

The Tie Perspective in Organizational Research

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Abstract

Last few years witness an explosion of interest in applying tie analysis to organizational contexts. The paper claims that it is the tie perspective that expands the world of observed phenomena from an autonomous view to a relational view for scholarly understanding organizational behavior and outcomes. We present an organizing framework based on four sorts of ties (embeddedness, strong tie and weak tie, managerial tie and alliance, and tie dynamics) and four theoretical mechanisms (resource access, trust, power, and signaling) to review the key findings in organizational ties literature. Following and expanding the framework, we point out the avenues of future research from the gaps in framework (dynamic tie, signaling mechanism), linkages across the boxes in framework (multiple ties, multiple mechanisms), and finally, extensions beyond the framework (dark side, asymmetric tie).

Keywords: Organization, Tie, Network, Organizational behavior, Organizational outcome

1. Introduction

In the field of organization and management, neoclassical economics, which has considerable influence, regards the organization as an independent and autonomous entity to use its own internal resource to compete with other similarly self-reliant and atomic entities. Organizations, however, are usually related to each other and frequently have a lot of impact on each other. These connections affect the organizational behavior and outcome to some extent. Therefore, in contrast to neoclassical economics, the tie analysis holds the point that organizations are essentially relational instead of autonomous and access resources and capabilities through their organizational ties (Gulati, 1999). The basic logic of tie analysis is that the structure, strength and property of ties between organizations have significant effect on organizational behavior and outcomes through resource access, trust, power, or signaling mechanisms. The power of tie analysis thus derives not only from providing extra explanation for variance in organizational level, but also from viewing the universe from a relational lens, which is simultaneously consider the organization and organizational ties, in addition to just from an autonomous lens. Therefore, the tie analysis presents a distinct and more complete worldview that fundamentally enriches the knowledge in organizational research (A. Zaheer, Gozubuyuk, & Milanov, 2010).

Granovetter (1973) started to focus on tie strength, in particular weak tie, and found that tie strength determined the degree of actors' social network overlap and then affect information access, mobility opportunity and community organizations. In this way, the paper connects micro ties with macro social phenomena and sociological theory. After that, researchers concentrate on studying which kind of tie structure can increase social capital and benefits actor (person, group or organization). Coleman (1988,1990) claimed that closure could increase social capital, while Burt (1992) argued that structure would do this. Follow-up study also points out that ties not only serve as "pipes", providing resources, trust and control benefits, but also as "prisms", through which the quality of organization can be inferred (Podolny, 2001). In the last three decades, tie research in organizational context has rapidly developed and now accumulates a stock of significant knowledge, particularly in strategic management, organization learning and innovation management (Brass, Galaskiewicz, Greve, & Tsai, 2004; Parkhe, Wasserman, & Ralston, 2006; A. Zaheer et al., 2010).

Of course, internal organizational capability is clearly the determinant factor to account for the variance in organizational outcomes. Organizational ties are not the only, or even the primary, factor to improve firm's performance. But tie perspective sheds additional light on how organizations perform such behavior and receive the outcomes since organizations form and enable their existing ties and at the same time are constrained by these ties. Combining the internal capability view with the tie perspective, we will better explain and predict organizational performance.

The paper develops a framework to organize the accumulative knowledge emerging from applying tie perspective analysis to organizational context and then highlights areas where future might go. First, we introduce some key concepts in tie perspective analysis and develop an organizing framework based on four basic sorts of ties and four commonly used theoretical mechanisms to review ties literature. Second, following and expanding this framework, the paper points out the avenues of future research from the gaps in framework, linkages across the boxes in framework and extensions beyond the framework.

2. Organizing the Literature: What We Know

There are some basic terms in tie perspective analysis. A network consists of a number of actors and numerous ties that connect these actors. These actors can be individuals, groups or organizations. When focusing on the ties of a particular actor, this actor is called ego and other actors that are connected to ego are referred to as alters. The paper first outlines four basic sorts of ties in organizational context and four common mechanisms using which organizational ties are theorized to operate, and then creates an organizing framework (see table 1) to review tie literature.

