THE ROLE OF GUANXI IN INFORMATION TECHNOLOGY ENABLED ORGANIZATIONS: A STRUCTURATION THEORY PERSPECTIVE

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Abstract

Firms in China, and in Asia-Pacific countries to a certain degree, cannot escape from two institutional characteristics of modern organizations: the uniquely Eastern practice of guanxi and the uniquely Western artifact of information technology. While both constructs have been extensively studied in organizational contexts, few have examined how these two constructs interact with each other and how such interaction impact organizational processes, norms, and other institutional properties. From the lens of structuration theory, we attempt to understand this interesting and important phenomenon. We submit that guanxi is neither a cultural artifact of the Chinese society, nor a product of weak institutions in shortage economies; rather, it is an outcome of structuration between the human agents who enact it and the institutional environment in which it is enacted, enabled or constrained by information technology. This structuration view of guanxi does not predict its ever lasting effect on Chinese business and society, nor does it foretell its demise in the global economy. However, it does provide a better explanation to the critical questions why guanxi is significant in certain firms but insignificant in others and how information technology enables and constrains the enactment of guanxi in organizational life.

Keywords: Guanxi, China, Information Technology, Culture, Institution, Structuration.
1 INTRODUCTION

In the management literature about Chinese management theories and practices, there is no concept like guanxi that evokes more spirited debate about what it is, its role in business and society, and whether it is truly a unique Chinese concept or phenomenon (Dunfee & Warren, 2001; Gold, Guthrie, & Wank, 2002; Guthrie, 1998; Luo, 1997b; Park & Luo, 2001; Yeung & Tung, 1996). In the extant studies, guanxi has been conceptualized as personal connections with implicit mutual obligation, assurance, and understanding of reciprocal favors in business and social relationships (Gold et al., 2002; Luo, 1997b), as a form of social capital that can be used for individual advancement and organizational competitiveness (Carlisle & Flynn, 2005; Knight & Yueh, 2008), or as a substitute for institutional support in a society that lacks a stable legal and regulatory environment businesses can rely on for impersonal business dealings (Xin & Pearce, 1996). For the interest of organizational scholars, “China today provides a context in which we can study the role of connections as manager-initiated substitutes for the kind of institutional support taken for granted in countries with more stable business environment.” (Xin & Pearce, 1996)(p. 1642-1643).

In this study, we advance a new conceptualization of guanxi from the lens of structuration theory (Giddens, 1984). We propose guanxi as a social construction enacted by human agents, perpetuated as an institutional property, and constrained by institutional and technological processes, as opposed to the common conceptualization of guanxi as a social object in and of itself (Yang, 1994), or as a consequence of weak institutional environment (Xin and Pearce, 1996). This new conceptualization allows us to examine its relationships and interactions with other institutional properties, human agents, and information technology from the structuration vantage. This new conceptualization differs from most of the extant literature in at least three significant ways. First, it focuses on the institutional level attributes of guanxi rather than the individual level attributes (Tsui & Farh, 1997). Second, it emphasizes the structuration characteristics of guanxi rather than instrumental or sentimental characteristics (Li, 2007). And finally, it focuses on the role of guanxi in inter-organizational relationship rather than inter-personal relationships, an area that has not received much deserved attention (Fan, 2002; Xin & Pearce, 1996).

To support this new conceptualization, following the structuration dialectics advanced in Orlikowski (1992), we conduct an exploratory case study by carrying out in-depth interviews with managers of multiple manufacturing firms in China to uncover the mechanisms through which guanxi enables or hinders the inter-organizational exchanges in areas of supply chain integration and information sharing. More importantly, we adopt a multi-level approach to the understanding of guanxi in inter-organizational exchanges and relationships. That is, we examine how management and professional staff view the roles and boundaries of guanxi in the context of inter-firm system integration, process integration, and purchasing transactions. Specifically, we are interested in investigating the following research questions: 1) What is the role of guanxi in modern Chinese firms participating in the global economy? 2) How is guanxi’s role in business constrained or enhanced by institutional properties and information technology? And 3) how and why is guanxi enacted and perpetuated by organizational agents under different organizational and technological constraints?

Answers to these questions will have significant theoretical and practical implications. Proponents of guanxi have been arguing strongly that it is not possible to manage Chinese firms effectively without understanding and practicing guanxi strategically and effectively, while opponents of guanxi have been arguing that guanxi is a transitory product in societies that lacks the rule of laws and institutional environment and is a source of corruption and inefficiency, and therefore should be eradicated in modern management practices. Our study should reveal how guanxi is being practiced today in Chinese businesses and whether it will survive the modernization of management philosophy, structures, and practices that are sweeping across China as a result of globalization and ubiquitous implementation of information technology in business operations and strategic decision making.
2 THEORETICAL BACKGROUND

There is a rich body of literature on guanxi, a Chinese word for social connections at individual and organizational levels (Gold et al., 2002). However, there is also an on-going debate among scholars in the East and the West about what guanxi really is and what it stands for in academic research and management practice, and what guanxi really does in social and business exchanges in China as well as other countries. Some argue that it is uniquely a Chinese concept rooted in the Chinese tradition and culture (Leung, Lai, Chan, & Wong, 2005; Luo, 1997b; Yang, 1994); others see it is a little more than a Chinese word for personal networks, social capital, or gift economies found in all societies (Gold et al., 2002). While the majority of the academic studies see guanxi as having a positive effect on inter-firm business exchanges and relationships, there are cautious voices in the literature that argue guanxi as a double edged sword that could cause harm, increase frictions, and foster corruptions in business exchanges (Dunfee & Warren, 2001; Fan, 2002; Guthrie, 1998; Warren, Dunfee, & Li, 2004). However, there is no denial that guanxi has existed in the social fabric of Chinese society for a long time and has significant influences on how individuals and organizations behave and the outcomes of individual and organizational actions (Farh, Tsui, Xin, & Cheng, 1998; Tsui & Farh, 1997; Warren et al., 2004; Xin & Pearce, 1996).

