemble human beings, and the “response” reveals resonance (or dissonance) in the relationships among the people as the results of their actions and interactions. The ruler, who is represented by the fifth line of the hexagram, symbolizes centrality. This means that the leader takes charge in balancing the forces within the interactions among the people and in managing the fluid situations among the people, which occur because the people’s positions are never fixed. In the second section of his *General Remarks on Zhou Yi* (“Articulating How the Yao Correspond to Changes”), Wang (1980) specified the implications of *wu jiu*, a recurring term in Zhou Yi meaning “no problem or trouble”:

Whenever “*wu jiu*” appears, it actually refers to a potential liability to foresee in a given situation and among the people involved. But because one is able to maintain the way of the noble man, such a leader succeeds in anticipating issues and taking preemptive actions. (Wang, 1980)

This approach to leadership that Wang recommended aligns well with a transformational leader who responds to environmental changes, identifies new opportunities for one’s school, and develops, articulates, and inspires others with a vision of the future (Leithwood & Jantzi, 2000). A transformational leader, then, according to Wang, does not act in an autocratic, divisive, and hurried manner. Instead, as Wang pointed out in his exposition of the hexagram, “changes take place in accordance with the interactions between the innate tendency of things” (Wang, 1980). Another translation of “innate tendency” (*li*) is of a principle that is not derived from any external source but refers to what is natural and spontaneous (*ziran*). Wang noted, “Nothing ever behaves haphazardly but necessarily follows its own principle. ... Therefore, things are complex but not chaotic, multitudinous but not confused” (*General Remarks on the Changes of the Zhou*, in de Bary & Bloom, 1999, translators). Applying the Daoist virtue of *ziran* means that leaders should not rely on material gains and disincentives such as bonuses, promotion, or firing to motivate and inspire their followers. Wang’s concept of *ziran* is in opposition to what is unnatural and harmful; that is, a fixation with making distinctions to the point of exclusion, with discrimination, prejudice, and objectification. In short, a good leader, for Wang, is not a transactional leader. Instead, they are an inspirational leader who is guided by *ziran*; that is, adept at making sense of and reacting appropriately to each and every situation. Such leaders are circumspect in their organizational leadership practice so as to foster and maintain harmonious relationships.

Inspiring Staff to Work towards a Communitarian Vision

How then should a leader bring about transformation? This brings us to the second point: Wang's ideas are aligned with the idea of a transformational school leader who rallies all the staff around a communitarian vision. By "communitarian," we are referring to the belief that the self is not atomistic and independent of social commitments and responsibilities. A community is central in shaping and defining a person's moral values, behaviour, and identity (Sandel, 1981; Tan, Chua, & Goh, 2015; Tan, 2020b; Taylor, 1989). As asserted by Haste (1996), "Morality cannot be understood unless we take full account of the social, cultural and historical context (p. 51). Returning to Wang's philosophy, his insights on leadership avoid the extremes of individualism, which neglect group needs, and of collectivism, which overlook individual needs. Instead, he supports a communitarian balance between individual and collective interests by stressing social embeddedness and human interdependence.

Wang (1980)'s communitarian vision is found in his *General Remarks on Zhou Yi*, in which he posits that a sage is capable of "capturing the change and transformation involved" by working towards and maintaining harmonious relationships. Returning to the lines in a hexagram in the *Zhou Yi* (see Figure 1), the *yao* in a hexagram represent different kinds of people in different positions and situations. The interactions of the lines represent the people in a particular scenario: certain lines resonate with each other while other lines are mismatched, representing either harmonious or dissonant relationships. The hexagram is analogous to a school with various "things," as Wang put it, or members of the school, such as the staff and students. The interactions among the teachers, students, parents, and other educational stakeholders may engender cooperation or conflicts. A wise school leader is one who is sensitive to and can manage complex human relationships prudently based on the parties involved, and circumstantial needs and agendas. Such leaders do not seek quick results through coercive means. Wang cautioned: "Being good at making quick progress lies in not hurrying, and being good at reaching goals lies in not forcing one's way" (*General Remarks on the Subtle and Profound Meaning of the Laozi*, in de Bary & Bloom, 1999, translators). Wang opposed the adoption of measures that create distinctions and exclusion: "Making distinctions, any name would result in exclusion; being dependent, any comparison would fall short of the absolute" (ibid.).

