

Guanxi Management as Complex Adaptive Systems: a Case Study of Taiwanese ODI in China

Meiling Wong

ABSTRACT. In China, *guanxi* is the basis on which Chinese exchange a lifetime of favors, resources, and business leverage. *Guanxi* is considered a unique construct and a product of Confucian values and the contemporary political and socioeconomic system in Chinese society. With its cultural embeddings *guanxi*, as the social norm of conduct, functions as complex adaptive systems that expand and interconnect to become well-knit social networks; meanwhile the functions of well-fixing and self-reinforcement of the *guanxi* networks (*chuens*) are synergetically activated internally, externally, and interactively, which shows their extreme flexibility of adaptation. Taking as a case study an outside direct investment (ODI) Taiwanese firm in China, we address and conduct a survey to examine the effect of *guanxi* on management. Results of the research suggest that *guanxi* is not limited to interpersonal links; it is also the switch that activates social networks and that reconciles interpersonal and internetwork mismatches to influence management efficacy.

KEY WORDS: culture, *guanxi*, complex adaptive systems

Introduction

Behavior that is locally efficient can be inefficient from a global point of view, being constructed with indigenous value that is embedded within local culture. Many firms are now in global alliances that depend upon flexibility and adaptability to local markets, requiring their managers to possess appropriate leadership styles to cope effectively with different value systems and cultures in international management (Coviello et al., 1998; Fahy, 2002). Culture, an essential component of which is personal

values (Kluckhohn, 1949; Kroeber, 1952), is now at center stage (Cadogan et al., 2001; George et al., 1998; Nakata and Sivakumar, 1996; Steenkamp et al., 1999), in the context of analyzing the role of leadership in maintaining sustained competitive advantage for a firm and superior international performance (Kimber, 1997; Jackson and Aycan, 2001; Pfeffer, 2002). An investigation of managers' personal values and their cultural antecedents is necessary to understand the leadership of individual managers and their potential to influence competitive advantage (Erbring and Young, 1979).

In China, *guanxi* has been a way of life since time immemorial, thus the personal investment required to develop and maintain good social relations is accepted as an unavoidable fact of life. *Guanxi* interaction has been viewed by many scholars as an idiosyncratic cultural phenomenon (Lee and Ellis, 2000) where Confucianism is the major life philosophy. With respect to social context, Chinese culture provides a tightly knit social framework in which individuals are protective of one another and organizations safeguard their members' interests. This projects a preference for cooperation, group decision-making, and relationships. Thus, the importance of networks lies in their emphasis on collectivism and group harmony. It is suggested that China is typified by the "government of people," whereas the USA is typified by the "government of law" (Chang, 1976). The cultural value of collectivism or the designation of a "government of people" can be interpreted as manifestations of a society governed by *guanxi* (Chun and Graen, 1997).

Guanxi is considered a unique Chinese construct (*The Economist*, 8/4/2000) and a product of Confucian values and the contemporary political and

socioeconomic system (Fan, 2002). For each specific relationship, people in China “reconcile” through interpersonal accommodation and negotiation (Imrie et al., 2002). This is labeled the Chinese system of management, i.e., the management of people (Chang, 1976; Yang, 1959). We thus propose that *guanxi* functions as complex adaptive systems that expand and interconnect with one another and expand into a well-knit social network. And the *guanxi* network (*chuen*), well-fixing and self-reinforcing, synergistically activates internally, externally, and interactively, which shows its extreme flexibility in adaptation that enables leadership with better management, which supplements the leader-member exchange theory (LMX; Graen and Uhl-Bien, 1991, 1995). Therefore, in an organization, leadership that adopts and leverages the *guanxi* mechanism in constructing and managing can make the system resourceful, contingent, and adaptive to external changes.

For the purpose of our research, we conduct an empirical study to explore the impact of *guanxi* on management leveraged by desirable leadership. In pursuing this objective the paper is organized as follows. First, it reviews briefly the concept of leadership as perceived in cultural contexts. Second, the meaning and cultural context of *guanxi* with respect to Confucianism is introduced, and the complexity of the *guanxi* network is elaborated. Third, for managerial utilization, the propositions of the role that *guanxi* plays as the internal factor in managing and reconciling interpersonal conflicts and as the link to external networks to enable intergroup coordination are developed and followed by interviews with managers and questionnaires completed by employees for verification in our case study. Finally, the paper ends with conclusions and directions for future research.

Leadership as perceived in cultural contexts

Personal and national culture depend essentially on personal values (Hofstede, 2001; Kroeber, 1952; Triandis, 1989, 1990; Triandis et al., 1988), which gives rise to a leadership style and an effectiveness dependent on the leader’s “bundle of values” (White, 1993). Leaders’ personal and cultural values

are measurable (Schwartz, 1992; Schwartz and Sagiv, 1995) and they imbue and underlie the performance of the firm (Byrne and Bradley, 2007).

In spite of general agreement among researchers about the importance of leadership to a firm’s performance, in that it allows greater responsiveness to environmental change, provides a way to coordinate the efforts of diverse groups within the organization, and facilitates organizational membership and satisfaction of personal needs (Katz and Kahn, 1978; Steers, 1991; Yukl, 1998), the concept of leadership may be perceived differently in various cultures. For instance, while in Western firms such as American ones, individualism is emphasized for achievement of efficiency, reaching collective harmony is the top priority in Asian firms, such as Chinese ones.

Chinese philosophy is characteristically secular and places less emphasis, in comparison with Western philosophy, upon foundational metaphysical reality. Okada Takehiko’s (1986) analysis of ancient Chinese culture divides life philosophy into three parts: realism, idealism, and transcendism. Confucianism in fact represents idealism but realism in practice, while transcendism includes Taoism and Buddhism, each of which has its own view of life, society, and the world. Realism is based upon material gain, in which it is believed that, when there is benefit for one side, there must be another side holds for conflict in a society constructed with people. This kind of relationship for utilitarianism exists everywhere, including the examples of the monarch and his subjects, the father and his son, brothers, friends, and the husband and his wife. That is also why techniques and power were utilized to dominate and control the opposite side to avoid possible conflicts. Idealism, in contrast, is based upon morality, in which it is believed that human and nature are one. Therefore self-realization and personality formation is indivisibly integral to constructing the ideal society. The idea of coexistence for idealism is to reach harmony. Leadership in this case takes as its role model the monarch to his subjects, or the patriarch who arbitrates justice in an organization.