Given the diverse perspectives and theoretical foundations that have been used in studies about guanxi, it is not feasible to conduct a comprehensive review of the literature. To establish a theoretical foundation for our research, we classify the extant literature on guanxi into two general categories: those that consider guanxi as uniquely Chinese and theorize it from cultural and social perspective (Fan, 2002; Standifird & Marshall, 2000; Tsang, 1998; Tsui & Farh, 1997; Yang, 1994), and those that consider guanxi as a consequence of institutional conditions and theorize it from economic and transactional perspective (Gu, Hung, & Tse, 2008; Luo, 1997a; Park & Luo, 2001; Warren et al., 2004; Xin & Pearce, 1996). In the following sections, we provide a brief summary of the literature based on this categorization.

2.1 Guanxi as a Construct of Cultural Tradition

Scholars who believe guanxi as a uniquely Chinese phenomenon trace its root to the teachings of Confucius about relationships between individuals and society (Gold et al., 2002; Luo, 1997b; Yang, 1994). In traditional Chinese culture that has been heavily shaped by the philosophies of Confucius for over two thousand years, an individual’s identity and sense of fulfilment is squarely centered on the social interactions with one’s social sphere, which makes the understanding and successfully managing interpersonal relationships essential elements of being Chinese, regardless of time or place (Gold et al. 2002). “The Chinese tend to see the manipulation of human relationships as the natural and normal approach for accomplishing most things in life. This also means that by perceiving society as a web of human relationships and associations the Chinese are highly alert to the importance of being skilled in manipulation” (Pye, 1968, pp. 173-174). Thus, “Chinese culture creates a deep psychological proclivity for individuals to actively cultivate and manipulate social relationships for instrumental ends.” (Gold et al., 2002, p. 11) Therefore, Guanxi is fundamentally an outcome of building and managing interpersonal relationships, which makes guanxi inseparable from Chinese culture. From this perspective, guanxi is an artifact of Chinese culture that has been collectively maintained and passed down from generation to generation.

With this cultural view of guanxi, it follows logically that the concept and practice of guanxi are unique to the Chinese societies which include mainland China and ethnic Chinese groups in Southeast Asia region and countries, and are individual by nature. Furthermore, it predicates that guanxi will continue to play an essential role in the lives of Chinese and Chinese societies, despite the significant social, economic, political, and technological advances, such as the economic reform started in the 1980s that has introduced numerous Western ideas and culture, or the globalization of local and regional economies in the last two decades, which has profoundly transformed the Chinese society in the mainland. To certain degree, this prediction appears to be holding well. The practice of guanxi in China is more widespread and more influential at individual and organizational levels and in social,
economic, and political activities today than ever before. It has served both as a lubricant for business transactions and a catalyst for individual and organizational corruption.

2.2 Guanxi as a Consequence of Institutional Condition

However, the cultural view of guanxi has been increasingly challenged by scholars in recent years (Gold et al., 2002). Alternative conceptualizations and theorizations of guanxi have been proposed by scholars mostly in the West from the perspectives of economics and transactions (e.g., Guthrie, 1998; Standifird & Marshall, 2000; Tsang, 1998). One of these is the institutionalist view that takes the positions that guanxi emerges from a particular set of institutional conditions that happen to exist in China, such as the shortage economies with weak legal infrastructure, and that these conditions can exist in other societies; thus there is nothing fundamentally Chinese about guanxi (Gold et al., 2002).

Scholars like Xin and Pearce (1996) and Luo (1997a) argued that the strong reliance on guanxi by Chinese firms when dealing with business partners and government agencies is primarily a result of weak market structure, poorly defined property rights, and instable institutions such as a lack of coherent business laws. Despite the thousands of laws, rules, and regulations adopted by the Chinese government in recent decades, they are rarely enforced completely; as a result, rather than depending on an abstract notion of impartial justice, Chinese traditionally prefer to rely on their individual contacts with those in power or control resources to get things accomplished (Luo, 1997a). Therefore, managers “cultivate personal connections to substitute for reliable government and an established rule of law” (Xin and Pearce, 1996, p.1642). Because the weak institutional environment usually disadvantages disproportionately the private businesses in resource distribution and protection against threats from governments and rivals, Xin and Pearce (1996) further argued that managers in privately owned enterprises are more like to perceive guanxi as important to business success, to rely on guanxi in their business dealings, and to trust their business connections than their counterparts in state-owned enterprises. Data collected through interviews with managers in state-owned, collective-hybrid, and private-owned companies in China support these arguments (Xin and Pearce, 1996).