Wang's message, therefore, is a call for leaders to be attuned to the unique make-up and interests of each individual person as well as the nature of interactions between people. This quality entails the dimension of transformational leadership of *individualized consideration* in transformational leadership, whereby the leader is aware of and caters to the specific needs of their staff. The leader provides individual support to staff members and expresses concern for their feelings and needs (Leithwood & Jantzi, 2000). The leader also needs to exhibit a learning perspective by establishing collaborative learning and teaching environments (Kools & Stoll, 2016). It is through a consultative approach that a leader conceptualizes and advances a shared vision that is acceptable to all. This approach is in concert with a transformational leader who fosters group goals by promoting cooperation among staff members and assisting them to work together toward common goals (Leithwood & Jantzi, 2000). To bring the communitarian vision to fruition, a leader also engages in *intellectual stimulation* by bringing out the best in each member through encouraging innovation and creativity. To foster harmonious relationships and avoid dissonant relationships, the leader also needs to have a *positive influence* with which to inspire others, and an *ability to motivate* all to work towards a

shared vision. It can be observed from this that Wang's philosophy supports the four dimensions of transformational leadership but anchors them in a communitarian vision.

Situational Judgement and Namelessness (wuming)

It has been shown that a neo-Daoist leader promotes a communitarian culture by inspiring all the stakeholders to contribute towards a common vision. As for the means employed by transformational leaders, Wang recommended that they exercise situational judgement in which one does what is *ziran* (spontaneous or natural) for specific circumstances. On situational judgement, recall that Wang (1980) stated in his *General Remarks on Zhou Yi*, "A hexagram represents a situation, while *yao* presents appropriate responses to the *changes in the situation*." A good leader is one who reacts judiciously and appropriately to a given situation by arriving at the best possible decision. Wang's ideas of situational judgement aligns with Dunne and Pendlebury's (2003) definition of judgement as involving

the open texture of the deliberation it sets in train; its need for fresh acts of perception or insight to meet the particularity of each action-situation; its irreducibility to general propositions and its hence inextinguishably experiential character; its being not only directive of present action but also itself shaped by the history of one's previous actions as these have become layered in one's character. (p. 201)

The fact that individual discretion and prudence are needed by the leader is reiterated by Wang elsewhere: "That is why the six lines of a hexagram intermingle; one can pick out one of them and use it to clarify what is happening, and as the hard and the soft supersede one another, one can establish which one is the master and use it to determine how they are ordered" (*General Remarks on the Changes of the Zhou*, in de Bary & Bloom, 1999, translators).

Situational judgement is advocated, as a leader needs to observe how the different lines of a hexagram naturally intersect, discern which one is dominant, and decide how things should be ordered. The lack of structure and unpredictable nature of problem situations means that developments, relationships, and positions are not fixed but vary from case to case. Given that leadership differs from hexagram to hexagram, good leaders need to know when to assert their authority and when to delegate authority to others. Such leaders, consistent with Daoism, privilege a contemplative practice to help them develop and demonstrate situational judgement. Wang promoted a neo-Daoist philosophy of contemplative practice, using his typical concise and precise language, as presented in his commentary on the five elements from Passage 10 of the *Dao De Jing* (道德经):

- 1) staying in a status of tranquility, to reach a status of clear mind and conscientious spirit (载营魄, 抱一清神);
- 2) breathing in fresh air from nature, to reach and maintain a tranquil and mellow frame of mind (任自然之气, 至柔和);
- 3) cleansing any ill notion, so as not to let greed block one's intelligence (涤除邪饰, 不以物介其明);

- 4) governing with love and care, never resorting to playing with schemes to fool people, who will in turn support their leaders (爱民治国, 无以智, 民不辟而国治之); and
- 5) becoming bright and mindful, to break away from undue disorientation or bewilderment (至明四达, 无迷无惑) (see Wang, 2009).