***Guanxi* and Confucianism**

As discussed above, more than just interpersonal relationships, *guanxi* is also a norm of conduct that is

attached to a role, as bound to *wulune*, i.e., the five fundamental relationships: emperor–subject, father–son, husband–wife, elder–younger siblings, and friend–friend, which sets the social hierarchy in China and constructs the *guanxi chuen* (social network) that links individuals. These five relationships give order and stability to the social system and offer the role contexts in which self-examination and self-development can be judged and interpreted (Chun and Graen, 1997). And the regulation integrated for a certain status is the “role” (Chang, 1986; Linton, 1972). Associated with each relationship is a set of role requirements and prescriptions from which deviation is not expected from a moral person (Yang, 1959). *Guanxi* ties people together according to the specific relationship between these people. People in the same social network are strongly bound, have strong and clear role obligations, and hold high levels of trust, loyalty, and altruism (Chun and Graen, 1997).

As discussed and well developed by Langenberg in his book (2007), *guanxi* is a phenomenon so ubiquitous in Chinese society that all Chinese are assumed to be part of at least one *guanxi* network (Schramm and Taube, 2001). *Guanxi* is a sociological term that describes a subset of Chinese personal connections between people (relationships) in which one individual is able to prevail upon another to perform a favor or service (Chung and Hamilton, 2002). It lies in the skillful mobilization of moral imperatives in pursuit of diffuse and calculated instrumental ends. As the “value of life” and “behavioral rule” (Cao, 2002), *guanxi* is said to be the key to analyzing and understanding Chinese conduct (Chen, 1998). *Guanxi* provides a “lubricant” (Chung and Hamilton, 2002; Gold et al., 2002; Standifird and Marshall, 2000) that helps the Chinese to get through life. It gives “the flow of many events a helping hand” (Zuo, 1997), which is not restricted to social interaction; rather it extends to business realms. *Guanxi* affiliations, rather than “arm’s length” principles, are the basis for transactions (Lovett et al., 1999).

Complexity of the *Guanxi* network

China, a great family formed with closely related races, in particular, is a society built based upon

Confucianism where people are closely tied into varieties of *guanxi*, whose networks bind millions of Chinese firms into social and business webs, largely dictating their success (Gibb and Li, 2003; Pearce and Robinson, 2000). As Hwang (1987) characterized *guanxi* bases, the strongest ones are referred to as the affective or “expressive” ties found among family members and close friends. In contrast, more distant others, such as between salesmen and customers, are connected by temporary “instrumental” ties that are enacted regularly in the pursuit of material goals. Between the two extremes are found “mixed” ties, which are governed by norms of equality and thus describe the most active domain for *guanxi* networking. For these mixed ties, *guanxi* is more like a network of relationships that a person cultivates through exchange of gifts and favors to attain mutual benefits. It is based on friendship and affection, and on a reciprocal obligation to respond to requests for assistance.

Guanxi networks are subnets (groups) connected with sums of cells (units) constructed by threads (individuals) with knots (*guanxi*), where groups stand for subsocieties such as communities, and cells stand for organizations such as families and firms. Groups are defined by people sharing some characteristic, and this similarity is often recognized by the public as the meaning for certain social interaction, where *guanxi* can take place more easily. Mayfair M.H. Yang has described *guanxi* building as the transformation process whereby two discrete individuals construct a basis of familiarity to enable subsequent development of their relationship. In this process, the gap between two hitherto-unrelated individuals is bridged, so that an outsider becomes part of the inside social circle of another person (Yeung and Tung, 1996). Take locality as an example for further elaboration. Locality is one of the common forms of ascribed *guanxi* bases in China for group identification, where Da-ton-hsiang refers to members from the same province, and Hisao-ton-hsiang refers to an even closer relationship for members from the same village. People from the same origin have affection for their hometown; this kind of liking is thus passed down to one another, which ties them together and reinforces their friendliness. In an organization, this is how Chinese gather together into small groups.

The small-world theorem explains the interpersonal network in our daily life: a special organization

and structure in which people are interconnected in a regular pattern mixed with a chaotic equilibrium (Watts and Strogatz, 1998). The small world reveals an underlying dynamic of interconnectedness that expresses itself indelibly in who we are, how we think, and how we behave (Buchanan, 2002). Our social network has not been designed by anyone; it has evolved through countless historical accidents: people meeting people by chance. However random it may appear, perhaps some special and rather finely crafted architecture has welled up within it nonetheless, just as in *guanxi* networks, which indeed stimulates our motive for this research. Adapted from Granovetter's paper (1973), in the example illustrated in Figure 1 strong links are shown as solid circles and weak links by dashed lines. The number of degrees of separation between A and B jumps from one to four if you remove the single link between them. The link is a social bridge, a crucial connection that binds a portion of the social fabric together.

Granovetter points out that bridges are very effective in tying social networks together, and that weak links are more important than the strong ones since they act as the crucial ties that sew the social network together. Situations are fairly similar in Chinese society, and these links are named *guanxi* with various characteristics: First, all relationship links are originated from the "family," including the weak ones. Weak links can be seen as the gate that outsiders try to cross to become insiders. These links may be weak in comparison with blood-family ties, but they are the key to unlocking and relocking the *guanxi chuen* (discussed in the last section). Second,

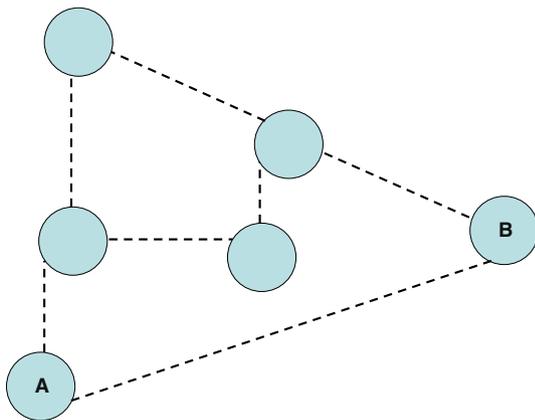


Figure 1. Strong and weak interpersonal links.