From the same institutional perspective, other scholars have argued that guanxi is a strategic resource under the institutional environment in China and if used appropriately it can create competitive advantage for firms (Luo, 1997a; Standifird & Marshall, 2000; Tsang, 1998; Yeung & Tung, 1996). Luo (1997a) studied the impact of guanxi on business performance in foreign-invested enterprises (FIEs) in China. Survey data collected from managers and firm performance data collected from local governments suggest that guanxi-based sales force marketing and credit-granting have a systematic and favorable effect on firm's profitability, asset turnover, and domestic sales growth (Luo, 1997a).

It is important to note that, in contrast to the cultural view of guanxi that predicts guanxi will continue to thrive in Chinese society indefinitely, the institutional view of guanxi predicts that as institutions in the developing economies and societies mature, so should the reliance on social networks built on individual relationships by managers and individuals (Gold et al., 2002; Guthrie, 1998). In other words, institutionalists predict the eventual demise of guanxi in social and business environment in societies of developing economies such as China and Russia, as these societies continue to advance in their institutional and legal environments.

3 GUANXI IN DIGITAL ECONOMY

The literature review suggests that guanxi is fundamentally conceptualized as a social object that emerged due to unique cultural, social, and institutional environment that has been in existence in the Chinese society for a long time. Therefore, guanxi is something a member of the society creates, maintains, cultivates, and even transfers from one social circle to another. Individuals who want to function in their social or business circles effectively must understand, maintain, and continue to cultivate their guanxi networks, and failure to do so will render an individual helpless and constrained in social life and business dealings. Businesses that want to tackle the Chinese market effectively must pay due attention to the construction and maintenance of guanxi, and business transactions with
individuals and firms in China should be approached with the knowledge that they will be placed in the context of guanxi networks (Luo, 1997b).

Or is it so? Can guanxi survive without the human actors enacting it in everyday life? Can guanxi still be that potent without the institutional environment legitimizing its enactment? And perhaps more interestingly, what role does information technology (IT) play in the enactment of guanxi in organizational context as more institutional properties are embedded in information systems today? In this study, we argue that guanxi is not a social artifact that exists independent of institutional properties and information technology; rather it is a product of structuration between the human actors who enact it and the institutional environment in which it is enacted for a particular purpose, and this enactment is either enabled or constrained by the information technology embedded in organizational processes. Structuration is defined as “a social process that involves the reciprocal integration of human actors and structural features of organizations” (Orlikowski, 1992, p. 404). Following the approach of Orlikowski in her analysis of the duality of technology (Orlikowski, 1992), we forward a theoretical framework of the structuration of guanxi in organizational context, as depicted in Figure 1, and the structurational relationships are described in Table 1.

![Figure 1: Structuration of Guanxi in Organizational Context](image)

<table>
<thead>
<tr>
<th>Relationship</th>
<th>Type of Influence</th>
<th>Nature of Influence</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>Guanxi as a product of human action</td>
<td>Guanxi is an outcome of human actions such as gift giving, social time, dining and wining and banquet.</td>
</tr>
<tr>
<td>b</td>
<td>Guanxi as a medium of human action</td>
<td>Guanxi facilitates and constrains human action through the provision of interpretive schemes, facilities, and norms.</td>
</tr>
<tr>
<td>c</td>
<td>Guanxi as a product of institutional properties</td>
<td>Guanxi is an outcome of institutional properties, such as organizational processes, rules, and policies.</td>
</tr>
<tr>
<td>d</td>
<td>Guanxi as a constituent of institutional properties</td>
<td>Guanxi becomes part of the institutional properties that define the organizational processes and norms.</td>
</tr>
<tr>
<td>e</td>
<td>Guanxi as an enableer to information technology</td>
<td>Guanxi is enhanced by and become more effective with information technology that enables human enactment.</td>
</tr>
<tr>
<td>f</td>
<td>Guanxi as a constraint to information technology</td>
<td>Guanxi constrains and bypasses certain features of information technology that limit human action.</td>
</tr>
</tbody>
</table>

Table 1: Definitions of Structuration Relationships

Therefore, from the structuration perspective, we predict that guanxi is neither to thrive forever as the cultural perspective argues, nor to gradually diminish and eventually disappear as China builds stronger institutions and legal infrastructures, but will be an integral part of business practices as long as human agents in organizations continue to enact it, facilitated by and at the meantime constrained within the institutional properties and organizational technologies such as IT systems. Such enactment
will cease to exist when the facilitating conditions are removed or dominated by the constraining conditions, which in turn requires human action and enactment of new institutional properties and organizational technologies.

In the remainder of this paper, we present an exploratory case study that provides empirical evidence and gives credence to the concepts and claims laid out in Figure 1 and Table 1. However, it is critical to note that the objective of the study is to discover rather than to confirm or test the framework or the relationships. Similar to Sarker et al. (2012), we were not pre-committed to finding instantiations of the concepts and relationships in our case evidence; rather, the framework may be considered as a priori theory that guides the design of the case study protocol and as a starting point for exploration. The framework provided us with potentially useful vocabulary to anchor our interpretation without straying in different directions (Sarker et al., 2012).