Although the interpretations are brief, Wang articulated his appreciation of the Daoist contemplative practice of “emptying the mind,” and advocates such meditation to understand the world more comprehensively (物全) and transform the environment and people methodically (物化). Such leaders take the time to self-reflect, self-examine, and self-correct, constantly progressing towards “sagehood” while reacting with agility to surrounding changes. Engaging in contemplative practice can help school leaders be mindful and attentive to their own thoughts, emotions, and behaviours, as well as those of people around them. These leaders can then exercise situational judgement spontaneously and naturally (*ziran*) rather than mechanically and haphazardly. In short, Wang’s meditative practice energizes transformative school leaders by making them more focused on their core mission: motivating their staff to respond to change and achieve their communitarian vision within a collectivist culture. The judgements made by these leaders is necessarily experiential, as it takes place in real-life organizational settings. In his discussion of “image” and “idea,” Wang brought to the fore the exigencies experienced by a leader. In the section on *Ming Xiang*, entitled “Articulating How the Hexagrams Form up the *Xiang* (Images),” in *General Remarks on Zhou Yi*, Wang upheld a Daoist view in order to understand the image (*xiang*) in Zhou Yi.⁵ He claimed that “the best way to express ideas is to resort to images, whereas the best way to explain the meanings of the images is to use language.”⁶ To him, the image was just a vehicle harnessed to convey ideas.

⁵ In Zhou Yi, *xiang* (象, image) is one of the integral components of the hexagrams:

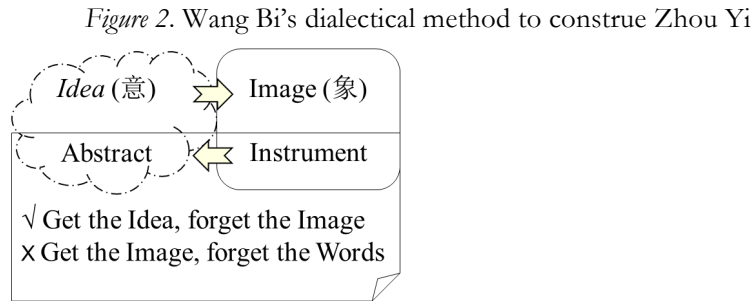
- *da xiang* (大象, great image), the eight trigrams (八卦, *gua*) as a whole, representing the material universe;
- *xiang* (象, image), each of the 64 hexagrams (卦, *gua*), representing a situation, in nature and in human organizations alike; and
- *xiao xiang* (小象, little images), each of the six lines (爻, *yao*) in a hexagram, representing the sub-circumstances in the situation. (Adopted from Zhang, 2009)

⁶ Wang’s interpretation was aligned with the Confucian expressions stated in Zhou Yi:

“子曰：书不尽言，言不尽意。
圣人立象以尽意，设卦以尽情伪，系辞焉得尽其言。”
(Yi Jing, Xi Ci [易经·系辞上传] Passage 12) (See Cui, 2007, pp. 383–384).

Confucius says, any piece of writing (书), once fixed, would not be inclusive in describing what was intended to express with language (言); and even if the language was fully stated, it would still be insufficient to articulate the idea (意). Therefore, the sages [referring to Wen Wang (文王) of the Western Zhou (西周), 1046 BC, and his sons Wu Wang (武王) and Zhou Gong (周公)] created images to completely present their ideas (尽意); and designed the hexagrams to reveal detailed features of the situations (尽情). The Xi Ci (系辞) took the functions of depicting what the images and hexagrams actually stood for, with an exquisite language (尽其言).

Therefore, once one gets an idea, they should forget the image, just like getting the rabbit and forgetting the trap (see Figure 2).⁷



The “image” represents the scenario faced by a leader, while the “idea” represents the desired outcome for each scenario. For a transformational leader, the ultimate goal is to achieve the communitarian vision for the organization. Wang asserted that “the images are the means to allow us to concentrate on the ideas” (*General Remarks on the Changes of the Zhou*, in de Bary & Bloom, 1999, translators). This means that a leader needs to make use of each situation (or “image”) as an opportunity to bring about change in their followers and organization. Put another way, a leader makes sense of and responds appropriately to each problem situation, whether it is to address a specific need, overcome a crisis, or guide their followers to come up with innovative solutions. Although the image (scenario) is useful, it is only a means to an end. Wang cautioned against staying fixed on the images themselves, as doing so would handicap a leader from moving on to grasping the idea (or desired outcome). A leader becomes fixated on a scenario when they bask in past glory, overrely on tried-and-tested methods, or do not take other scenarios seriously. What a leader should do instead is to continue to use their own personal insight by making sense of particular situations, along with the flexibility to put general knowledge to use (Dunne & Pendlebury, 2003). This combination of the particular and the general are noted by Wang:

