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## **Integrating principles of yin and yang and business networks – The dynamics of cooperation and competition**

Annika Tidström  
Department of Management and Organization  
University of Vaasa  
Box 700  
65101 Vaasa  
Finland  
E-mail: [anntid@uwasa.fi](mailto:anntid@uwasa.fi)  
Phone: +358 6 324 8554  
Fax: +358 6 324 8195

Lars-Gunnar Mattsson  
Department of Marketing and Strategy  
Stockholm School of Economics  
Box 6501  
113 83 Stockholm  
Sweden  
E-mail: [Lars-Gunnar.Mattsson@hhs.se](mailto:Lars-Gunnar.Mattsson@hhs.se)  
Phone: +4687586641

### **Abstract**

Findings from business network studies have led to some seemingly paradoxical propositions such as: “Competition drives cooperation”. “Increased cooperation leads to more intense competition”. “Change requires stability.” “Stability is dependent on change”. How can the network processes be understood when we apply the paradoxical propositions?

In this paper we focus on how market dynamics, as it relates to competition and cooperation processes in the market, can be understood as interaction between these processes. We do this by investigating how Yin and Yang-principles in Taoism might be applied to such analyses. Yin and Yang symbolize different opposing forces that act together and form a whole. A certain force cannot be understood apart from its counterforce, which would mean that cooperation cannot be understood without competition and vice versa.

The purpose of the paper is thus to discuss the potential usefulness of applying Yin and Yang principles in studies aiming to increase understanding of network dynamics. We will focus on the balancing of the forces of cooperation and competition in business markets with reference to the configuration of competition and cooperation in the network.

**Keywords:** Yin and Yang, cooperation, competition, business networks, dynamics

## Introduction

The paper concerns the general phenomenon of market dynamics, i.e. how markets develop (change and/or stabilize) over time. We apply a business network perspective on markets, which means that a market is characterized by dynamic exchange relationships between sellers and buyers and by direct and indirect connections between such relationships. We label the business network approach "IMP". IMP is not a monolithic approach, and there is of course research on business networks outside of the IMP Group activities. However, we think that there is enough of a common base among IMP researchers to make such a label descriptive, and that for the purpose of this paper to focus the business network research on the IMP tradition.

Market dynamics is driven by both endogenous and exogenous forces. For IMP endogenous forces are important due to the connectivity attributes of networks and because the market concept includes both complementarities and substitutes, and several "levels" in production systems. The distinction between exogenous and endogenous obviously depends on how network boundaries are distinguished.

In IMP it has been argued that both cooperation and competition is needed in order for business relationships to be efficient (e.g. Gadde and Håkansson, 1993). It has also been argued that increased intensity of competition in a network leads to increased intensity of cooperation and vice versa (e.g. Mattsson, 1992). The simultaneous existence of cooperation and competition in a dyadic relation between two firms has been discussed as "co-opetition" (e.g. Bengtsson and Kock, 2000). Furthermore, at the market level the term "collective competition" has been used to describe when firms cooperate in order to compete with other cooperating firms (e.g. Hertz and Mattsson, 2004). IMP researchers have pointed to "paradoxes" inherent in the business network perspective (e.g. Ford, Gadde, Håkansson and Snehota, 2003) and some findings about interaction between competition and cooperation can be seen as paradoxical.

Taoism, more particularly the principles of Yin and Yang (abbreviated Y/Y in the following) constitute an interesting opportunity to identify and analyze opposites, the relationships between different opposites as well as the impact of one opposite on the other (Simpkins and Simpkins, 1999). Interaction between opposites affects, according to Y/Y, the dynamics of social phenomena. Since the general meaning of the terms cooperation and competition is that they are opposites they can be seen as representing Y/Y. According to Taoism each force interacts with its potential counterforce, which means that when a certain force is active also its counterforce is. The seeds of Yin lie within Yang and the seeds of Yang are found within Yin. This is called "presence in absence". Competition and cooperation represent opposite forces that interact in balancing Y/Y-processes.