Table 1. Organizing Framework for Organizational Ties Research

Sorts of Ties	Theoretical Mechanisms			
	Resource Access	Trust	Control	signaling
Embeddedness	Closure→Resource Structural Holes→Diversified Resource Centrality→Resource	Closure→Trust Centrality→Trust heterogeneity→ Reliability	Structural Holes →Control Network of Ties→“Small- worldness”	Bonacich Centrality→Status
Strong/Weak Ties	Strong Ties→Tacit Knowledge Transfer Weak Ties→Explicit Knowledge Transfer Strong Ties→Repeated and Redundant Information Exploitation Behavior→Strong Ties Exploration Behavior →Weak Ties	Strong Ties→Trust→Low Transaction Costs→Performance	Strong Ties →Technology Adaption Power Intensity→Tie Strength	
Managerial Ties/Alliances	Board Interlock→Resource Dependence Alliance→Resource	Trust→Low Transaction Costs→Effective Alliance	Board Interlock →Control Managerial Friendship Ties→Few Limitations	Alliance→ Organizational Quality
Tie dynamics	Resource Dependence→Alliance Formation Network of Ties→Alliance Formation	Trust →Tie Formation		

According to different criteria for classification, the basic sorts of ties are embeddedness, strong tie and weak tie, managerial tie and alliance, and tie dynamics. Firstly, the term “tie” has two levels of meaning – broad and narrow definitions. The broad definition of tie means embeddedness, which refer to the whole network of ties. The narrow one specifically describes the dyadic tie. Secondly, as for dyadic ties, the ties can be divided into strong ties and weak ties according to tie strength, a combination of the emotional intensity, the amount of time, the reciprocal service, and the intimacy (M. S. Granovetter, 1973). Thirdly, judging by the nature of actors, the dyadic ties can be divided into managerial ties and alliances. The former type examines personal ties, which usually are senior managerial ties, to indirectly analyze the effect of organizational ties on organizational behavior and outcomes, while the latter type investigates the organizational ties, which commonly are strategic alliances, to directly demonstrate the impact of organizational ties. Fourthly, in addition to tie statics analysis, the aforementioned tie analyses all belong to, tie dynamics analysis also plays an important role in tie perspective analysis. Tie statics analysis pays much attention to explore how the structure, strength and property of these existing ties affect organizations, whereas dynamic ties closely consider which factors influence the formation, maintenance and dissolution of ties.

In term of theoretical mechanism, there are four kinds of mechanisms that are commonly used to explain the results of ties: resource access, trust, power, and signaling mechanism. First of all, ties bring organizations access to resource. One of the most attractive and hottest discussed resources is information. Second, ties enhance trust that will reduce transaction costs and then improve organization performance. Third, ties create control advantage. For example, board interlock (the board member of one firm also works as a board member in another firm) makes one organization have more control of another one. Fourth, ties also have signaling mechanism. The quality of organization can be inferred from it’s ties (Podolny, 2001). For instance, small firms are willing to establish alliances with large firms, since these alliances will improve their reputation

and bring them legitimacy (Haibin, Yanfeng, & Xia, 2014).

2.1 Embeddedness

Granovetter (1985) first to elaborated the concept embeddedness and noted that embeddedness referred to that all economic activities were bound to be embedded in a broader social context. Rigorous and sophisticated analysis of economic activities must take into account the embeddedness of the activities, that's to say putting the activities in the social network which they are embedded in. Uzzi (1996,1997) systematically demonstrated embeddedness and pointed out that embeddedness was an exchange system in which uniquely market related opportunities existed. Organizations embedded in the social network even have a higher chance of survival than organizations close to market (Uzzi, 1996, 1997).

Embeddedness, namely the broad definition of tie, includes three levels of analyses (A. Zaheer et al., 2010). The first level is dyadic level, focusing on the characteristics of dyadic ties, for example tie strength. The second one is ego network level. Researches at this level mainly study the features of ego's network, such as centrality, structural hole, closure, and structural equivalence, and investigate their effects on organizational behavior and outcomes. The third level is whole network level. Scholars predominantly examine the characteristics of the entire network of ties, such as its size and density. Specifically, the narrow definition of tie means the dyadic tie that is the first of three levels of analyses. This part reviews the literature at ego level and whole network level, and next section will star to elaborate dyadic ties.

2.1.1 Ego network level

Research at ego network level does not concentrate on the features of a single binary tie, but rather on the characteristics of ego's network, analyzing the effects that structural hole, closure and centrality have on organizational behavior and performance.