That is why if one examines things from the point of view of totality, even though things are multitudinous, one knows that it is possible to deal with them by holding fast to the One, and if one views them from the point of view of the fundamental, even though the concepts involved are immense in number and scope, one knows that it is possible to cover them all with a single name. (*General Remarks on the Changes of the Zhou*, in de Bary & Bloom, 1999, translators)

It follows, then, that a leader is cognizant of both the general (“the point of view of totality,” “the One,” “a single name”) and the specific (“things,” “concepts”). The reference to examining things from a macro perspective (“the point of view of totality”) parallels the qualities of a transformational

⁷ Wang took a position of logical reasoning to advocate a dialectical method (思辨) of applying abstracts (抽象) and generalization (概括) to understand the implications in Zhou Yi. In the first section of his *General Remarks on Zhou Yi, Ming Tuan* (明象, Articulating Tuan), Wang claimed that each of the 64 hexagrams was a unified entity and that the topic (卦辞) itself expressed the overall meaning of the hexagram. It is evident that Wang was a dialectical thinker, who expanded the Confucian epistemology, and combined it with the Daoist metaphysical perspective. This tremendously influenced scholars of the following generations in taking the view that Confucianism and Daoist were not contradictory but instead complementary.

leader, who adopts systems thinking through environmental scanning and a strategic perspective to develop and achieve shared goals (Kools & Stoll, 2016).

Underpinning the exercising of situational judgement is the quality of namelessness (无名, *wuming*) in a leader. Wang foregrounds the moral dimension of a leader who practises nothingness (*wu*).⁸ Nothingness is not to be taken literally as emptiness, but denotes rather the absence of oppressive control and the manifestation of humility and deference (Chua, 2005; Zhang, 2009). Wang described the Daoist concepts of *wu* (无, nothingness) and *you* (有, being), the two fundamental philosophical notions from Passage 1 of the *Dao De Jing* (道德经), in his *Commentary to the Lao Zi* (老子注). He revealed a profound philosophical insight of Daoist observations of cosmological phenomena; that is, the development of the concept of *wu* to *you*, and of the concept of *wuming* to *youming* (有名, naming), as presented in his statement: “*You* (being) is stemmed from *wu* (nothingness); while formless and nameless are the origin of myriad things” (凡有皆始于无。故‘未形’‘无名’时, 则为万物之始).⁹ Wang also described a sage as one who embodies “gentleness and amiability and, in so doing, identif[ies] with nothingness (*wu*),” and who “respond[s] to things but without becoming attached to them” (*General Remarks on the Subtle and Profound Meaning of the Laozi*, in de Bary & Bloom, 1999, translators). In particular, a good leader, for Wang, espouses nameless (*wuming*) by not making “names”; that is, making distinctions and comparisons:

A name necessarily involves how one thing is distinct from other things, and a comparison necessarily involves how [the tenor of] one thing depends upon [the vehicle of] another. Making distinctions, any name would result in exclusion; being dependent, any comparison would fall short of the absolute. As it cannot be perfectly inclusive, any name for It would deviate greatly from the truth; as it cannot be absolute, any comparison for It would fail to designate what It really is. (*General Remarks on the Subtle and Profound Meaning of the Laozi*, in de Bary & Bloom, 1999, translators)

Wang’s description of an ethical leader as a sage is not unique in Chinese philosophy or leadership studies. But what makes his insights distinct and valuable is his idea of a transformational leader who advances communitarianism and practises *wuming*. Specifically, Wang’s *wuming*-based orientation to leadership has the potential to address the critique of the potential abuse of power in transformational leadership. Recall the question raised earlier of what it means for a transformational leader to be a role model and how that can be achieved. Wang’s emphasis on *wuming* is diametrically opposed to a dictatorial and manipulative leader who practises favouritism and promotes dependency among their followers. Researchers such as Maroy (2009) and Berkovich (2016) have cautioned that hierarchical power is ineffective in the modern world, where leaders need to foster a culture of collaboration and collective wisdom. Rather than abusing one’s power through imposing top-down, draconian, and oppressive measures, transformational leaders, according to Wang, do the opposite. They practise *wuming* by being empathetic, consultative, and just, responding to every “thing”

⁸ Wang articulated the Daoist concepts of *wu* (无, nothingness) and *you* (有, being), to set the fundamental principle of *xuan xue* by taking *wu* as the origin (本, *ben*), known as *Yi wu wei ben* (以无为为本, namely 贵无本体论), the doctrine to observe and explain cosmological phenomena.