4 CASE STUDY DESIGN AND METHODOLOGY

Although the literature on guanxi is rich and diverse, to the best of our knowledge, there is little or no analysis of guanxi from the structuration perspective, nor in relationship to information technology. On the other hand, there is a strong theoretical parallel between the work on structuration of technology (Barley, 1986; Boudreau & Robey, 2005; DeSanctis & Poole, 1994; Jones & Karsten, 2008; Orlikowski, 1992, 2000) and what we want to accomplish – reconceptualizing guanxi as a structuration among human agents, institutional properties, and information technology in organizational context. We were interested in knowing how and why guanxi is enacted and perpetuated by human actors in organizational life, how and why guanxi becomes a part of the institutional properties, and how and why information technology enhances or constrains the role of guanxi in organizational processes. “Case studies are the preferred strategy when ‘how’ or ‘why’ questions are being posed, when the investigators have little control over events, and when the focus is on a contemporary phenomenon within some real-life context.” (Yin, 1989, p.13) Hence, the exploratory case study methodology is appropriate for our purpose (Paré, 2004; Yin, 1989). Furthermore, we adopted a positivist view of scientific inquiry by committing to the idea that research is about discovering the objective reality of a focal phenomenon by crafting measures that will detect those dimensions of the reality that interest the researchers (Paré, 2004).

4.1 Case Study Protocol and Firms

We followed the general guidelines for conducting positivist exploratory case studies (Paré, 2004; Yin, 1989). A case study protocol was first developed based on an extensive literature research and brainstorming, which outlined the scope and objectives of the research, the nature of the research design, the characteristics of the target interviewees, firms, and industries, and the initial set of interview questions. We followed the holistic multiple case design (Yin, 1989, p.55) because we focused on the unit of analysis—guanxi at firm level—across multiple firms. We set the goal of recruiting at least five firms in various industries and with various ownership structures. We wanted to be able to interview about 6-8 individuals in each firm, from top executives, mid-level managers, to professional staff, in production, planning, purchasing, IT, and supply chain units or departments. And we wanted to focus on large (>10,000 employees) and medium sized (1000-10,000) firms to increase the reliability and decrease the sensitivity of our findings.

Based on these criteria, a list of candidate manufacturers in the Southeast region of China, the manufacturing hub of the world, was then created, based on the researchers’ knowledge about the firms and industries in the region. After initial contacts with managers in these candidate firms, six companies were selected as the target of this study. Tables 2 and 3 show the detailed profiles of the focal and supplier firms selected.

<table>
<thead>
<tr>
<th>Firm</th>
<th>Industry</th>
<th>Ownership</th>
<th>Annual Sales (million RMB)</th>
<th>Num. of Employees</th>
<th>Num. of Partners (Suppliers &amp; Buyers)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Automobile</td>
<td>Joint Venture</td>
<td>50,000</td>
<td>5,500</td>
<td>154 supplier</td>
</tr>
<tr>
<td>Firm</td>
<td>Number of Interviewees</td>
<td>Job Titles</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>------------------------</td>
<td>------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>6</td>
<td>Executive Vice President, Chief of Staff of the Chairman, Vice Director of Purchasing, Director of Technology Procurement, Director of IT, IT Staff</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>5</td>
<td>Vice Directory of Information Management Center, Vice President of Strategic Sourcing, Vice President of Purchasing, IT Manager (2)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>7</td>
<td>Vice President of Textile Business, Vice President of Purchasing, Sales Manager (2), Executive Assistant to the Chairman, Vice Director of Administration, IT Managers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>4</td>
<td>CIO, Vice Director of Logistics, Director of Sales, Director of IT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>5</td>
<td>CIO, IT Manager (2), Purchasing Manager, Supply Chain Manager</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>2</td>
<td>CIO, IT Manager</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 3:** Profiles of the Informants

**4.2 Data Collection and Analysis**

The primary data collection method was interviews with the informants, which covered a broad range of topics: competitive strategies, organizational culture, IT systems, and general operational processes in IT, purchasing, planning, production, and logistics. The actual interviews were conducted in March 2012, with the research team, which consisted of the three authors and 3–4 doctoral students, visiting each of the six firms. With the consent of the interviewees, all interviews were digitally recorded for later transcription. At each site, the interviews were conducted either in a group setting that lasted 3–4 hours or with individuals that lasted about 1 hour, depending on the availability of the managers. Given the nature of the interviews and the broad issues involved, the group interview format proved to be more advantageous than individual interviews, because very often when one manager could not provide certain information, the others could jump in and fill the gap. Because no questions involved confidential information, we believed the group setting did not hinder the interviewees' willingness to reveal true experiences and opinions. In all, 29 managers participated in the interviews, resulting in about 30 hours of recording, averaging over 60 minutes for each interviewee. These recordings were later transcribed by the research team into a document about 240 pages in Chinese. Team members also took field notes during the interviews and listened to the firms' presentations on their operations, IT systems, and relationships with partners. In addition, the research team collected documents and brochures about the firms and their products for background information.

We adopted the exploratory case study design with multiple cases for replication and theoretical saturation (Yin, 1989). Therefore, in the data analysis phase, we first coded the transcripts from one firm, and identified the main characteristics of how guanxi manifested itself in organizational processes under the given institutional and technological environments, using the framework shown in Figure 1 as a conceptual guidance. By coding we mean going over the transcripts, identifying key
statements that are relevant to our research questions, and categorizing these key statements into the three dyads in the framework: human agents ↔ guanxi, institutional properties ↔ guanxi, and information technology ↔ guanxi. We also added a fourth category that captures the interaction among human agents, institutional properties, and information technology vis-à-vis the enactment of guanxi in organizational life. This was followed by a replication process in which transcripts from the other five firms were examined and relevant statements were identified and mapped into the established categories. New and unfamiliar concepts and relationships, if identified, were categorized into the “Other” category for later analysis and reclassification.