The most attractive finding of this literature stream stems from a long and dramatic debate on the structural determinant of social capital. Strangely enough, structural hole and closure, two conceptually opposite constructs, are both said to generate social capital. Specifically, Coleman (1988,1990) argued that ego network high in closure created social capital for the actor while Burt (1992) claimed structural hole did. Closure is usually measured as ego network density. Complete closure means that all actors in the network are connected to one another and density in this case reaches one the theoretical maximum. When two actors are connected to the same actor but are not connected to each other, there exists a structural hole. Coleman points out two benefits of closure. One one hand, closure increases information access, since the more ties actor has the more information that may be valuable the actor will receive (James Samuel Coleman, 1990). On the other hand, closure establishes the sanctions of commitment betrayal and thereby reduces the risk of trust. In this way, trust behaviors and cooperation are encouraged (James S. Coleman, 1988; James Samuel Coleman, 1990). Many researches support this view. For example, the density of team members' network is positively related to the team's task performance and viability (Balkundi & Harrison, 2006). Burt (1992) famously claimed that actors bridging structural holes would gain information and control advantages over actors whose alters were connected to one other. Although closure provides actor with much information, this information is always repeated and redundant. The information advantage stems from the ability of structural hole to offer diversified information that are usually more valuable to actor (Ronald S Burt, 2007). Control advantage refers to that the ego located in structural hole position is able to broker two or more alters who are out of touch with each other with different opinions and benefits from this (Ronald S. Burt, 1992). The actors bridging structural holes and thus having control power are called *tertius gaudens* by Simmel and Merton; that is being the third one to reap the harvest. Plenty of studies are in favor of this point. For instance, the firm whose entrepreneur team bridges structural holes in the external advice network has better performance (Vissa & Chacar, 2009). Subsequently, scholars attempt to integrate these conflicting views and propose the solution that structural hole and closure are complementary rather than opposite (Ronald S Burt, 2007). Structural hole which creates information and control benefits is the source of value added, but closure is essential to realize the value buried in structural hole (Ronald S Burt, 2007; Ronald S. Burt, 2000; Lin, Cook, & Burt, 2001). For example, team effectiveness reaches maximum when the team has an optimal structure of ties: forming closure within the team network and bridging structural holes across the vertical and horizontal boundaries of team (Oh, Chung, & Labianca, 2004).

Another group of research at this level is interested in centrality. The findings can be summarized as "centrality increase performance" (Tsai, 2001). For knowledge-intensive workers, the higher of betweenness centrality (i.e. the more connections between actors have to go through this actor) in information and cognition network, the higher rating of performance evaluation (Cross & Cummings, 2004). The team whose leader has high centrality in its membership network and the team has high centrality in inter-team network both get better performance (Balkundi & Harrison, 2006). Besides, centrality has signaling effect. Bonacich centrality can reflect the status and identity of actor (Benjamin & Podolny, 1999; Gulati & Higgins, 2003). Bonacich took the centrality of the ego's alters into regard and developed a coefficient based on an eigenvector measure to account for the fact that the overall centrality score of ego can be changed by its alters' centrality. The size of this

coefficient measures the significance given to the centrality of alters and then in turn to alters' alters (Bonacich, 1972).

2.1.2 Whole Network Level

Researches here investigate the influence of whole network characteristics on organizational behavior and outcomes. For instance, heterogeneity of supporter network is significant for manager to establish a reliable reputation (Wong & Boh, 2010). Typical study in this part is about "small-worldness" property of networks (Barabási, 2002). Small-world network where the average of the shortest path distances is low is characterized by a cluster of locally dense cliques. Since actors prefer forming teams consist of incumbents in the network or their past collaborators in the network (Uzzi, Guimera, Spiro, & Amaral, 2006). Organization's employment model often reflects the propensity for small-world network. Companies are more likely to hire top management team members from the companies with board interlock, and the greater number of the top management team members employed by the company from a particular organization, the greater probability of continuing hiring top management team members from that organization (Williamson & Cable, 2003).

2.2 *Strong Ties and Weak Ties*

Tie strength is an emphasis of tie perspective analysis at dyadic level. Scholars have spent much time understanding the impact of strong ties and weak ties. Tie strength is a combination of the emotional intensity, the amount of time, the reciprocal service, and the intimacy (M. S. Granovetter, 1973). Granovetter (1973) conducted an innovative investigation of tie strength, connecting micro ties with macro sociological theory and started the exploration of tie strength.