although strong links may not be so obvious in linking networks, they are neither ineffective nor erasable, as stated in the book *Nexus* (Buchanan, 2002). For Chinese, the *guanxi*, once established, is permanent no matter what. Until one dies, the role context of *wulune* governs one's mind and behavior in associating with others. Third, *guanxi* can be distant. However, frequent interaction with reciprocity reinforces *guanxi* and brings them closer. Fourth, although weak links can be seen as social "shortcuts," their existence is as vital as in the "small world," and their absence could cause the network to fall apart. Since all *guanxi* (*wulune*) are rooted in and derived from the base of the "family," everyone can be related with others through a basis of familiarity (as mentioned in the last section). Like complex adaptive systems, which are constantly revising and rearranging, *guanxi* is adjustable and altercasting as needed. In Chinese society, *guanxi* and its mechanism is the key, and can be characterized as falling between chaos and order.

For the following discussion, Waldrop's book, *Complexity* (1992), will be partly quoted to avoid any slight error. Prof. Licklider (1953) explained Hebb's (1949) "new theories of learning and memory" in his speech: most of the brain appears to be a study in chaos under a microscope, with each nerve cell sending out thousands of random filaments that connect it willy-nilly to thousands of other nerve cells. And yet this densely interconnected network is obviously not random. A healthy brain produces perception, thought, and action quite coherently. Moreover, the brain is obviously not static. It refines and adapts its behavior through experience. It learns.

In the crudest picture, each neuron is a single cell with a central body from which issue numerous fibers. The shortest of these, known as *dendrites*, are the neuron's receiving channels, while the longer fibers, known as *axons*, are its transmission lines. The axons running away from any neuron eventually link up with the dendrites of other neurons, providing communicating links (Buchanan, 2002) at synapses, points of connection where nerve impulses make the leap from one cell to the next. These synaptic changes are in fact the basis of all learning and memory (Hebb, 1949). As a result, said Hebb, a network that started out at random would rapidly organize itself. Experience would accumulate through a kind of positive feedback: the strong,

frequently used synapses would grow stronger, while the weak, seldom-used synapses would atrophy. These memories, in turn, would tend to be widely distributed over the brain, with each one corresponding to a complex pattern of synapses involving thousands or millions of neurons. (Hebb was one of the first to describe such distributed memories as “connectionist.”)

Furthermore, Prof. Licklider explained Hebb’s second assumption: that the selective strengthening of synapses would cause the brain to organize itself into “cell assemblies”: subsets of several thousand neurons in which circulating nerve impulses would reinforce themselves and continue to circulate. Hebb considered these cell assemblies to be the brain’s building blocks of information. Each one would correspond to a tone, a flash of light or a fragment of an idea. Yet these assemblies would not be physically distinct. Indeed, they would overlap, with any given neuron belonging to several of them. Because of this, activating one assembly would inevitably lead to the activation of others, so that these fundamental building blocks would quickly organize themselves into larger concepts and more complex behaviors. The cell assemblies, in short, would be the fundamental quanta of thought.

Chinese society (or any other society) is also like a brain; *guanxi* acts as the building blocks that gather individuals into networks and functions as the link between chaos and order. Each *guanxi* mechanism functions as the synapse, transmitting information, coordinating activities, and organizing into assemblies (*guanxi chuen*). Different from cell assemblies, these social assemblies can be physically separated, yet emotionally connected through *guanxi*. Furthermore these social assemblies can be organized into a large entity without geographical restrictions based on the external environment. And *chaxugeju* of *guanxi* (Fei, 1992[1947]) classifies the closeness of relationship between oneself and others and determines each individual position and role in the *guanxi chuen* (circle). The closer to the core one is positioned (inner), the stronger the links to the cluster. Those who are positioned further out thus have relatively weaker links to the cluster. Through these weak links (*guanxi*), individuals are able to hook up with other small worlds (*guanxi* networks or *guanxi chuen*) and have interconnections among networks in forming collected small worlds (Watts and Strogatz, 1998).

All complex systems have somehow acquired the ability for order and chaos in a special kind of balance. This balance point – often called the edge of chaos – is where the components of a system never quite lock into place, and yet never quite dissolve into turbulence either. The edge of chaos is the constantly shifting battle zone between stagnation and anarchy, the one place where a complex system can be spontaneous, adaptive, and alive (Waldrop, 1992). In the Chinese *guanxi* network system, based on *wulune* and its referred *guanxi*, this particular cultural value is commonly recognized by all Chinese and not only distinguishes the hierarchical structure in an organization but also regulates the interactive norms between individuals, which in turn stabilizes the system. In *guanxi* networks, the original system is destroyed by the chaos caused by a newcomer’s joining, which is followed by reforming, restructuring, and strengthening. In order to achieve mutual adaptation and reconciliation, individuals surpass themselves to acquire the group characteristics and reach integral harmony. Utilizing resources including information, *guanxi* under this circumstance helps individuals to turn their dilemmas around into favors. Based on accumulated positive feedback, *guanxi chuen*s thus expand and interconnect with one another and become well-knit social networks. Meanwhile functions of self-fixing and self-reinforcement of the *guanxi chuen*s are synergetically activated internally, externally, and interactively, which shows their extreme flexibility in adaptation (Figure 2).

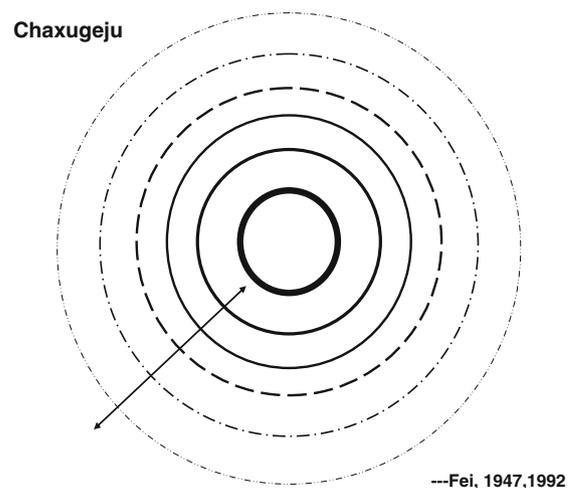


Figure 2. *Chaxugeju* and small world.