5 MAIN FINDINGS

5.1 Guanxi and Human Agents

One of the recurring themes in our interview data is that regardless the significant variations in organizational structures, processes, and policies, i.e., the institutional properties, in our sample firms, guanxi is enacted by human agents to accomplish individual or organizational tasks, and at the same time, the actions of the human agents are facilities or constrained by guanxi in these firms every day, as suggested by arrows a and b in Figure 1.

This structuration between guanxi and human agents is vividly illustrated by process of how the visit of the research team to firm A was arranged. As a joint venture between a major Japanese automaker and a local state-owned enterprise to manufacture a well-known Japanese auto brand for the domestic market, firm A adopted the entire manufacturing system, production technology, and management structure from its Japanese partner, which emphasize strict business process and monitoring and control mechanisms. Even in such strong organizational process environment, variations from the prescribed processes can still occur, due to the inevitable factor of human agents. The visit by the research team to the firm was hastily arranged, an otherwise impossible event without strong guanxi involved, as described by the Executive Vice President (EVP) of firm A:

“When Professor Xie sent me an email yesterday indicating that your team would like to extend the visit from half-day to a full-day, it was a very difficult thing for me, because it took time to arrange and coordinate with everyone. On the other hand, however, had I told you that the arrangement couldn’t be adjusted, you wouldn’t be happy about it. So, when I replied to you, I already considered these factors, and, as Chinese, what would be considered acceptable. Then I did my best to make the adjustment. Things like this won’t happen [in the Japanese automaker]. The Japanese manager would have rejected the request straightforward. They won’t make the adjustment because once the adjustment is made to these people [the planned interviewees], then adjustments have to be made to other affected individuals, and the whole system will have to adjust and that may cause problems. That’s why they [the Japanese automaker] follow strict time arrangement to ensure each unit in the process is in proper order. For example, if someone wants to meet with the CEO or the President [of the Japanese automaker], it usually takes at least one month time to make an arrangement, even that does not guarantee you an appointment, depending on the schedule of the CEO or the President. On the other hand, in China, if someone is requesting a meeting with you one month ahead of time and you turn it down, you will be perceived as not loyal to friends [or not saving face to your friends].”

For firm C, a privately owned textile manufacturing company that depends on about 360 suppliers for raw material and over 12,000 vendors for its products, guanxi is a way of life from top executives to purchasing agents and sales managers. The Vice President for Textile Business said it straightforward: “I believe guanxi has a significant role in business. It won’t work if you don’t have guanxi with people in China.” When asked whether guanxi would still be that important 50 years from today, he stated:

“I don’t believe it will change much. China has been like this for a few thousand years. The situation of gifting to government agencies is increasingly severe. If you don’t send gifts, it’s difficult to get things done. The salaries of the government employees are not high, and they need some extra income. On the other hand, when you are in my position, you must have some money to support this type of activities. I usually have about 10,000 yuan cash on hand, frequently needed to pay for lunches and
dinner with people.... When we deal with the government, routine maintenance of guanxi using lunches and dinners are not enough. For specific issues, we might have to pay. Last time when we needed to be tested [for meeting the environmental protection standards] by a government agency, we were in the waiting list along with many other firms. But the government agency only had two set of testing devices, so the waiting time could be months long. Even though we had dinner with the head of the agency before, we still couldn’t be scheduled. So I asked someone to send some money to the managers, and we got the test done in the afternoon of that day. This is in spite of the fact that we are one of the largest tax payers for the local government.”

Therefore, guanxi is a significant part of organizational life in most Chinese firms because in part the human agents who live in the cultural environment feel the needs to enact it when certain tasks need to be accomplished and are compelled to act according to the established social and cultural norms in maintaining guanxi for future reciprocal expectations. The case evidence appears to support both cultural and institutional view of guanxi. In the case of firm A, the enactment of guanxi by the researcher and the EVP is largely cultural and normative. On the other hand, in the case of firm C, the enactment of guanxi is clearly institutional.

5.2 Guanxi and Institutional Properties

Our case evidence also confirms that although guanxi exists and sustains in organizations because of the enactment and re-enactment by human agents in every day routine, the enactment of guanxi by human agents are inevitably enabled or constrained by the institutional properties of the organization, such as rules and procedures, norms and values, and structures (Orlikowski, 1992). These institutional properties set the boundaries for human behavior and reified by human behavior in organizations. It follows that institutional properties enables and constrains guanxi, and once guanxi is enacted and re-enacted routinely by human agents in an organization repeatedly over time, guanxi could become part of the institutional properties of the organization. This structuration process of guanxi is illustrated by arrows c and d in Figure 1.

The cases of firms A and F provide an illustration of how institutional properties may significantly control or diminish the role of guanxi (arrow e in Figure 1) in one of the most guanxi-prone areas of business operations – selection of suppliers and negotiation of purchasing contracts. Firm F is an original equipment manufacturer (OEM) of LCD displays for domestic and international brands. From the very beginning when the company was established, the top management set up comprehensive business processes. The firm purchases from over 2000 suppliers for its extensive product portfolio, with about 150 considered as key suppliers. Having such significant number of suppliers and amount of purchasing each year, it is almost inevitable that guanxi would have played some roles, even significant roles, in selecting and managing the suppliers in a typical Chinese business ecosystem. Surprisingly, this appeared not to be the case in firm F.