⁹ Wang was the first to explain Daoist concepts of *wu* (无, nothingness) and *wuming* (无名, namelessness) as the origin (本, *ben*) of the sky and the earth (“无名, 天地之始。 有名, 万物之母”), and to portray the originality of the sky and the productivity of the earth.

(followers) in the hexagram appropriately by taking into account the contextual permutations, events, human relationships, and targeted outcomes. Furthermore, transformational school leaders' adoption of situational judgement helps them lead effectively as they are confronted with increasing work demands in a coronavirus-plagued world. With situational judgement we can find Wang's fourth interpretation of the Daoist philosophy: "governing with love and care, never resorting to playing with schemes to fool people, who will in turn support their leaders (Wang, 2009). Only by demonstrating conscious and conscientious practices of respect and care can leaders receive reciprocal support from their employees, colleagues, or teams, who will bring about substantial changes in themselves and to the school, which is the essence of transformational school leadership.

Educational Implications

The preceding has shown how Wang's philosophical thought mirrors the fundamental principles of transformational school leadership while also expanding them. His insights call for a distinctive type of leadership that foregrounds the Chinese beliefs in communitarianism and *wuming* (namelessness). Although a virtue-centric orientation to leadership is not unique to neo-Daoism and is also found in non-Daoist and non-Asian leadership literature, what is distinctive about Wang's philosophy is his exposition of the hexagram, images, and *wu*, which are salient to transformational leadership. First, Wang's analogies of the hexagram representing a situation, *yao* representing appropriate responses, and the middle lines representing the ruler, illustrate the fluidity of and interactions between different actors and developments. In the context of transformational leadership, a leader needs to demonstrate *ziran* (natural or spontaneous action or judgement) as part of knowing what works or does not work in one situation. As noted earlier, someone demonstrating *ziran* eschews making distinctions to the point of exclusion. A transformational leader, therefore, should exercise situational judgement by replacing discrimination, prejudice, and objectification with open-mindedness, adaptability, and discretion.

Second, Wang's notion of *wu* opens the door for school leaders to use *wu* (nothingness) as an additional and constructive tool for thinking about what innovation requires. The significance of Wang's insight is that it helps us understand changes as drivers of transformation, which can be harnessed by school leaders in their practice of transformational leadership. Take the notion of "you (gain) transformed from *wu* (nothingness) (从无到有)," for example. School leaders have to deal with the issue of teachers becoming overly busy when being asked to spend time on professional development (PD). In addressing the challenge of teachers feeling like they have no extra time, school leaders could set aside a few hours every week for PD, when teachers are free to learn new things and skills, and thereby become more effective at teaching. Such setting aside time is a practice of the Daoist paradox, "loss for gain (*you*)" – that is, taking time from "no time" (*wu*), because of busyness, to having time (*you*) to engage in PD. But some teachers may still resist attending PD, as they are beset with a heavy teaching workload. Transformational school leaders should therefore explore innovative ways to help teachers reduce the time they spend on lesson preparation and delivery. One way is to introduce professional learning communities so that teachers can share teaching resources, prepare lessons together, and co-teach. The time spent on participating in professional learning communities (a gain, or *you*) is a worthwhile investment, as it will help teachers to resolve the issue of "no time" (*wu*). It is important for a transformational school leader to "walk

the talk” by spearheading and engaging in the PD and professional learning communities alongside teachers.

Third, Wang’s idea of using images to express ideas is also a unique contribution to the concept of transformational leadership. School leaders could follow the example of the sages by appealing to images to present their ideas creatively and effectively. Take the image of water (水), which is one of the eight hexagrams (八卦). Lao Zi describes the nature of water as “being beneficial to, but not competitive with, other things” (水善利万物而不争), and tending to stay in lower places that ordinary people dislike (处众人之所恶, see Passage 8 of the *Dao De Jing* [道德经]). Wang insightfully observed that ordinary people are wary of low status (人恶卑), and agreed with Lao Zi in advocating that those in higher positions demonstrate their kind nature by displaying humility (上善若水) to their subordinates. School leaders who rely on this image of water in running the school and managing their staff will be mindful of supporting their staff by blending in with them, just like water. These leaders will also be reminded not to be like stagnant water that stays in lower places – that is, to avoid unethical behaviour – but instead to actively uphold their staff and provide moral support. A school that is framed by the image of water is one where the staff is not calculating or purely transactional in their work, but are instead motivated to contribute to the development and well-being of their school.