Just as frequently used synapses grow stronger, frequently used *guanxi* are usually the tighter ones. However it is quite costly to establish and maintain *guanxi*, including money, energy, and time expenditure. *Guanxi* are born through benefit, and so will be terminated by it. When there is mutual benefit, a weak link reinforces and becomes a strong link; while there is benefit conflict, the reverse is true. Strong links in *guanxi chuen* are based on inertia, such as blood ties, for which affection for each other is more important than benefit, whereas for weak links, which are substitutable, benefit is the only practical cause that really counts.

Propositions for *guanxi* mechanism in management

Management of people in Chinese firms for leadership is basically the issue of dealing with *guanxi*. *Guanxi* is a hybrid between affection and benefit. Different *guanxi* have different weights for each factor, and the weights change depending on the situation. Leveraging *guanxi* is an art. For example, the purpose of entering a *guanxi chuen* through a *guanxi* link is to reach the core of it and grasp the power of influence so as to govern the rest with it. Under this situation, there are at least two niches that need to be recognized: First, the key man (*guanxi* link) who brings you into the *guanxi chuen* has to be pampered with proper control or you will be hand-tied and stuck under his control instead. Second, great respect has to be paid to the former powerholder to avoid potential revolt from his remaining followers. Best of all is to have them incorporated into your own force.

For the practical purpose of leveraging, the definition of *guanxi* is deconstructed in skill sets as follows. The characteristics of Chinese *guanxi chuen* are listed in Table I.

Invisible

A *guanxi chuen* is a unique circle of interpersonal relationships that links individuals with *guanxi*. It is invisible but powerful, not just merely for the purpose of physical connecting but also for psychological solidarity.

TABLE I
Guanxi skill set

<i>Guanxi chuen</i>	<i>Guanxi</i> link
1. Invisible	a. Key man
2. Reliable	b. Capable
3. Reciprocal	c. Influential
4. Adjustable	d. Bearable
5. Solidarity	e. Respectable
6. Transferable	f. Flexible
7. Altercasting	g. Reconciler
8. Permanent	

Reliable

People inside the *guanxi chuen* are connected to one another. These are either ties of blood or interrelated with *guanxi*, which is reliable and trustworthy.

Reciprocal

In the *guanxi chuen*, there is common knowledge on reciprocity, either through material, monetary or return of favors. Most of all, it is the *qin* (affection) that matters. The reciprocity is like a balance sheet that never balances. One should always pay back more than one received.

Adjustable

Although *guanxi* is specifically defined in a certain *guanxi chuen*, it is adjustable in terms of strength and distance from the core a four dimensions in accordance with different situations as required.

Solidarity

Members of a *guanxi chuen* are united as one and cohesive to the core. No-one is apart, seeking individual benefit. Instead opportunities come from the *chuen*, and continue to do as long as one sustains their position correctly and plays their role well.

Transferable

The sixth *lune* is based on rules extended from the *wulune* and is followed by unrelated people, such as

businessmen. For example, A and B both belong to the same *guanxi chuen*, while C and B also belong to another *chuen*. When C needs a favor from A, he would ask B to link him up with A for a favor. Thus the *guanxi* between A and B can be passed to A and C.

Altercasting

As time goes by, some *guanxi* weaken, especially those that were built based upon benefit. People do not keep in close touch when the mission is over. Nevertheless *guanxi* can be altercasted when the “key man” appears, one who is able to link up *guanxi chuens* as needed. And when the old *guanxi* recalls the new cooperative, the *guanxi* is further reinforced.

Permanent

Guanxi in between is either forever lasting or terminated once for all. People within a *guanxi* are *zijiaren* (insiders), and become strangers when the *guanxi* terminates.

A *guanxi chuen* link should possess the following features (Table I).

Key man

The link to a *guanxi chuen* is the key man, who holds the key to the entrance of the *chuen*; he is able to unlock the *chuen* and bring in outsiders or connect to other *chuens*.

Sensitive

Links have to be sensitive not just to people but also to situations, such as information, or atmosphere, so as to link up certain people at the right time.

Capable

One way of gaining respect is to be capable, through which one can be helpful to others.

Influential

The link to a *chuen* is usually the most influential person, since he is the most popular or capable one. He usually earns his respect by being helpful to others. Thus it is easier to have the favor back (reciprocity) when he asks for it. It is indirectly proved that one who is warm-hearted and enthusiastic can be influential.

Flexible

Since the one who links up the *chuen* needs to be popular, he certainly has to be flexible enough and easy going, so that conflicts or negotiations can be settled smoothly through him.

Bearable

Links that are sensitive and flexible certainly are bearable with sympathy, particularly for arbitration and dealing with complaints, since they are usually also mediators and reconcilers.

Reconciler

Links with lots of *guanxi* usually take their roles as the reconciler of disputes and usually receive respect and reach common consensus from both sides, since most likely they both owe him favors from the past.

According to this discussion, the definition of *guanxi* is deconstructed into skill sets and applied to the management of people by leadership in Chinese firms. We thus propose that the *guanxi* mechanism in the *guanxi* network has an impact on management of leadership as:

- P.1 *Guanxi* network and its mechanism have positive effect on financing.
- P.2 *Guanxi* network and its mechanism have positive effect on reconciling conflict.
- P.3 *Guanxi* network and its mechanism have positive effect on lowering employee turnover rate.
- P.4 *Guanxi* network and its mechanism have positive effect on performance.