According to the CIO of firm F, the company uses an online bidding and negotiation system for all of its purchases, in which every purchasing contract is auctioned to qualified suppliers. To bid for firm F’s supply contracts, potential suppliers are solicited to submit qualification information and then screened by a team of firm F’s specialists, for financial health, production capacity, past history, and other criteria. In some cases firm F sends out inspection teams to visit the potential suppliers for verification. Once a selected set of suppliers are qualified and put into the system, they can participate in the contract bidding against each other over an online platform. The bidding is done in a semi-transparent environment: each bidder can see the latest bid and their rank order based on price, but not who the other bidders are. In the end, the supplier with the lowest price won the contract. However, to manage supply risk, the company usually chooses the lowest 2-3 suppliers as winners, with the lowest bidder getting the primary contract, and the other 1-2 suppliers being notified that they are the secondary suppliers with smaller order amount.

This process in theory is transparent and fair, and would have eliminated any human factors, thus guanxi, from the purchasing process. However, in reality it is not as simple as it appeared. The IT manager of firm F describes:
“Not all of the supply contracts are determined based on price alone. As you know, we determine the contract price based on a formula in which the cost of material and cost of processing (labor, manufacturing, and logistics) are separately considered. While the cost of material is about the same across, the rest varies from one supplier to another. Therefore, not all purchasing contracts are solely determined by price. For example, there are differences between suppliers in Shenzhen [local suppliers] and in Guangzhou [remote suppliers] in terms of logistical cost. We also need to consider delivery date, product quality, production capacity, firm reputation, etc., and develop an overall evaluation, and then determine whether this supplier can be the primary or secondary supplier for this particular component or material. As I said before, we cannot put all our eggs into one basket. For certain commodity component, such as resistors and capacitors, we use one primary supplier, but for specialty material and components, such as plastic and metal casing, we usually distribute the order to two or three suppliers to reduce risk. It is always beneficial to divide large orders to multiple suppliers.”

This process appears re-introducing the human factor into an otherwise de-humanized contracting process designed specifically to minimize or eliminate human interference. Could it have defeated the original intention of using online-bidding and negotiation for eliminating human factors, such as guanxi, in the process? Could strong organizational processes alleviate or constrain such interference?

When asked about how the company managed guanxi in its selection of suppliers, the IT manager of firm F stated:

“We rely on the checks and balances in the [contracting] process. Selection of any supplier cannot be determined by one or two individuals [in the purchasing department]. Rather, the many other departments are involved, including quality control and engineering departments, in supplier evaluation and selection. In addition, many of the provisions of contract laws must be considered as well to make sure the potential suppliers can be legally contracted. Of course, there are always possibilities that some of the elements in the contracting process are out of our control.”

The Executive Vice President of firm A articulated how organizational process in his firm has virtually eliminated the role of guanxi in purchasing operations (even though he had succumbed to guanxi when agreeing for our visit and our request for extending interview time):

“[In my company] it cannot be the case that a purchasing agent can decide how much to order or where to order. We use a single channel, and in rare cases, double channel, system of suppliers for parts and components. As long as a type of car is in production, you have to buy from a pre-determined set of suppliers. Any individual doesn’t have much power in purchasing decisions. The sales department determines model and quantity, the purchasing, design, and R&D departments jointly select the suppliers and determine prices, and then the production department makes orders based on the pre-determined model, quantity, and prices to the selected suppliers.”

These examples show that strong institutional properties indeed are capable of constraining the role of guanxi in business transaction and marginalize its significance. However, since institutional properties, more specifically organizational processes, are enacted and reified by human agents in specific organizational environment, it is not possible to completely eliminate human interference to organizational process. In fact, guanxi and its derivatives could even become part of the institutional properties that constrain or facilitate human action (arrow d in Figure 1). For example, in firm A, the selection of suppliers follow a well-establish and comprehensive organizational process, from the initial proposal, to site visit, and final evaluation, thus a well-defined institutional property. However, when asked whether it is possible that selected potential suppliers might get favorable treatment because their top executives might have close personal relationships with the top executives of firm A, in other words, a good guanxi between the top executives, the Vice Director of Purchasing responded this way:

“This indeed occurs. In fact, this is also one way for us to understand the landscape of potential suppliers. Our top executives have contacts in their circles, and if they identify an appropriate supplier, they would recommend it to us. But this is just a recommendation, not an order that we must use this supplier. Once we get the information about the potential supplier, we would have to use the established process and conduct a comprehensive evaluation before making a decision.”
While guanxi is practiced every day in organizational life by human actors, it is still considered as something that does not belong to the norms of management practice in modern businesses by many managers in many firms. Many of our informants denied openly that guanxi has anything to do with their business activities or organizational behavior. However, some informants did readily admit that guanxi is part of the organizational life even with all the information technology and western management systems adopted in their organizations. When we asked whether he had any concerns or was uncomfortable of being invited for wining and dining by suppliers, the CIO of firm D said that he was not afraid of it at all because:

“This has something to do with the culture of the company. In order to ensure the operation of the company by maintaining the stable prices [of the products we purchase], we must understand our suppliers.”

The argument for understating customers or clients lends legitimacy to practicing guanxi in even the most advanced business organizations that have fully embraced western style management philosophy, structure, and practice. One the most frequently cited justifications by managers we interviewed for having to attend the wining and dining with managers of client or supplier companies is that these activities build stronger guanxi and help better understand customers (e.g., clients, suppliers, and government agencies). In some firms, cultivating guanxi with customers is indeed part of the business routine. Therefore, while existing and strong institutional properties facilitate and constrain the enactment and re-enactment of guanxi by human agents, guanxi is also legitimized and reified by human agents and at least in some cases become a component of the established institutional properties.