The *purpose* of the paper is to discuss the potential usefulness of applying Yin and Yang principles in studies aiming to increase understanding of business network dynamics. We will focus on the balancing of the forces of cooperation and competition in business markets with reference to the configuration of competition and cooperation in the network. The paper is conceptual. We offer, in the form of propositions, some suggestions about how application of Y/Y principles might be useful for further research on core IMP issues regarding business networks.

The novelty of the paper lies in suggestions about how Y/Y principles can be used to combine ideas from Taoism with literature about industrial markets. To some extent Taoism has been applied in earlier business studies (e.g. Fletcher and Fang, 2006; Suen, Cheung and Mondejar, 2007), but to

our knowledge the principles of Y/Y have not earlier been applied in analyses of cooperation and competition in business markets.

The *disposition of the paper* is as follows. The next section presents Y/Y principles and their application in social sciences. In the following section, the IMP business network is presented with an emphasis on principles related to market dynamics and interaction between cooperation and competition. A comparison between Y/Y- and IMP-principles follows. Finally some propositions for future business network research are developed in light of the principles of yin and yang.

## **The principles of Yin and Yang and their application in social science research**

### *Taoism in general, Y/Y principles*

Yin and Yang is a part of Taoism. The fundamental doctrines of Taoism are embodied in the Tao-te-ching, which is a classic book on the teachings of Tao (the way) and Te (virtue). The three cornerstones of Taoism are Tao, Freedom and Wu-wei. Tao means the road or the way of life and it existed before heaven and earth. It is the mother of all things, and it is everlasting and unchangeable. According to Taoism one should follow the natural way in order to receive a life of peace, harmony and enlightenment. The natural way is in contrast to artificial regulation, punishment and ceremonies. The founder of Taoism, Lao-tzu is a somewhat mythical Chinese philosopher from who lived in the 3<sup>rd</sup> century B.C. He condemned war, taxation, superficial knowledge and conventional morality. As far as freedom is concerned, Taoism believes that absolute freedom can be acquired only through the understanding of Tao and by the practice of Wu-wei. Literally Wu-wei means “non-action” and it is related to a simplicity of life. In other words rulers rule best when they rule least, i.e. when they take no unnatural action (Suen et al., 2007; Wu, 1985; Xiao, 1996).

The basic idea behind Yin and Yang is that the universe is run by a single principle, the Tao, or Great Ultimate. Tao is divided into two opposites, Yin and Yang. Yin is coupled with earth, femaleness, the moon, completion, coldness and darkness. Yang is characterized by the principles of heaven, maleness, the sun, creation, heat and light.

According to Taoism all change in the universe can be related to Y/Y. Tao is a process, a dynamic state of balanced movement. The process is rhythmic and not linear or cyclic. (Grigg, 1989) An interpretation of this is that the movement from a certain force to another has no clear pattern, but a certain force may dominate for a certain period of time and then its counterforce takes over. It is impossible to say exactly when and for how long time a certain force will dominate. Based on this it is also possible to argue that in order to be properly understood, a phenomenon or paradox should be observed and analyzed over time from a process point of view (e.g. Chae and Bloodgood, 2006). By taking a static and short-term perspective we will only for the specific moment be aware of something that will change the following moment. To sum up we can say that there are continuous, rhythmic movements from yin to yang and yang to yin

Yin and Yang do neither compete nor conflict. They complement each other. The balancing between Y/Y can be related to Tao. It is a question of *balancing*, not balance. Tao is a process, a dynamic state of balanced movement. The process is rhythmic and not linear or cyclic. In Taoism the focus lies on keeping up a dynamic and harmonious balancing in the present. (Grigg, 1989) The balancing between different opposing forces is in a state of constant change, which is determined both by the internal and external environment and no single person or entity determines its dynamics. Opposing forces not only dialectically interact with each other, but they are also mutually dependent. They both contribute to and complement each other. The forces are not in balance, but

they are in a state of constant change, based on both the internal and external environment. Organizations should seek balance and harmony between Y/Y to obtain and preserve organizational healthiness. When opposing forces are in harmony, they will attract each other and thereby build a composite whole of an element or phenomena. (Chae and Bloodgood, 2006).