Empirical study

A survey was administered with individuals employed in a Taiwanese outside direct investment (ODI) in mainland China (Table II). This Taiwanese firm was established with capital of five million NT \$5,000,000 in 1992. Their Chinese factory in Dongguang, Kuangtong was established in 1997 with capital of US \$1,000,000 dollars and experienced annual growth of 20% over the last 10 years. A questionnaire containing 20 questions in four parts (Appendix A): financing, local government, among colleagues, and superior/subordinates, concerning the internal and external effects of *guanxi* mechanism, was designed in accordance with interviews with the chief executive officer (CEO) and then completed by a total of 664 employees, using a five-point Likert scale, varying from “strongly disagree” (1) to “strongly agree” (5). We performed Pearson test on the data collected from our sample (Tables IV, V).

Results and discussion

A total of 554 effective questionnaires (of a total of 664 distributed) were collected. All the respondents

were employees with at least 1 year of working experience; some of them have been working with the present company for over 10 years (Table III). Applying Pearson test (SPSS) with 5% significant level, we analyzed the collected data. All of our propositions are supported, which means that both *guanxi* network and its mechanism have significant influence on the management of leadership. Results also show: (1) respondents who are senior, with more pay, or with less education have stronger belief in *guanxi* and its effect, (2) effect of *guanxi* is positively correlated with higher positioned employees with more decision power; in other words, the more power one has, the more *guanxi* one leverages (Tables IV, V).

In addition, the information learned from our interviews with the CEO is fascinating: First, expenses on maintaining public relationships takes up to 2–3% of total expenses each year. Second, regardless of the same nationality of Taiwan and China, Taiwan is relatively more democratic than China, which makes the information more transparent. Thus for business, real capability is emphasized in Taiwan whereas the implicit rule of *guanxi* is well acknowledged and complied with more in China. Third, although corporate culture has its

TABLE II
Basic information of the respondents

Sex		Working experience	
Male	337	Less than 1 years	402
Female	217	Between 1 and 3 years	53
Age		Between 3 and 5 years	67
Below 20 years old	57	Others	32
Between 21 and 25 years old	249	Current position	
Between 26 and 30 years old	160	Operators	545
Between 31 and 35 years old	40	Middle managers	8
Between 36 and 40 years old	25	CEO	1
Between 41 and 50 years old	16	Current department	
Above 51 years old	7	Production	529
Education		R&D	6
Elementary school	28	Management	8
Junior high school	83	Others	11
High school	331	Current salary level	
Community college	16	Below RMB ¥500	34
Technological college	11	Between RMB ¥500 and 1,000	281
University	77	Between RMB ¥1,000 and 1,500	166
Masters and above	8	Between RMB ¥1,500 and 2,000	45
		Above RMB ¥2,000	28

TABLE III
Sample characteristics

Treatment	Source	Sum of squares	Degrees of freedom	Mean square	Mean	SD	F
Age	SSB	20,879.755	553	37.757	26.57	6.145	13.658
	SSW	0.000	0				
	SST	20,879.755	553				
Working experience	SSB	904.599	553	1.636	1.69	1.279	28.789
	SSW	0.000	0				
	SST	904.599	553				
Current salary	SSB	89,525,383.574	553	161,890.386	1031.14	402.3356	729.739
	SSW	0.000	0				
	SST	89,525,383.574	553				

TABLE IV
Response data collected

Responses Questions	Strongly agree	Agree	Yes and no	Disagree	Strongly disagree
Q1	44% (243)	47% (261)	0% (0)	8% (44)	1% (6)
Q2	47% (261)	39% (216)	1% (6)	12% (65)	1% (6)
Q3	64% (355)	32% (177)	0% (0)	4% (22)	0% (0)
Q4	57% (316)	35% (194)	0% (0)	8% (44)	0% (0)
Q5	46% (254)	47% (261)	0% (0)	7% (39)	0% (0)
Q6	41% (228)	48% (265)	0% (0)	9% (50)	2% (11)
Q7	51% (282)	39% (216)	1% (6)	8% (44)	1% (6)
Q8	56% (310)	37% (205)	1% (6)	6% (33)	0% (0)
Q9	56% (310)	37% (205)	0% (0)	7% (39)	0% (0)
Q10	51% (283)	42% (232)	0% (0)	6% (33)	1% (6)
Q11	51% (283)	43% (238)	0% (0)	6% (33)	0% (0)
Q12	48% (265)	46% (254)	0% (0)	5% (29)	1% (6)
Q13	39% (216)	43% (239)	0% (0)	15% (83)	3% (16)
Q14	49% (270)	41% (228)	0% (0)	9% (50)	1% (6)
Q15	47% (261)	39% (217)	0% (0)	11% (60)	3% (16)
Q16	44% (243)	47% (261)	1% (6)	8% (44)	0% (0)
Q17	45% (250)	48% (265)	0% (0)	7% (39)	0% (0)
Q18	48% (265)	45% (250)	0% (0)	7% (39)	0% (0)
Q19	52% (289)	44% (243)	0% (0)	4% (22)	0% (0)
Q20	33% (183)	42% (233)	15% (83)	6% (33)	4% (22)

impact on cultivating employees' vision and guiding their working attitude, in China everything is basically viewed in terms of money since mainland Chinese are eager to reduce poverty. So *guanxi* is used for personal benefit instead of being leveraged to reach mutual benefit as well as reinforcing mutual affection. The employment turnover rate is mostly on the operating line, where professional skill is not

strictly required and employees never stay long enough to build subtle and stable *guanxi* with others. Head men or middle managers, who are assumed to form stronger *guanxi* in their network, usually have a lower turnover rate.