5.3 Guanxi and Information Technology

One of the most important omissions in the extant literature about guanxi in Chinese organizations is the role of information technology (IT). This omission is significant because IT directly and indirectly impacts the two structuration forces in organizations: human agents and institutional properties. According to Orlikowski (1992), IT is a medium of human actions that facilitates and constrains human behavior in organizational settings. Given our proposition that guanxi is an enactment of human agents in the confines of institutional properties, it follows that IT will facilitate and constrain how and where guanxi is enacted, and equally importantly, guanxi influences how IT is appropriated by human agents in conducting organizational activities. This structuration process is illustrated by arrows e and f in Figure 1.

A major difference between business organizations today and those two or three decades ago is the widespread use of IT systems that implement, embed, and enforce critical business processes, rules, and procedures, in short, institutional properties. Our case evidence strongly demonstrated that in many different ways IT has facilitated or enhanced the use of guanxi in business transactions and relationships (arrow e in Figure 1). One of the benefits of IT to companies in helping them manage guanxi in business is that IT has made guanxi less reliance on individual memories and connections. IT in a sense has institutionalized guanxi. Without IT support, the investment in guanxi resides in individuals (Yang, 1996). When either party in a guanxi dyad leaves a firm, the guanxi leaves the two firms (Luo, 1997b). With IT, however, the guanxi can be preserved to a large extent even if the relevant individuals are no longer with the firms. This is illustrated by the conversation in firm B. When asked how he thought about the relationship between IT systems and building guanxi with other business managers, the manager of purchasing department in firm B stated:

“I can extract relevant information from our IT system, approach a supplier, and show its top executive how we had helped the firm in the past. I am pretty much guaranteed to get something in return. In strategic partnership, we are dealing with high level executives, and they generally will accept this reciprocal obligation, otherwise they won’t survive long in this business.”

He went on to provide this particular example to support his beliefs:

“When our products change and become diversified, he will be cooperative and help us in the transition. We have statistics that show how much we purchased from him when he was in difficult
situations, so even if the actual contact person is no longer there, the company still owns me a piece of the relationship. When we are in difficult situation and need them, they will have to reciprocate. To give you an example, there was a time when I was in charge of the LCD supply. I had major problems with shortage of suppliers. One supplier had a long relationship with us, but they decided to switch to computer products, so we were forced to consider new suppliers. But I need to get back my investment in this company. So I used our IT system and printed out a report that showed all of our past transactions. I presented this report to their top executive and told him how we supported his company when they were in trouble, and now we were in need of help. He promised to help us in return for what we had done for him."

On the other hand, IT can also significantly constrain guanxi in organizations by making business processes more transparent and communications more direct between the human agents within and across organizations. The case of firm D illustrates this point. Firm D is in the business of manufacturing electronic appliances for consumer market. Its main products include electric fans and portable electric heating devices. It distributes these products to supermarket chains as well as vendors in shopping malls. To increase the sales as well as awareness of its products, firm D frequently holds promotions in which prices are marketed down significantly. To enlist supermarkets or vendors to participate in such promotions, firm D compensates the sellers for the loss incurred as a result of such promotions. On the other hand, such promotion will increase sales and profit of the participating sellers. Thus, the supermarkets and vendors benefit from such promotions, making it very attractive for the sellers to want to be part of the promotions. In the past, this attraction provided significant power to the account managers of firm D, who were the only source of information about the worthiness of the sellers for selection decisions made by higher level managers. Therefore, having and maintaining a strong guanxi with the account managers were essential for the sellers to have any hope of being selected for the promotions. Complaints from the sellers were common about unfair practices by the account managers, but they were usually too late and often fell through cracks. As part of the firm D’s enterprise system, it created an application called Customer Exchange Center which allows for all sorts of information sharing, most importantly any complaints sellers may have against account managers, which is monitored by the Vice President for Sales on a routine basis. The CIO of the firm D stated:

“Vendors often request financial support from our company to do promotions. These requests must be evaluated by the account managers first. Usually an account manager has two or three vendor accounts, and he [or she] can allocate the limited promotion budget to two of the three, and the third does not get it because its guanxi with the account managers is not as strong as the ones of the other two. Over time the third vendor will become smaller and smaller... With this new system, the vendors can directly communicate with the VP for Sales, so it accomplishes two objectives: one is deterrence, and the other is transparency. The end result is that vendors do not have to rely on guanxi with account managers [to do business].”

In reviewing our interview transcripts, we found that these types of examples are prevalent in our case firms. For every case where IT enabled the enactment of guanxi by human agents, there is a case in which IT systems help reduce and constrain the effect of guanxi in business transactions and inter-organizational relationships.

On the other hand, there is also clear evidence that guanxi can significantly constrain or even bypass IT systems when the systems get into the way of enactment of guanxi by human agents (arrow f in Figure 1). One the important role of guanxi in inter-organizational relationships is that it often loosens up organizational processes by relaxing or bypassing rules and procedures for specific situations or events, even if these rules and procedures are embedded in IT systems. For example, in many Chinese firms, it is not uncommon to make full-payment before completely delivery of goods in order to help the suppliers with good relationship, or partial payment for full delivery to help the buyer with temporary shortage of cash flow. All it takes is for someone to make an oral commitment or promise and a handshake between the two parties, even if the deal involves millions of dollar in value. When IT systems are adopted by the firms and used to manage business transactions, many of these flexibilities are eliminated because the fundamental business rules, such as payment terms, delivery schedules, and invoicing are hard coded into the software applications. Not following the prescribed
rules would result in incomplete transactions and unbalanced accounts in the system that should alert management and draw unwanted attentions to the relevant individuals.