Balancing is more related to an action of coping than with managing. Balancing is not an attempt to achieve some kind of equilibrium, but it is a continuous and rhythmic action. Balancing is not related to a question of whether it has been done successfully or not, but it is about action in an attempt to achieve harmony. In other words: Harmony is received through balancing yin and yang.

According to Taoism each force cooperates with its potential counterforce, which means that when a certain force is active also its counterforce is. Although Y/Y are illustrated in black and white within a circle, the black part contains a small white circle and the white part contains a small black circle. This means that the seeds of yin lie within yang and the seeds of yang are found within yin. This is called "presence in absence" (Simpkins and Simpkins, 1989). Every force is replaced by its opposite, which eventually again is replaced by the first force. You can produce one force from the other. This can be called harmonious action. This can be illustrated with a bamboo stick that overcomes the wind by yielding to it. If it were stiff, it would break, but as it yield it overcomes. From this we can conclude that weakness produces strength, and strength produces weakness. "If you want to become whole, let yourself be partial" (Mason, 2009) or according to the focus of this paper: "If you want to cooperate, compete" and "If you want to compete, cooperate".

To sum up, the principles of Y/Y are paradoxical. They depend on each other, exist within each other, give birth to each other, and succeed each other at different points (Fang, 2006). There are no clear cyclical or linear patterns of movements between Y/Y, but a rhythmic dynamism, which is dependent on the continuous balancing between Y/Y.

### *Yin and yang within social science research*

Several terms have been used to describe Y/Y. Some scholars prefer to talk about different forces while others use terms such as opposites (e.g. Johnston, 1991), contradictions (e.g. Faure and Fang, 2008), poles (Chae and Bloodgood, 2006) and polarities (Mason, 2009). In previous research Y/Y has been applied to various social and business phenomena. It has been used in studies of the Asian or Chinese culture as such and in comparisons between East and West. Studies have focused on the Chinese society in general (e.g. Faure and Fang, 2008) and on business relationships between East and West (e.g. Johnston, 1991). Strutton and Pelton (1997) argue that Y/Y can be applied to understand relationship marketing in global settings. They found that effective competitors usually must be effective "cooperators" (a.a. p. 32).

Faure and Fang (2008) study paradoxical Chinese values and distinguish between eight different paradoxes. Gao and Handley-Schachler (2003) focus on the influences of Eastern religions and Y/Y on Chinese accounting history. Studies have also been made from a managerial perspective (e.g. Rabey, 2003; Suen et al., 2007), focusing on business relationships, negotiations (e.g. Fletcher and Fang, 2006) or quality systems (Curry and Kadasah, 2002). The principles of Y/Y have also been used within healthcare and medicine, for example in relation to skills (e.g. Kemper, 2007). Fletcher and Fang (2006) study the impact of culture on relationship creation and network formation in emerging Asian markets. They stress that the traditional view by Hofstede (1980), that bipolarizes national market cultures in terms of "either-or" dimensions such as either feminine or masculine is contrary to the Y/Y principle encapsulating "both-and".

Y/Y has thus to some extent been applied in business research in efforts to understand and explain Eastern business life and differences between Western and Eastern ways of doing business. We

believe that Y/Y might be possible to fruitfully apply also in more general social research that does not include the specific Asian cultures in which Y/Y plays, or has played an important role.