A major implication of Wang’s thought is its formulation of a neo-Daoist orientation of transformational leadership that is grounded in communitarianism and *wuming* (namelessness). It is important to remember that transformational leadership theories originate from Anglo-American histories and traditions that are predominantly individualistic. This is not to say that collaboration is absent in Western discourses and practices – the emphasis in Western discourses on constructing and supporting a shared vision suggests the importance of moving beyond self-interest toward a communal good. But the majority of writers on educational leadership, writing primarily in the West, overlook the important antecedent of communitarian values and their contribution to transformational leadership. This is where Wang’s philosophy is pertinent in drawing attention to a nurturing culture created and sustained by a transformational leader. Wang’s vision of leadership reflects a Chinese emphasis on communitarianism, which dovetails with the goal of a transformational leader who rallies all of their staff around a shared vision.

Wang’s ideas about namelessness (*wuming*) and situational judgement also help school leaders become effective transformational leaders in everyday settings. Instead of pressuring their staff and students to (out)perform one another in standardized assessments and staff appraisal, a transformational leader aspires towards harmonious relationships by seeking balance. Such leaders practise namelessness (*wuming*) by rejecting performativity and competition, both of which lead to dissonant relationships and the dissolution of a common moral purpose. This requires that leaders exercise situational judgement and model care, concern, and collaboration to meet the holistic needs of students and staff (Tan, 2019, 2020c). Kwan (2020) writes in her empirical study that school leaders need to replace surveillance measures of teacher performance with a collegial culture and a trusting school environment. Instead of promoting the commodification of education, a transformational leader crafts a communitarian vision with their staff and students that is based on harmony and nothingness (*wu*). In addition, the school management system, curriculum, pedagogy, assessment, staff collaboration, PD plans and other aspects of running a school are designed to support and fortify this shared vision.

Conclusion

Wang's understanding of a transformational leader encourages leaders to continuously engage in leadership that focuses on change, professional learning, and cultivating one's own leadership skills. In doing so, they become more inspirational and strengthen their moral authority and influence over their followers. They also need to equip themselves with thinking tools because unprecedented practices and issues in education require novel solutions. Wang's metaphysical approach, particularly his notion of the usefulness of images, can be harnessed as a useful thinking tool in dealing with change. Borrowing this idea can help leaders to build up their leadership skills, as it can help them to come up with new ideas from the scenarios (images) they face in their educational leadership practices, especially when the image constitutes a critical incident that requires them to make use of their sage-like qualities. A neo-Daoist interpretation underlines the empathetic, humble, and caring attributes of a leader who responds appropriately to situational changes in order to maintain harmonious relationships.

In this article, we have reviewed the theory of transformational school leadership through a neo-Daoist lens. We have explained how Wang's insights are instructive in addressing a recurring critique of transformational leadership and its potential for abuse of power. Rather than manipulating and exploiting their followers, a neo-Daoist transformational leader, as envisioned by Wang, is humane, consultative, and attentive to their followers' needs. We have explained this through three arguments. First, Wang's ideas support transformational leaders who go beyond transactional relationships to effect change as guided by *ziran* (spontaneity or natural actions). Second, such leaders inspire all of their staff to work towards a communitarian vision by making situational judgements that are guided by contemplation, and by practising *wuming* (namelessness). Third, Wang's philosophy has the potential to address a major criticism concerning the abuse of power in transformational leadership. Neo-Daoist leaders do not push for changes in an autocratic, divisive, or hurried manner. Instead, they rely on *wu* (nothingness) and *wuming* (namelessness) to achieve harmonious relationships.

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References

- Abbas, D. & Tan, C. (2019). Transformational Islamic leadership: A case study from Singapore. In M. Huda, J. Safar, A. K. Mohamed, K. A. Jasmi, & B. Basiron (Eds.), *Global perspectives on teaching and learning paths in Islamic education* (pp. 79–91). Hershey: IGI Global.
- Barnett, K., McCormick, J., & Conners, R. (2001). Transformational leadership in schools: Panacea, placebo or problem? *Journal of Educational Administration*, 39(1), 24–46.
- Bass, B. M. (1998). *Transformational leadership: Industrial, military, and educational impact*. Mahwah: Erlbaum.