However, the reality is not as certain as the intention of the systems or the organizational processes, as we have found out in our case firms. In some firms, the bypass functions are actually built into the IT system just to allow managers to have the flexibility to handle special guanxi customers. When asked how IT might constrain the role of guanxi in organizational processes, the manager of purchasing of firm E said:

“That [IT significantly reduced the role of guanxi in business] wouldn’t be normal. In cases we couldn’t meet the normal transaction requirement [e.g., can’t make payment when goods are delivered, or need to make an early payment before the delivery is complete], we will use different channels and processes to complete the transactions, with special approval procedure. We cannot allow the [IT] system to strangle the business, and there are always ways to be flexible. For example, for long-term partners, we require certain amount of deposit [which would allow payment for incomplete delivery] to reduce risk.”

This is corroborated by the deputy manager of purchasing at firm E when asked how she would handle irregularities in ordering, payment, and deliveries that the system won’t process within the embedded business rules. She stated:

“These issues can certainly be managed by people. It is essential to allow flexibilities that must be handled by people, and the system can’t be allowed to determine everything. The [IT] system is only a tool to assist people. When it’s time to help each other, [IT] systems can’t do it. All the [IT] system can do is to help us know each other better [in terms of shared information].”

5.4 Human Agents, Institutional Properties, IT and Guanxi

While our conceptual model (Figure 1) depicts three explicit bilateral structuration relationships, a threefold structuration among guanxi and human agents, institutional properties, and information technology is implied. As noted by many scholars who studied the relationship between organization and technology, technology, such as IT systems, is constructed by organizations and enacted by users to perform organizations tasks (Barley, 1986; Boudreau & Robey, 2005; DeSanctis & Poole, 1994; Orlikowski, 1992). When technology becomes impediment to users for accomplishing routine tasks, users often improvise or bypass technology (Boudreau & Robey, 2005). Similarly, when institutional properties embedded in IT systems, as typically found in most of the enterprise resource planning (ERP) systems and supply chain management (SCM) systems, become impediments to the enactment of guanxi by human agents, guanxi could be significantly diminished or guanxi could triumph over institution and IT systems. There is no predictable outcome in this threefold structuration process, as our case evidence has shown.

On the other hand, it is clear that the use of IT has made organizational processes more transparent, precise, and consistent, which in turn limit the ability of guanxi in weakening institutional properties, and thus constrain the actions of human agents in organizations. The CIO of firm F elaborated his view about the relationships between institutional properties, human agents, IT systems, and guanxi:

“When we build and grow our company, guanxi is always there. We pay attention to it, and we try to develop processes and policies to manage it. Whenever frictions and conflicts arise among different units, management will develop some policies and procedures to address these issues, and these policies and procedures will then be implemented and concretized in our information systems. Without IS, if two units are on good terms, and one needs a signature for an invoice from the other, it is signed immediately; if they are not on good terms, it may take several days. With IS, the workflow system and electronic signature make this a simple issue: it is very clear when the invoice is sent and when it is signed. This system resolves many issues related to human factors. In addition, the system has clear workflow implemented: who should process it first, who is second, and so on. In the case of our order management system, it resolves many frictions and conflicts due to human factors. If an order is set to be completed in 30 days, everyone puts their best effort to ensure the deadline is met. If a unit in the early process has some delays, other units in the later process can make up for the lost
days and still meet the deadline. Then the company will consider this order is on time. With IS, the responsibility is clear, and the system shows which unit or process caused problems, reducing the disputes amount units and individuals. In the old days, for example, there were often disputes between sales and product development what and when information was shared. Now with IS, such disputes are significantly reduced. Overall, IT has solved many issues related to guanxi among individuals, in both management and systems aspects.”

The case evidence suggests that guanxi is an outcome of complex structuration processes among human agents, institutional properties, and IT systems that embed the institutional properties and mediates human actions. Therefore, the ontology of guanxi in organizations cannot be fully explained from cultural and institutional perspective alone, and it must be analyzed with all three structuration forces together with the structuration dialectics.

6 CONCLUSION

Using the lens of structuration theory (Giddens, 1984) and following the dialectics of duality of technology (Orlikowski, 1992), we proposed a new conceptualization of guanxi in the context of IT enabled organizations. We submit that guanxi is not just a cultural artifact of the Chinese society that will thrive in the foreseeable future, or a product of weak institutions in shortage economies typical of developing countries that will eventually disappear; rather, it is an outcome of structuration among the human agents who enact it for a particular purpose and the institutional environment where it is enacted, either enabled or constrained by information technology embedded in organizational processes and enforcing institutional properties. This structuration view of guanxi does not predict its ever lasting effect on Chinese business and society, nor does it predict its demise in the global economy enabled by information technology. However, it does provide a better and richer explanation to the critical questions why guanxi is significant in certain firms but insignificant in others and how IT enables and constrains the role of guanxi in organizational life. This structuration view sheds new light on the ontology of guanxi in organizations and provides practical guidance for managing inter-firm relationships in China and other countries.

References