Y/Y has been used on a conceptual and empirical level, which means that a phenomenon is studied from different opposing poles, including both a theoretical background and empirical examples. We have not found any study in which the Y/Y principles are used with a focus methodology. In several studies, Y/Y are applied only in order to distinguish between different opposites of a certain phenomenon. These studies may be criticized for being too superficial, without describing and discussing the underlying assumptions of yin and yang.

According to the philosophy of Y/Y both forces of a paradox are equally important to recognize, constant change is a fact of life and each force contains a part of its opposing force.

“For instance, focusing on the aspect of competition without simultaneously considering cooperation provides an incomplete view of competition. Competitors normally do not act to the same degree of competitiveness at all times. Rather, there are times that they work together toward a common goal, such as guiding legislation, and the cooperation affects and is affected by ongoing competitive behavior. The presence of each pole can significantly affect the other pole and the influence would be missed or ignored if a paradoxical view was not used. Variance would either go unexplained or be explained incorrectly”. (Chae and Bloodgood, 2006, p. 4)

Based on these premises, IMP and especially the interaction between cooperation and competition is introduced in the following sections of this study.

## **The IMP business network approach to markets**

In general

Already from the early years of business network research it has been recognized that relationships and networks are characterized by both stability and change, by both cooperation and competition. In this paper we will refer to some arguments and concepts in IMP that are of specific relevance in relation to Y/Y principles. (*Italics* in cited texts have been added by us.)

Networks are a form of governance for production and consumption in market economies. Economic actors are dependent on coordination between their own resources and resources controlled by others. Coordination takes place within dynamic exchange relationships of a predominantly cooperative nature. Effectiveness of such cooperation affects the ability of actors to compete. Both cooperation and competition exist in markets.

Management control, including selection of counterparts, is hampered by temporal and spatial network dependencies in the network.

“The *complexity* of effects and underlying factors of relationship development is difficult to reduce to manageable proportions. Yet it has to be done. It is needed in order *cope* with relationship development.” (Håkansson and Snehota, 1995, p.42)

The development of a business relationship is much dependent on interaction over time and influences from the dynamics of its network context.

“ The development of a business relationship depends on what has happened in the past in the relationship, what each of the parties has learned in other relationships, on what currently happens between the companies and their relationships to other companies, on the expectations of both companies of their future interaction; on what happens in the wider

network of relationships, in which they are not directly involved” (Håkansson and Ford, 2002).

“...no single transaction can be understood without reference to the relationship of which it is a part and to what has contributed to that relationship. Similarly, no single relationship can be understood without reference to the network itself ” (Ford et al., 2003, p.18).

Change is incremental *from within the structure*. The change that occurs within business networks is not a change from one state to another given state, but it is rather *a state of dynamic flux*, which can be described as a continuous process. (Håkansson and Snehota, 1995).

Interaction in networks causes both stability and change. Stability and change co-exist. The following citations are typical.

“...they are dialectically connected and causally interdependent and both are important for network dynamics” (Håkansson and Snehota, 1995, p. 270).

“...stability and change become related to each other, *they will be each other's base* (a.a. p. 271).

“...interaction *contains the seeds of change*” (Håkansson and Johanson, 1988, p. 374).

Network researchers have pointed to *paradoxes* inherent in the network perspective. Networking happens in a space of paradoxes and the mix and balance of these elements will vary over time in a given relationship, as circumstances change across relationships (Håkansson and Ford, 2002). Ford et al (2003) list three network paradoxes related to managing in networks: the network is both enabling and restricting; relationships are outcomes of company decisions and the companies are outcomes of their relationships; companies need to control interaction with others but such control might be destructive.