In China, there are no reliable performance measures (Peng and Luo, 2000). Therefore subjective ratings are heavily relied upon, such as

TABLE V
Pearson test

Questions	Pearson test	Sex	Age	Education	Working experience	Current position	Current department	Current salary
Q1	Pearson	-0.021	0.216	0.322	0.178	0.131	0.006	0.155
	Sig.	0.617	0.000	0.000	0.000	0.002	0.888	0.000
Q2	Pearson	0.015	0.111	0.200	0.101	0.134	0.067	0.084
	Sig.	0.723	0.009	0.000	0.018	0.002	0.117	0.047
Q3	Pearson	-0.053	0.217	0.238	0.192	0.140	0.077	0.174
	Sig.	0.217	0.000	0.000	0.000	0.001	0.071	0.000
Q4	Pearson	0.024	0.125	0.126	0.110	0.128	0.073	0.081
	Sig.	0.580	0.003	0.003	0.009	0.003	0.086	0.057
Q5	Pearson	-0.042	0.234	0.398	0.229	0.126	-0.009	0.254
	Sig.	0.322	0.000	0.000	0.000	0.003	0.835	0.000
Q6	Pearson	0.004	0.250	0.266	0.271	0.128	0.046	0.247
	Sig.	0.930	0.000	0.000	0.000	0.003	0.279	0.000
Q7	Pearson	0.049	0.229	0.305	0.256	0.123	0.060	0.219
	Sig.	0.253	0.000	0.000	0.000	0.004	0.156	0.000
Q8	Pearson	0.024	0.198	0.225	0.216	0.123	0.044	0.182
	Sig.	0.578	0.000	0.000	0.000	0.004	0.300	0.000
Q9	Pearson	-0.018	0.219	0.571	0.270	0.131	0.032	0.204
	Sig.	0.672	0.000	0.000	0.000	0.002	0.448	0.000
Q10	Pearson	0.091	0.112	0.244	0.253	0.135	0.009	0.191
	Sig.	0.032	0.009	0.000	0.000	0.001	0.828	0.000
Q11	Pearson	0.005	0.201	0.195	0.549	0.078	0.005	0.395
	Sig.	0.910	0.000	0.000	0.000	0.068	0.902	0.000
Q12	Pearson	-0.058	0.274	0.206	0.293	0.115	0.016	0.254
	Sig.	0.169	0.000	0.000	0.000	0.007	0.707	0.000
Q13	Pearson	-0.034	0.173	0.239	0.277	0.113	0.017	0.194
	Sig.	0.420	0.000	0.000	0.000	0.008	0.682	0.000
Q14	Pearson	0.013	0.228	0.243	0.250	0.109	-0.005	0.226
	Sig.	0.769	0.000	0.000	0.000	0.010	0.909	0.000
Q15	Pearson	-0.028	0.198	0.225	0.233	0.083	-0.060	0.197
	Sig.	0.505	0.000	0.000	0.000	0.051	0.159	0.000
Q16	Pearson	0.001	0.206	0.328	0.200	0.106	0.000	0.174
	Sig.	0.985	0.000	0.000	0.000	0.012	0.991	0.000
Q17	Pearson	0.001	0.321	0.220	0.453	0.112	0.036	0.403
	Sig.	0.977	0.000	0.000	0.000	0.008	0.396	0.000

TABLE V
Continued

Questions	Pearson test	Sex	Age	Education	Working experience	Current position	Current department	Current salary
Q18	Pearson Sig.	0.017 0.698	0.339 0.000	0.268 0.000	0.283 0.000	0.082 0.053	-0.047 0.265	0.266 0.000
Q19	Pearson Sig.	-0.021 0.621	0.282 0.000	0.233 0.000	0.314 0.000	0.081 0.056	0.095 0.025	0.265 0.000
Q20	Pearson Sig.	-0.031 0.469	0.510 0.000	0.230 0.000	0.310 0.000	0.119 0.005	0.027 0.521	0.452 0.000

Significant level: ≥ 0.05 is insignificant; $0.01 \leq$ significant ≤ 0.05 ; $0.001 \leq$ absolute significant ≤ 0.01 ; < 0.001 is completely significant.

profitability, sales growth, asset growth, employee morale, and competitive status (Wang et al., 2003). According to our interview, since its establishment of 1997, the firm has a growth rate in profit of 20% yearly, increased sales of 50% yearly, and decreasing turnover rate, especially after 2001 when the local *guanxi* network was well constructed. Obviously *guanxi* has positive effect in five areas: turnover rate decrease, ROE increase, financing/liquidity, performance efficiency, and productivity.

As our propositions were verified by interviews and empirical data, we thus conclude that, in China, the role-context society, where obligation is attached to specific roles assigned upon the *wulume* system based on the teaching of Confucianism, i.e., *guanxi*, thus plays a role not just as an internal factor in constructing interpersonal relationships and reinforcing teamwork, in turn increasing performance efficiency: externally it also links with other networks to enlarge the *guanxi chuen* in lowering external uncertainty and ensuring interbusiness cooperation. Therefore, for business in China, *guanxi* ought to be considered as one of the essential elements in not just linking up people physically, but also has a significant impact on management.

Directions for future research

Although the purpose of this paper is to examine the effect of *guanxi* on management efficacy of leadership, we realize that there are likely to be other associations not specifically examined in this paper that warrant future attention. There are a few suggestions for future research: First, *wulume*, which in effect defines the social roles and classifies their hierarchical system on the basis of Confucianism, is in fact the cornerstone of the *guanxi* construct. The effect of the teaching of Confucianism is dynamic, and may vary with the possibility of generation gap. How the *guanxi* mechanism works between generations of Chinese in recognizing and manipulating their *guanxi* networks deserves more attention and studies. Second, in our survey, we notice that, regardless of how *guanxi* matters to all Chinese, most of the first-line operators take orders as given and deal with them in their own way. This phenomenon shows that a reward system may compensate for *guanxi* leakage, which deserves further research.

Third, we acknowledge that, as *guanxi* networks knit across and are widespread in every corner of Chinese society, their essential influence in multiple dimensions requires further attention.

Appendix A: Questionnaire

1. *Guanxi* well with banks helps build the firm's creditability.
2. *Guanxi* well with banks helps increase financed amount.
3. *Guanxi* well with banks helps extend due date of the loan.
4. *Guanxi* well with banks receives more preferential financing.
5. *Guanxi* well with local government helps solve labor dispute.
6. *Guanxi* well with local government helps the firm's development.
7. *Guanxi* well with local government helps mediate inter corporations' dispute.
8. *Guanxi* well with local government helps gain contract.
9. *Guanxi* well with local government helps build corporate image.
10. *Guanxi* well with colleagues helps decrease the turnover rate.
11. *Guanxi* well with colleagues helps increase mutual willingness assisting each other.
12. *Guanxi* well with colleagues helps increase performing efficiency.
13. *Guanxi* well with colleagues encourages improvement.
14. *Guanxi* well with colleagues helps increase employees' morale.
15. *Guanxi* well with colleagues helps the firm's solidarity.
16. *Guanxi* well between superior and his subordinates helps execute the firm's policy.
17. *Guanxi* well between superior and his subordinates helps increase efficiency.
18. *Guanxi* well between superior and his subordinates helps the top-down orders run smooth.
19. *Guanxi* well between superior and his subordinates strengthens mutual trust.
20. *Guanxi* well between superior and his subordinates helps foster team spirit.