Research in this field is fruitful. In terms of resource access, strong ties are conducive to the transfer and transmission of tacit knowledge, while weak ties facilitate the transfer of explicit knowledge and information (Uzzi & Lancaster, 2003). In turn, the extent and type of organizational learning, namely the amount of knowledge sharing and the nature of tacit or explicit knowledge, also determines the strength of partnership alliance (Badir & O'Connor, 2015). Strong ties improve performance when the environment demands a high degree of exploitation behavior, such as steel industry. On the contrary, weak ties are better for performance when the environment requires a high level of exploration behavior, for instance semiconductor industry (Rowley, Behrens, & Krackhardt, 2000). In addition, chances are high that strong ties will bring repeated and redundant information (M. S. Granovetter, 1973).

As for trust, strong ties formed in repeated interactions enhance trust between organizations (Gulati, 1995; Gulati & Gargiulo, 1999). Further, the high degree of trust among organizations reduces transaction costs, thus improving the revenue generated by these ties (A. Zaheer, McEvily, & Perrone, 1998).

Concerning control, network made up of strong ties is more influential for technology adoption than the entire network consisting of both strong and weak ties. When there are multiple replaceable and competitive technologies to select, in order to avoid risk and reduce uncertainty, users rely on strong ties to make adoption decisions. The possibility of adopting a technology is positively related to the number of actors who are in network of strong ties and have adopted this technology (Suarez, 2005). With regard to power intensity, the impact of power intensity of broker (including personal power and position power) on new product research and development is completely mediate by the strength of ties among members (Oke, Idiagbon-Oke, & Walurnbwa, 2008).

2.3 *Managerial Ties and Alliances*

Judging by the nature of actors, dyadic ties can be divided into managerial ties the actors of which are persons and alliances the actors of which are organizations.

2.3.1 Managerial Ties

Managerial tie, the interpersonal ties between an organization's manager and another organization's manager, is essentially a micro-macro link (Peng & Luo, 2000). Specifically, managerial ties can be divided into two types: formal ties (i.e. working ties) and informal ties (i.e. friendship ties).

For formal ties, scholars generally agree that micro managerial ties help improve macro organizational performance, but this effect is moderated by many factors (Li, Poppo, & Zhou, 2008; Peng & Luo, 2000; Yoo, Reed, Shin, & Lemak, 2009). Numerous researches elaborate these moderators. The influence of managerial ties on organizational performance differs among firms with different business sectors, ownership types, industry growth rates, sizes (Peng & Luo, 2000), competitive strength and structural uncertainty (i.e., the degree of rapid change of industrial environment) (Li et al., 2008). The typical formal managerial tie is board interlock, a board member in one company also work as a director in another company. Board interlock helps solve the problem of resource dependence and thus enhances organizational performance (Yoo et al., 2009). Being another strategy to deal with resource dependence, informal managerial ties, namely friendship ties, have the same positive impact as formal managerial ties on organizational outcomes but bring few limitations (Westphal, Boivie, & Chng, 2006).

2.3.2 Alliances

In general, organizational ties refer to alliances. Commonly, the existence of alliances between organizations means there are organizational ties. With regard to resource access, ties are ‘pipes’ to supply resource. For example, alliances with large firms provide small firms with access to tacit and diverse knowledge (Haibin et al., 2014) and complementary resources in large firms such as financial, manufacturing, marketing, and other resources for commercializing their technologies (Rothaermel, 2001). Considering trust, because higher trust means lower transaction costs, trust enhance the effectiveness of alliance (Beamish & Lupton, 2009). In terms of signaling mechanism, ties are ‘prisms’ of organizations’ quality (Podolny, 2001). For instance, small firms’ alliances with large firms offer small firms external legitimacy that buffers them from the liabilities of smallness or newness (Haibin et al., 2014).

2.4 Tie Dynamics

Different from the tie statics analysis reviewed above, tie dynamics analysis, represented by the formation of ties, is also a significance part in tie perspective analysis. The analysis of tie statics dominantly demonstrates how the structure, strength and nature of existing ties affect the outcomes of organization, such as the capability of resource acquiring (Akbar Zaheer & McEvily, 1999) and business growth (Vissa & Chacar, 2009), whereas the analysis of tie dynamics often investigates which factors affect the formation, maintenance, and dissolution of ties. For empirical method, tie statics analysis may collect cross-sectional data, while tie dynamics analysis generally use longitudinal data.