There is a general consensus in IMP that network dynamics does not imply movement towards any equilibrium but there is room for ideas about how imbalances of different types may act as driving forces for change. One example is when investments in production assets (e.g. a new factory) affect investments in market assets (e.g. in relationships to distributors). “*Lack of balance* between resources is an important driving force for investment processes to be initiated in different firms” (Mattsson, 1987, p. 136). Håkansson, Henjesand and Waluszewski (2004) call for more research into connection and disconnection of various network elements and the *balancing* of forces such as conforming and confrontation. According to Young and Wilkinson (1997), relationships and networks involve balance between beliefs, attitudes and behaviors in the same way as individuals are balancing the cognitions and responses that make up their personality. These arguments indicate that the balancing of different forces may simultaneously take place on different levels, such as company level, relationship level and market level. What happens on a certain level may influence and be influenced by what happens on another level.

Examples of elements representing different (seemingly opposite) forces in business networks are planned economy vs. market economy, cooperation vs. competition, stability vs. change, trust vs. opportunism.

### *Cooperation and competition*

Intra-organization studies are replete with observations on interaction between cooperative and competitive processes, between individuals, between groups and between functions. Some use the term co-opetition in studies of multi-unit corporations (e.g. Bengtsson and Kock, 1999, 2000; Tsai, 2002; Luo, Slotegraaf and Pan, 2006). Obviously such intra organizational processes also affect and are affected by inter-organizational processes. In this paper, however we focus on the latter. IMP research has explicitly treated cooperative relationships between actors controlling complementary

resources to a larger extent than competitive relations between actors. Cunningham (2008) recently argued, based on a study in which suppliers were shown to act in a complex mixture of cooperative, transactional, competitive and collusive modes of behaviour, that IMP research should be more actively interested in competition.

The general meaning of the terms cooperation and competition is that they are opposites. Cooperation resembles forces in the same direction, while competition is related to forces in opposition to each other. These forces exist on different network levels that contain both cooperative and competitive processes. Easton (1992), in a discussion of coordination as network processes, treats competition and cooperation as two *dialectical* processes. There is a trade off between cooperation, necessary to create benefits, and competition, needed to control the resources so created.

The market process continuously affects the network structure, stabilizing as well as changing. Market and production investments, internationalization, mergers and acquisitions, strategic alliances, changes in purchasing and marketing strategies (e. g. systems selling, outsourcing) etc. change how actors are connected in terms of cooperation and competition. It has been observed how during specific periods the propensity to merge or to enter into strategic alliances increases (“merger waves”). Purchasing and marketing strategies change from time to time, both as regards individual actors and as more general business trends. E.g. regarding outsourcing, systems selling, suppliers and customers’ involvement in product development. All such changes imply changes in how actors are connected to each other in terms of competition and cooperation. However, even if such developments are all the time going on, the processes are not linear or cyclical, it is rather the rhythm that changes, e.g. during a merger wave, when a new management philosophy gains acceptance, when innovation processes imply changes in technical dependencies or when an “institutional reform” opens up for competition in earlier public monopolies.

Ford et al. (2003) argue that strategizing is not simply concerned with competition. *Strategizing is coping* with and taking advantage of relationships with surrounding companies in their entirety. These companies include suppliers, customers and competitors. Cooperation and competition are *not a simple dichotomy* for companies. However, an organization’s strategic posture might be towards competition or towards cooperation (Håkansson and Snehota, 1995, p. 329).

Competition between two actors takes place when their objectives are in conflict with each other. In a network perspective both cooperation and competition may be seen as mediated by third actors. Two complementary suppliers might e.g. cooperate with each other due to the need to improve the offer to a customer. Two competitors might begin to cooperate to meet competition from a third competitor. Cooperation in one business relationship might stimulate competition as far as both the focal relationship and other business relationships are considered. An example is a situation when two retailers with similar products have their own vendors on a certain geographical market. The retailers are competing but the prerequisite for cooperation still exists, i.e. cooperation is present in its absence, because it would be possible for the retailers to cooperate by having the same vendor. If the retailers employ the same vendor and thereby start cooperating, competition is still present, both visibly and in its absence. Visibly as the retailers sell similar products and in its absence, as for example in a situation where one of the retailers learn something through the cooperation which again leads to increased competition. Other examples where cooperation and competition might interact is for example when intermediaries cooperate with their counterparts but at the same time are threatened by the alternative that these counterparts begin to interact directly, bypassing the intermediary. In project markets, firms might be competitors, learn about each other, and then in future projects begin to cooperate, either as subcontractors to each other or agree to cooperate in

restraint of competition. Mergers and acquisitions between competitors provide other examples of how competitive processes might stimulate cooperation in a later period.