- Bass, B. M. (1990a). *Bass & Stodgill's handbook of leadership: Theory, research and managerial applications* (3rd ed.). New York: Free Press.
- Bass, B. M. (1990b). From transactional to transformational leadership: Learning to share the vision. *Organisational Dynamics*, 13, 26–40.
- Bass, B. M., & Avolio, B. J. (Eds.). (1994). *Improving organisational effectiveness through transformational leadership*. Thousand Oaks: Sage Publications.
- Bass, B. M., Avolio, B. J., Jung, D. I., & Berson, Y. (2003). Predicting unit performance by assessing transformational and transactional leadership. *Journal of Applied Psychology*, 88(2), 207–218.
- Bass, B. M., & Steidlmeier, P. (1999). Ethics, character, and authentic transformational leadership behaviour. *Leadership Quarterly*, 10(2), 181–217.
- Berkovich I. (2016). School leaders and transformational leadership theory: Time to part ways? *Journal of Educational Administration*, 54(5): 609–622.
- Berkovich, I. (2018). Will it sink or will it float: Putting three common conceptions about principals' transformational leadership to the test. *Educational Management Administration & Leadership*, 46, 888–907.
- Bono, J., & Judge, T. A. (2004). Personality and transformational and transactional leadership: A meta-analysis. *Journal of Applied Psychology*, 89, 901–910.
- Burbules, N. C. (1995) Reasonable doubt: Toward a postmodern defence of reason as an educational aim. In W. Kohli (Ed.), *Critical conversations in philosophy of education* (pp. 82–102). New York: Routledge.
- Burns, J. M. (1978). *Leadership*. New York: Harper & Row.
- Bush, T. (2017). The enduring power of transformational leadership. *Educational Management Administration & Leadership*, 45, 563–565.
- Chua, S. M. J. (2005). The nameless and formless *dao* as metaphor and imagery: Modeling the *Dao* in Wang Bi's Laozi. *Journal of Chinese Philosophy*, 32(3), 477–492.
- Conger, J., & Kanungo, R. N. (1998). *Charismatic leadership in organizations*. Thousand Oaks: Sage Publications.
- Cui, B. (2007). *Yijing Zhuyi* (周易 注译). Zhengzhou: Zhongzhou Classics Press.
- D'Ambrosio, P. J. (2016). Wei-Jin period *cuanxue* 'neo-Daoism': Re-orking the relationship between Confucian and Daoist themes. *Philosophy Compass*, 11(11), 621–631.
- Dóci, E., Hofmans, J., Nijs, S., & Judge, T. A. (2020). Leaders under pressure: Time pressure and state core self-evaluations as antecedents of transformational leadership behaviour. *European Journal of Work and Organizational Psychology*, DOI: 10.1080/1359432X.2020.1714717, 1–10.
- De Bary, W. T., & Bloom, I. (1999). *Sources of Chinese tradition* (vol. 1). New York: Columbia University Press.
- Dunne, J., & Pendlebury, S. (2003). Practical reason. In N. Blake, P. Smeyers, R. Smith, & P. Standish (Eds.), *The Blackwell guide to the philosophy of education* (pp. 194–211). Malden: Blackwell Publishing.
- Hall, J., Johnson, S., Wysocki, A., & Kepner, K. (2002). Transformational leadership: The transformation of managers and associates. University of Florida, IFAS Extension. Retrieved from <http://edis.ifas.ufl.edu> (accessed 12 Oct 2019).
- Hallinger, P., & Heck, R. (2010). Collaborative leadership and school improvement: Understanding the impact on school capacity and student learning. *School Leadership and Management*, 30, 95–110.