References

- Buchanan, M.: 2002, *Nexus: Small Worlds and the Groundbreaking Science of Networks* (W.W. Norton & Company, Ltd., London).
- Byrne, G. J. and F. Bradley: 2007, 'Culture's Influence on Leadership Efficiency: How Personal and National Cultures Affect Leadership Style', *Journal of Business Research* **60**, 168–175. doi:10.1016/j.jbusres.2006.10.015.
- Cadogan, J. W., N. J. Paul, R. T. Salminen, K. Puumalainen and S. Sundqvist: 2001, 'Key Antecedents to 'Export' Market-Oriented Behaviors: A Cross-National Empirical Examination', *International Journal of Research in Marketing* **18**(3), 261–282. doi:10.1016/S0167-8116(01)00038-6.
- Cao, H.: 2002, 'Exploring the Emergence of Guanxi Networks', *Social Sciences in Hubei* **10**, 73–75.
- Chang, Y. N.: 1976, 'Early Chinese Management Thought', *California Management Review* **19**, 71–76.
- Chang, T. S.: 1986, *Social Theory* (Giu Liu, Taipei), pp. 239–240.
- Chen, J.: 1998, *Guanxi Resource and the De-Ruralization of Farmers: Field Study on Yue Village, East Zhejiang Province* (China Sociology, Beijing).
- Chun, H. and G. Graen: 1997, 'Guanxi and Professional Leadership in Contemporary Sino-American Joint Ventures in Mainland China', *Leadership Quarterly* **8**(4), 452–465.
- Chung, W.-K. and G. G. Hamilton: 2002, 'Social Logic as Business Logic: Guanxi, Trustworthiness, and the Embeddedness of Chinese Business Practices', in R. P. Appelbaum and W. L. F. Felstiner (eds.), *Rules and Networks* (Hart Publishing, Oxford). Quoted from electronic version at: http://students.washington.edu/wchung/social_logic.pdf. Accessed 19 Apr 2001.
- Coviello, N. E., P. N. Ghauri and K. Martin: 1998, 'International Competitiveness: Empirical Findings from Some Service Firms', *Journal of International Marketing* **6**(2), 8–17.
- Erbring, L. and A. A. Young: 1979, 'Individuals and Social Structure: Contextual Effects as Endogenous Feedback', *Sociological Methods & Research* **7**(4), 396–430.
- Fahy, J.: 2002, 'A Resource-Based Analysis of Sustainable Advantage in a Global Environment', *International*

- Business Review* **11**(1), 57–78. doi:10.1016/S0969-5931(01)00047-6.
- Fan, Y.: 2002, 'Questioning Guanxi: Definition, Classification and Implications', *International Business Review* **11**(5), 543–561.
- Fei, X. (1992[1947]) *From the Soil: The Foundations of Chinese Society* (trans. Gary G. Hamilton and Zheng Wang) (University of California Press, Berkeley, CA).
- George, J. M., G. Jones and J. Gonzalez: 1998, 'The Role Affect in Cross-Cultural Negotiations', *Journal of International Business Studies* **29**(4), 749–772. doi:10.1057/palgrave.jibs.8490051.
- Gibb, A. and J. Li: 2003, 'Organizing for Enterprise in China: What can we Learn from the Chinese Micro, Small, and Medium Enterprise Development Experience', *Future* **35**(4), 403–421.
- Gold, T., D. Guthrie and D. Wank: 2002, 'An Introduction to the Study of Guanxi', in T. Gold, D. Guthrie and D. Wank (eds.), *Social Connections in China: Institutions, Culture, and the changing Nature of Guanxi* (Cambridge University Press, Cambridge).
- Graen, G. B. and M. Uhl-Bien: 1991, 'The Transformation of Professionals into Self-Managing and Partially Self-Designing Contributors: Toward a Theory of Leadership-Making', *Journal of Management Systems* **3**, 25–39.
- Graen, G. B. and M. Uhl-Bien: 1995, 'Relationship-Based Approach to Leadership: Development of Leader-Member Exchange (LMX) Theory of Leadership Over 25 Years: Applying a Multi-Level Multi-Domain Perspective', *The Leadership Quarterly* **6**, 219–247. doi:10.1016/1048-9843(95)90036-5.
- Granovetter, M.: 1973, 'The Strength of Weak Ties', *American Journal of Sociology* **78**, 1360–1380. doi:10.1086/225469.
- Hebb, D. O.: 1949, *The Organization of Behavior* (Wiley, New York).
- Hofstede, G.: 2001, *Culture's Consequences* (Sage, Beverly Hills, CA).
- Hwang, K. K.: 1987, 'Face and Favor: The Chinese Power Game', *American Journal of Sociology* **92**(4), 944–974. doi:10.1086/228588.
- Imrie, B. C., J. W. Cadogan and R. McNaughton: 2002, 'The Service Quality Construct on a Global Stage', *Managing Service Quality* **12**, 10–18. doi:10.1108/09604520210415353.
- Jackson, T. and A. Aycan: 2001, 'Towards the Future', *International Journal of Cross Cultural Management* **1**(1), 5–9. doi:10.1177/147059580111001.
- Katz, D. and R. Kahn: 1978, *The Social Psychology of Organizations*, 2nd Edition (Free, NY).
- Kimber, D.: 1997, 'Sharing, Giving and Friendship: The Forgotten Factors of Business Relationships', *Journal of Human Values* **3**, 45–67. doi:10.1177/097168589700300105.
- Kluckhohn, C.: 1949, *Mirror for Man: The Relation of Anthropology to Modern Life* (McGraw Hill, NY).
- Kroeber, A. L.: 1952, *The Nature of Culture* (University of Chicago Press, Chicago).
- Langenberg, E. A.: 2007, *Guanxi and Business Strategy* (Physica-Verlag, Heidelberg).
- Lee, M. Y. and P. Ellis: 2000, 'Insider-Outsider Perspectives of Guanxi', *Business Horizons* **January–February**, 25–30.
- Licklider, J. C. R.: 1953, 'Hearing', *Annual Review of Psychology* **4**, 89–110.
- Linton, R.: 1972, 'The Status-Role Concept', in E. Hollander and R. Hunt (eds.), *Classic Contributions to Social Psychology* (Oxford University Press, New York), p. 112.
- Lovett, S., L. C. Simmons and R. Kali: 1999, 'Guanxi Versus The Market: Ethics and Efficiency', *Journal of International Business Studies* **30**(2), 231–248.
- Nakata, C. and K. Sivakumar: 1996, 'National Culture and New Product Development: An Integrative Review', *Journal of Marketing* **60**(1), 61–72. doi:10.2307/1251888.
- Okada Takehiko: 1986, *The Subject and its Meaning of Chinese Philosophy* (China Books House).
- Pearce, J. A. II. and R. B. Robinson: 2000, 'Cultivating Guanxi as a Foreign Investor Strategy', *Business Horizons* **January–February**, 31–38.
- Peng, M. M. and Y. Luo: 2000, 'Managerial Ties and Firm Performance in a Transition Economy: The Nature of a Micro-Macro Link', *Academy of Management Journal* **43**, 486–501. doi:10.2307/1556406.
- Pfeffer, J.: 2002, 'Competitive Advantage Through People', in J. Henry and D. Mayle (eds.), *Managing Innovation & Change* (Sage, London).
- Schramm, M. and M. Taube: 2001, 'Institutionenökonomische Anmerkungen zur Einbettung von Korruption in das Ordnungssystem chinesischer Guanxi-Netzwerke', Duisburg Working Papers on East Asian Economic Studies, 60. Quoted from electronic version at: <http://www.ub.uniduisburg.+de/ETD-db/theses/availableduett-07172002130752/unrestricted/AP+2001,+60.pdf>.
- Schwartz, S. H.: 1992, 'Universals in the Content and Structure of Values: Theoretical Advances & Empirical Tests in 20 Countries', in M. P. Zanna (ed.), *Advances in Experimental Social Psychology*, Vol. 25 (Academic, San Diego), pp. 1–65.
- Schwartz, S. H. and L. Sagiv: 1995, 'Identifying Culture-Specifics in the Content and Structure of Values', *Journal of Cross-Cultural Psychology*, 92–116.
- Standifird, S. S. and R. S. Marshall: 2000, 'The Transaction Cost Advantage of Guanxi-Based Business Practices', *Journal of World Business* **35**(1), 21–42.