Easton and Araujo (1992) recognize that intercompetitor cooperation in networks is an interesting phenomenon to consider. Later research on so-called *co-opetition* (e.g. Bengtsson and Kock, 2000; Tidström, 2006) became an important research stream, originally more in general strategic management literature (e.g. Nalebuff and Brandenburger, 1996; Doz and Hamel, 1998) than in core IMP research.

Strategy literature, addressing, interaction between cooperation and competition at the market level, referring to strategic alliances, has used the term collective competition to identify market structures where competition takes place predominantly between groups of actors that cooperate internally (Gomes-Casseres, 1999). Such structures have earlier been analysed in Sweden as regards retail and wholesale distribution using term "bloc competition" (e.g. Mattsson, 1969). Araujo and Mouzas (1997) analyze competitive interaction in vertical marketing systems by taking into account how this interaction is mediated by cooperative exchange relationships between buyers and sellers. Competitive and cooperative interaction takes place at two different levels, a horizontal focusing on competitive interaction between manufacturers and retailers and a vertical level, focusing on cooperative interaction between manufacturers and retailers. Bengtsson and Kock (1999) discuss how both vertical and horizontal business relationships may include elements of competition/conflict and cooperation/harmony. Simultaneous existence of cooperation and competition within exchange relationships between actors in distribution systems can be considered as part of *normal practices* of doing business (e.g. Wilkinson and Young, 1994).

Furthermore, with reference to structural network changes, Hertz and Mattsson (2004), analyze how the dynamics of network reconfiguration can be understood. It is seen as driven by the need to change the structure of cooperative relationships in international freight forwarding networks when mergers, acquisitions and strategic alliances change the competitive structure and "*forbidden triads*" exist.

## Comparing Y/Y and IMP principles

In this section the basic principles of Y/Y and IMP. These principles are derived from the previous presentation and discussion related to the subjects.

### Y/Y

1. All *change* in the universe can be related to *two opposing forces*. One opposite produces the other. One opposite contains the *seeds* of the other. Yin and Yang complement each other, they are not in conflict. Opposing forces not only dialectically interact with each other, but they are also mutually dependent. They both contribute to and complement each other.
2. Tao is a process, a *dynamic state of balanced movement*. The process is *rhythmic* and not linear or cyclic. It is about *balancing*, not balance. The focus lies on keeping up a *dynamic and harmonious balancing in the present*. As present times move, we move in balance with it and are simultaneously balancing present times.
3. The movement from a certain force to another has *no clear pattern*. However, a force may dominate for a certain period of time and then its counterforce takes over. It is impossible to say exactly when and for how long time a certain force will dominate.
4. A paradox should be observed and *analyzed over time*, from a process point of view. The balance between different poles is in a state of constant change, which is determined both by the internal and external environment and not by a specific entity.

5. When opposing forces are in *harmony*, they will attract each other and thereby build a composite whole of an element or phenomena.
6. Freedom can be acquired only through the practice of Wu-wei, a term meaning non-action. *Rulers rule best when they rule least*, i.e. when they take no “unnatural” action.