- Haste, H. (1996). Communitarianism and the social construction of morality. *Journal of Moral Education*, 25(1), 47–55.
- Hay, I. (2006). Transformational leadership: Characteristics and criticisms. *E-Journal of Organizational Learning and Leadership*, 5(2), 1–19.
- Judge, T. A., & Piccolo, R. (2004). Transformational and transactional leadership: A meta-analytic test of their relative validity. *Journal of Applied Psychology*, 89, 755–768.
- Kools, M., & Stoll, L. (2016). What makes a school a learning organisation? *OECD Education Working Papers*, No. 137. Paris: OECD Publishing.
- Kwan, P. (2020). Is transformational leadership theory passé? Revisiting the integrative effect of instructional leadership and transformational leadership on student outcomes. *Educational Administration Quarterly*, 56(2), 321–349.
- Leithwood, K., & Jantzi, D. (2000). *Making schools smarter: A system for monitoring school and district progress*. Thousand Oaks: Corwin Press.
- Liu, L. (2013). A transformational school leadership model in Chinese urban upper secondary schools. *International Studies in Educational Administration (Commonwealth Council for Educational Administration & Management (CCEAM))*, 41(3), 73–94.
- Liu, P. (2015). Motivating teachers' commitment to change through transformational school leadership in Chinese urban upper secondary schools. *Journal of Educational Administration*, 53(6), 735–754.
- Maroy, C. (2009). Convergences and hybridization of educational policies around 'post-bureaucratic' models of regulation. *Compare*, 39(1), 71–84.
- Retna, K.S., & Ng, P. (2010). The need for transformational leadership in Singapore's school-based reform. *Journal of School Leadership*, 19(1), 19–33.
- Sandel, M. J. (1981). *Liberalism and the limits of justice*. Cambridge: Cambridge University Press.
- Silins, H., Mulford B., & Zarins, S. (2002). Organisational learning and school change. *Educational Administration Quarterly*, 38(5), 613–642.
- Song, J. H., Bae, S. H., Park, S., & Kim, H. K. (2013). Influential factors for knowledge creation practices of CT teachers: mutual impact of perceived school support, transformational leadership, and work engagement. *Asia Pacific Education Review*, 14(4), 467–482.
- Tan, C. (2019). Conceptualising social justice in education: A Daoist perspective. *Compare: A Journal of Comparative and International Education*, 1–16. DOI: 10.1080/03057925.2019.1660144.
- Tan, C. (2020a). The school as a learning organisation in China. *Journal of Professional Capital and Community*, 5(1), 15–26.
- Tan, C. (2020b). *Confucian Philosophy for Contemporary Education*. London: Routledge.
- Tan, C. (2020c). Revisiting Donald Schön's notion of reflective practice: A Daoist interpretation. *Reflective Practice*, 1–15. DOI:10.1080/14623943.2020.1805307.
- Tan, C. (2020d). The learning school through a Daoist lens. *Oxford Review of Education*, 46(3), 393–407.
- Tan, C., Chua, C. S. K., & Goh, O. (2015). Rethinking the framework for 21st-century education: Toward a communitarian conception. *Educational Forum*, 79(3), 307–320.
- Taylor, C. (1989). *Sources of the self: The making of the modern identity*. Cambridge: Harvard University Press.
- Tichy, N. M., & Devanna, M. A. (1986). *The transformational leader*. New York: Wiley.
- Urick, A., & Bowers, A. (2014). What are the different types of principals across the United States? A latent class analysis of principal perception of leadership. *Educational Administration Quarterly*, 50, 96–134.

- Wang, B. (1980). *Wang Bi ji jiaoshi* 王弼集校釋 (*The Annotated Edition of Wang Bi's Work*). Edited by Lou Yulie 樓宇烈. Beijing: Zhonghua shuju.
- Wang, B. (2009). *Commentary to the Lao Zi* [老子注]. Translated by R. G. Wagner & L. Yang. Nanjing: Jiangsu renmin chubanshe.
- Wang, H. (2018). *Wuwei*, self-organization, and classroom dynamics. *Educational Philosophy and Theory*, 51(11), 1,141–1,151.
- Wu, C., Neubert, M. J., & Yi, X. (2007). Transformational leadership, cohesion perceptions, and employee cynicism about organisational change the mediating role of justice perceptions. *Journal of Applied Behavioural Science*, 43(3), 327–351.
- Yukl, G. (2006). *Leadership in organisations* (6th ed.). New Jersey: Pearson Education.
- Zhang, Y. M. (2009). The hexagon-façade of a people's leader. *Chinese Management Studies*, 3(2), 169–172.
- Zhang, Y. M., & Ng, P. T. (2009). Exploring Yi Jing and its implications to leadership. *Chinese Management Studies*, 3(2), 155–168.
- Zhu, H. (2018). Neo-Daoism and Neo-Confucianism: Three common themes. *Journal of Chinese Philosophy*, 45(1–2), 119–124.

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