- Steenkamp, J. B., E. M. Frenkel ter Hofsted and M. Wedel: 1999, 'A Cross-National Investigation into the Individual and National Cultural Antecedents of Consumer Innovativeness', *Journal of Marketing* **63**, 55–69. doi:[10.2307/1251945](https://doi.org/10.2307/1251945).
- Steers, R. M.: 1991, *Introduction to Organizational Behavior* (Harper-Collins, NY).
- Triandis, H. C.: 1989, 'The Self & Social Behavior in Different Cultural Contexts', *Psychological Review* **96**, 506–520. doi:[10.1037/0033-295X.96.3.506](https://doi.org/10.1037/0033-295X.96.3.506).
- Triandis, H. C.: 1990, Cross Cultural Studies of Individualism & Collectivism. Proceedings of Nebraska Symposium on Motivation (University of Nebraska Press, Lincoln, Nebraska), pp. 41–133.
- Triandis, H. C., R. Bontempo, M. J. Villareal, M. Asai and N. Lucca: 1988, 'Individual and Collectivism: Cross-Cultural Perspectives on Self-in-Group Relationships', *Journal of Personality and Social Psychology* **54**(2), 323–338. doi:[10.1037/0022-3514.54.2.323](https://doi.org/10.1037/0022-3514.54.2.323).
- Waldrop, M. M.: 1992, *Complexity: The Emerging Science at the Edge of Order and Chaos* (Touchstone Simon & Schuster, NY).
- Wang, D., A. S. Tsui, Y. Zhang and L. Ma: 2003, 'Employment Relationship and Firm Performance: Evidence from an Emerging Economy', *Journal of Organizational Behavior* **24**, 511–535. doi:[10.1002/job.213](https://doi.org/10.1002/job.213).
- Watts, D. J. and S. H. Strogatz: 1998, 'Collective Dynamics of 'Small-World' Networks', *Nature* **393**, 440–442. doi:[10.1038/30918](https://doi.org/10.1038/30918).
- White, H. C.: 1993, 'Values Come in Styles Which Mate to Change', in M. Hechter, L. Lynn and R. E. Michod (eds.), *The Origin of Values* (Aldine De Gruyter, New York), pp. 63–91.
- Yang, C. K.: 1959, 'Some Characteristics of Chinese Bureaucratic Behavior', in D. S. Nivision and A. F. Wright (eds.), *Confucianism in Action* (Stanford University Press, Stanford, CA), pp. 134–164.
- Yeung, I. Y. M. and R. Tung: 1996, 'Achieving Business Success in Confucian Societies: The Importance of Guanxi (Connections)', *Organizational Dynamics*, 54–65. doi:[10.1016/S0090-2616\(96\)90025-X](https://doi.org/10.1016/S0090-2616(96)90025-X)
- Yukl, G.: 1998, *Leadership in Organizations* (Prentice-Hall, Englewood Cliffs, NJ).
- Zuo, B.: 1997, *Chinese People's Lian and Mianzi* (Huazhong Normal University Press, Wuchang).

*Department of Industrial Engineering & Management,
National Chinyi University of Technology,
Taichung, Taiwan
E-mail: mlwong@ncut.edu.tw*

Copyright of Journal of Business Ethics is the property of Springer Science & Business Media B.V. and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.