## IMP

1. *Paradoxes* are inherent in the IMP perspective. E.g. the network is both enabling and restricting, interaction causes both stability and change. Interaction contains the *seeds of change*. Competition and cooperation can be seen as *two dialectical forces*.
2. Change is incremental, from within the structure, it is not a change from one state to the other but is rather *a state of dynamic flux*. Imbalances of different types may act as driving forces for *balancing*. Equilibrium is never reached.
3. The *complexity* of effects and underlying factors of relationship development is difficult to reduce to manageable proportions. A single relationship cannot be understood without reference to the network in which it is embedded.
4. Interacting processes should be *studied over time*. Present structures and processes are based on what happened in the past and will affect the future.
5. IMP does not use the harmony concept explicitly. On the contrary tensions and conflicts are often discussed as aspects of cooperative relationships. However, a major reason for the existence of exchange relationships is *complementarity* between resources controlled by cooperating actors, which indicates some degree of harmony.
6. As to possibilities for individual actors single-handedly to affect the network, IMP acknowledges that it is difficult, if not impossible to manage networks. No one however argues for non-action as generally the best alternative. *Coping* with relationship and network dynamics, or managing in networks, is more descriptive of what individual actors can hope to do. Any major influence by actors on the network is based on *interaction* that is quite dispersed within the organizations and not pre-dominantly driven by “top-management”. Managing in networks is more about *balancing and coping* than managing in the traditional sense. See the management-oriented book by Ford et al (2003).

When comparing the principles of Y/Y and IMP we find that they are of a similar nature regarding points 1-4 but more or less different as regards points 5 and 6.

The principles of Y/Y concern the apparent paradoxical nature of interaction between opposite forces. Van de Ven and Poole (1988) discuss apparent paradoxes revealed in organization studies and present four alternatives to approach them. First, researchers may choose to “*accept the paradox* and learn to live with it”. According to Chae and Bloodgood (2006) this is of little help in situations where choices have to be made. The second method is to resolve paradoxes by clarifying levels of reference and the connections among them, i.e. to perform *a multilevel analysis*. Third, one may take the *role of time* into account. The two poles of a paradox may succeed each other at different points in time. The fourth method is to introduce new terms for, or a *new logic to explain a paradox* in order to get a more complete description and understanding of the different poles. These four methods may be combined, as we do below, although they are analytically distinct. First, we see both cooperation and competition as natural elements of business relationships. Second, we view the phenomenon as an interaction between different levels. Third, we recognize time as we argue that cooperation and competition changes and interacts over time both within and between a business relationship and at the over-all network level. Fourth, the business network perspective provides a logic that may serve to explain the paradoxes.

## **Analyzing cooperation and competition from the perspectives of Y/Y and IMP: Some propositions for future business network research**

IMP research is focused on issues related to understanding network structures/processes and to management of and in such structures/processes. In this paper we focus on competition and cooperation. Above we have characterized basic IMP principles and compared them with Y/Y principles. Ideas for IMP research, following from Y/Y are suggested in the following propositions that are also related to the four methods to handle paradoxes in Van de Ven and Poole (1988), discussed above.

Proposition 1. *Competition and cooperation should not be analysed isolated from each other.*

Proposition 2. *Competition and cooperation should be analysed as continuous processes over time with special focus on their rhythmic nature.*

Proposition 3. *Competition and cooperation between individual actors should be analysed in their network context, not in isolation.*

Proposition 4. *To learn more about competition, analyse cooperation and vice versa.*

Proposition 5. *Analyse interaction between competition and cooperation in networks in terms of balancing between the two opposite forces.* (There are always imbalances that by some criteria reduce performance. Harmony is such a criterion.)

Proposition 6. *Analyse how interaction between cooperation and competition is affected by interaction between other opposing forces, especially by interaction between change and stability.*

Proposition 7. *Analyse how, and indeed if, managing efforts (strategizing, coping, interaction, non-action etc.) in networks influence and is influenced by interaction between cooperation and competition.*

It is too early to judge if and how reference to Y/Y principles and more than two centuries old Chinese philosophy may help to understand business networks and network forms of governance, generally, in market economies. We believe that it is worthwhile to address some of the propositions listed above in future business network research. The basic principles in Y/Y and IMP are rather similar but IMP research has yet much to do to investigate the interaction between opposite forces.

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