Scholars are interested in the formation of strategic alliances. From the perspective of resource access, researches initially focused on internal capabilities of organizations and applied resource based theory and resource dependence theory to explain the formation of strategic alliances (Dierickx & Cool, 1989; Hagerdoorn, 1993; Mahoney & Pandian, 1992; Mariti & Smiley, 1983; Wernerfelt, 1984). Companies that have interdependent resources of each other are more likely to establish strategic alliances (Gulati, 1995; Katila, Rosenberger, & Eisenhardt, 2008). Afterwards, researchers note that resources not only exist within the company, but also present in the network of ties. Network location affects the amount of organizational resource, and the more accumulation of resources in alliances network, the higher opportunities for organizations to set up new alliances in the next few years (Gulati, 1999). Organizational Learning also influences the formation of alliances. Learning from previous experience will improve organizational capacity and the firms that have higher capacity of building up strategic alliances are more likely to establish new alliances (Gulati, 1999). When it comes to trust, scholars point out that strong ties enhance trust between organizations and thus promote the formation of alliances (Gulati, 1995; Gulati & Gargiulo, 1999).

3. Future Research: What We Need to Know

The paper identified two dimensions – sort of ties and theoretical mechanisms – that delineate the organizational ties literature and elaborated accumulative knowledge using the organizing framework generated by these two dimensions. Following and expanding the framework, this part points out the directions for future research from the gaps in framework, linkages across the boxes in framework (vertical and horizontal), and extensions beyond the framework.

3.1 Gaps in the Framework

As discussed above, there is an explosion of interest in applying tie perspective analysis to organizational contexts, however, the distribution of these studies is uneven: in terms of sort, compared with tie statics analysis, tie dynamics analysis is limited; with regard to mechanism, in contrast to resources access and trust, signaling mechanism is ignored.

3.1.1 Tie Dynamics

In chronological order, the entire life cycle of tie analysis can be divided into three phases: the formation of ties, the management of ties and the dissolution of ties (see Figure 1). The most fruitful phase is the management of ties, followed by the formation of ties, and the least developed one is the dissolution of ties, from which future research may come.

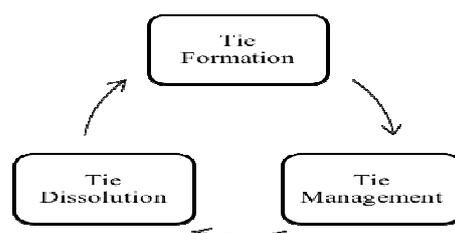


Figure 1. Ties Research in Chronological Order

Few scholars investigate the effect of tie dissolution (Baker, Faulkner, & Fisher, 1998; Greve, Baum, Mitsuhashi, & Rowley, 2010). Researchers are concerned with the stability of market, but ignore the dynamic nature of market (Fligstein, 2002). The contribution of tie dissolution analysis is twofold. Theoretically, direct research on the dissolution of ties is essential to a complete study of the entire life cycle of ties (Hallen, 2008), in addition to the analyses of formation and management of ties, because the market itself is dynamic, not static (Swedberg, 1993), and organizations and individuals periodically decide to end some ties and form new ones. Practically, the dissolution of ties is a common phenomenon in daily work; that's to say, organizations in the market all are affected by the dissolution of ties. For example, for the purchaser, dissolution of ties will break its supply channels up, affecting normal operation and management. For the seller, dissolution of ties will directly affect the sales of products, thereby affecting the company's performance (Broschak & Block, 2014). In all, researches focus on investigating why and how organizational ties are more likely or less likely to dissolve make great sense for understanding organizational performance and organizational survival ability.

Mobility tie, the main part of the few studies about dissolution of ties, is established as a result of the flow of personnel. Researches on mobility ties mostly discuss how the loss or acquisition of employees affects organizational outcomes, such as organizational survival, knowledge acquisition, economic performance and so on. As the mobility of managers will take away the social capital accumulated by the continuous invest of managers in their network of ties (M. Granovetter, 1985; Levinthal & Fichman, 1988; Akbar Zaheer & McEvily, 1999), scholars generally demonstrate that occupational mobility of managers leads to the dissolution of organizational ties. Along this way, future research could analyze the implications of dissolution of ties on organizations. Besides, aiming at thoroughly understanding tie dynamics, we encourage scholars to conduct longitudinal study instead of cross-sectional research.

3.1.2 Signaling Mechanism

Numerous studies have deliberated the mechanism of the ties as "pipes" to provide resources and trust, however, few researches pay attention to the mechanism as "prisms" to reflect the quality of organizations. Future research could explore which features related to interorganizational ties can be used to judge the quality of the organization, especially when is not easy to directly determine the quality of an organization. For example, concerning the signaling effect of the mobility ties, whether or not the organizations with personnel outflow are more unattractive or have poorer performance than those with personnel inflow? For the signaling mechanism of tie strength, whether tie strength indicates the effectiveness and speed of information transfer?

3.2 Linkages Across Boxes

3.2.1 Vertical Movement Across Boxes -- Multiple Ties

In practice, since organizational ties are increasingly complex and organizational activities are simultaneously influenced by many ties, organizations often have multiple ties. In theory, plenty of researches have separately evaluated the impact of each tie, but hardly investigate the effect of multiple ties simultaneously; that is, the theorization of the concept "multiplexity" is underdeveloped (Kuwabara, Luo, & Sheldon, 2010). Therefore, whether for solving practical problems or for the need to make up the theoretical gap, researchers should pay more attention to multiple ties and examine the meaning of them.

Multiplexity refers to the degree that two or more different types of ties simultaneously exist (Wasserman & Faust, 1994). Multiple ties develop trust between actors, increase mutual knowledge acquisition, and enhance social impact on each other (Beckman & Haunschild, 2002). Multiple ties improve the probability of implementing the norm, provide more learning opportunities, and therefore prevent ties from dissolution and contribute to the maintenance of ties (Rogan, 2014). There exist many conflicting findings in tie analysis, such as strong tie and weak tie which is better, and the study of multiple ties may help disentangle these debates. For instance, after taking into account of other kinds of ties, a certain organizational tie that is weak tie when analyzed separately may no longer a weak tie.

3.2.2 Horizontal Movement Across Boxes

Horizontal movement across boxes means the combination of multiple mechanisms and theories in tie analysis. A tie related organizational outcome is usually caused by the joint action of a variety of mechanisms, which requires future research to explore how these mechanisms affect each other and finally bring about the result. For example, some research combines trust and resource access mechanism to examine the influence of tie strength and indicates that the impact of strong ties on the valuable information acquisition is mediated by competence-based and benevolence-based trust. In the absence of these two kinds of trust, the advantages of weak ties dominate; that's to say, under this circumstance, weak ties that can help get diversified and unrepeatable information are more beneficial to organizations (Levin & Cross, 2004).

3.3 Extensions Beyond the Framework

3.3.1 Dark Side of Ties

Concentrating on the positive impact of organizational ties, extant research ignores considering the negative

consequences of ties, that is, the dark side of ties (Gulati & Gargiulo, 1999). Much potential exists for future research that elaborates the dark side of ties (A. Zaheer et al., 2010). For instance, embeddedness can save time, integrate consensus, bring trust and promote the Pareto improvement of the efficiency of resource allocation to help organizations adapt to the complex environment. However, over-embeddedness will lock the organization itself in and make organization inflexible, since over-embeddedness makes organization ignore the changes of external environment and stay away from the information outside its network of ties (Uzzi, 1997). Weighting the benefits and costs of organizational ties, managers can make the most appropriate decision.

3.3.2 Asymmetric Ties

Current research generally investigates the ties between two organizations that have almost equal ability, namely symmetric ties, but in reality, unequal situations, such as status, ability and so on, between two organizations present many asymmetric ties. Typical studies in this field are about alliances between small firm and large firm, and emerging or ordinary corporation and “corporate shark”. Small and medium enterprises (SMEs) can benefit from the strategic alliances with large enterprises (Stuart, Hoang, & Hybels, 1999), while these “corporate sharks” have adverse effect on ordinary companies at the same time (Katila et al., 2008). Establishing ties with firms that have high centrality or well-known fame, peripheral enterprises sink into a vicious circle: the enterprise that sets up alliance with center company needs to be willing to occupy a subordinate position and this sacrifice indeed offers peripheral enterprise much support from center enterprise. However, the agreement to occupying a subordinate position makes it hard for the peripheral enterprise to attract other center enterprises, since the subordinate position unfavorably signals that this corporation has limited strength. In this way, these peripheral enterprises have great challenges to move inward and therefore fall into the vicious circle (Ahuja, Polidoro, & Mitchell, 2009). After investigating the pros and cons of alliances between small firms and large firms, scholars begin to discuss how to manage asymmetric ties. Some studies compare the relative impacts of small firms’ different alliances with large firms on small firms’ performance and claim that compared with exploration alliances, exploitation alliances with large firms will averagely generate higher values for small firms because of the heightened risk of appropriation in exploration alliances (Haibin et al., 2014). Along this way, future research may demonstrate the benefits and costs of asymmetric ties and make a trade-off to analyze how to manage asymmetric ties appropriately.

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