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# The Co-evolution of Strategic Alliances

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## Abstract

This paper proposes a co-evolutionary theory of strategic alliances. The paper proposes a framework which views strategic alliances in the context of the adaptation choices of a firm. Strategic alliances, in this view, are embedded in a firm's strategic portfolio, and co-evolve with the firm's strategy, the institutional, organizational and competitive environment, and with management intent for the alliance. Specifically, we argue that alliance intent may be described, at any time, as having either exploitation or exploration objectives. We further discuss how the morphology of an alliance—absorptive capacity, control, and identification—may be isomorphic with its intent, and, in the aggregate, drive the evolution of the population of alliances.

# Introduction

In the past decade, research on strategic alliances has blossomed greatly, reflecting the increasing incidence and importance of strategic alliances in business practice. Strategic alliance research has become something of an industry, challenging the traditional centrality of the firm as a focus for research.

Research on strategic alliances is not a new endeavor. Economists have traditionally been interested in the potential and real anti-competitive implications of joint ventures, and other forms of cooperation between and among firms. This literature viewed alliances as a means for firms to gain market power and extract monopoly rents (Fusfield 1958, Pate 1969, Boyle 1968, Mead 1967, Berg and Friedman 1980). Sociologists have also examined strategic alliances, in their early studies of interorganizational relations (Benson 1975, Evan 1966, Hall et al. 1977, Herbert 1984, Levine and White 1961, Litwak and Hoylton 1962, Litwak and Rothman 1970, Pfeffer and Nowak 1976). This literature investigated the structure and processes associated with both cooperation and competition between and among organizations. Typically, these studies emphasized such phenomena as power in inter-firm networks (cf. Cook 1977), and the collusive functions of interlocking boards of directors (cf. Mizruchi and Schwartz 1987), areas which continue to attract attention.

Modern research on strategic alliances may be dated from the publication of an influential volume (Contractor and Lorange 1988) which surveyed the emerging field of international business cooperative strategies. Contractor and Lorange (1988) portrayed the strategic alliance literature as fragmented, with many disciplines laying claim to the field. No overarching framework has yet emerged. Over a decade later this observation is still common (Osborn and Hagedoorn 1997). Alliance research is conducted by economists, organization theorists, sociologists, strategic management, marketing, operations management, and international business scholars, and employs the gamut of methodologies and theoretical frameworks indigenous to those fields.

A rough taxonomy of recent strategic alliance research would include studies of (a) inter-organizational relationships and networks as a class of phenomenon (Astley 1984, Astley and Fombrun 1983, Bresser and Harl 1986, Burt 1992, DiMaggio and Powell 1983, Fombrun and Astley 1983, Gulati 1995, Oliver 1990); (b) the choice of alliances compared to alternative governance mechanisms, typically, although not exclusively, employing a transaction cost framework (Buckley and Casson 1988, Hennart 1988, Hennart and Reddy 1997, Kogut 1988, Balakrishnan and Koza 1993, Powell 1990); (c) the antecedents, structure, and functions of alliances in international contexts (Beamish 1985, Contractor and Lorange 1988, Franko 1971, Friedman and Kalmanoff 1961, Anderson and Gatignon 1986, Reuer and Miller 1997); (d) incentive issues, such as contracting, opportunism, and trust (Gulati 1995, Parkhe 1993); (e) variables associated with alliance success, failure, and stability (Doz 1996, Parkhe 1993); and (f) guidelines for the better management of alliances (Doz 1996; Harrigan, 1985, 1986; Killing 1983).

These literatures have presented an eclectic variety of explanations and models of the respective issues, which taken together have provided a foundation for further research (Gulati 1998; Osborn and Hagedoorn 1997). This

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paper extends the literature on strategic alliances by considering strategic alliances in the context of the adaptation choices of the firm: the motivation for the alliance; the co-evolution of the firm and its environment; and the embeddedness of an alliance within the adaptation portfolio of the firm, and within the industry adaptation practices mediated by the institutional arrangements constraining the firm (Grabhner 1993, Granovetter 1985, Whitley 1991). We focus on for-profit (economically oriented) inter-firm alliances where each of the participating firms is an independent agent; where the alliance co-evolves as an outcome of alliance activity and actions of each participating firm; and where alliance actions are reciprocally embedded within each of the firms constituting the alliance, the industry, and society. Although much of the literature on alliances has performance (effectiveness, efficiency) as the dependent variable (cf. Sydow and Windeler 1998), in this paper, we highlight an evolutionary perspective, beginning with antecedent and founding conditions, negotiating and establishing expectations for creating and distributing joint value, the co-evolution of direction, structure, and practices in concert with the evolution of the constituent firms, industry, and society. This leads us to consider organizational issues related to trust, alliance morphology, and the emergence of asymmetry conditions and stability over time.

#### The Motivation for Alliances

A search of the alliance literature produces an extensive list of reasons that have been advanced for entering an alliance. These include, but are not limited to, learning alliances—"partners hope to learn and acquire from each other technologies, products, skills, and knowledge" (Lei and Slocum 1992)—and business alliances, which maximize the utilization of complementary assets—"each partner brings and contributes a distinctive capability in a particular value adding activity" (Lei and Slocum 1991). In the former, alliance partners seek to reduce a significant information asymmetry between the partners; in the latter, alliance partners seek to establish a position in a product or geographic market or market segment.

Hitt et al. (1997) list no less than fifteen different reasons why firms might enter an alliance. However, each of the proposed reasons could also apply to the choice of a different strategic option. For example, "establishing a franchise in a new market" can be accomplished through an alliance, but it could also be accomplished through an acquisition (or merger) with an established player in that market, or through a Greenfield entry. The choice of a specific entry strategy is a function of many variables including managerial cognition of the environment (Meindl et al. 1994), history and path dependence such

as recent experiences with particular strategies or imprinting conditions, managerial preferences (Lewin and Stephens 1994), dominant industry practices, externalities such as governmental constraints on further industry concentration, propensity for risk, influence of garbage can processes, the information structure spanning the firms (Balakrishnan and Koza 1993), and the like. At this level of analysis it becomes difficult to specify a model which explains specific individual firm choices for a particular strategic response to a particular time. Different strategic responses may be equifinal (Gresov and Drazin 1997, Sydow and Windeler 1998) in terms of their outcomes. Furthermore, at the level of analyzing each individual strategic response the reason for the choice is potentially idiosyncratic.

March (1991, 1995) advanced a model of exploration and exploitation in organization learning which provides a framework for linking adaptations at the firm level to changes occurring at the level of the organizational population. In the terminology of complexity theory, exploration is associated with prospecting for new landscapes: discovering new opportunities for wealth creation and above average returns. Exploration involves innovation, basic research, invention, risk taking, building new capabilities, entering new lines of business, and investments in the firm's absorptive capacity (Cohen and Levinthal 1990; Lane and Lubatkin 1998). At the other end of the continuum, exploitation is associated with increasing the productivity of employed capital and assets—improving and refining existing capabilities and technologies, standardization, routinization, and systematic cost reduction. Levinthal and March (1993) argued that the survival of the firm is dependent upon the firm's ability to "engage in enough exploitation to insure the organization current viability and engage in enough exploration to insure its future viability" (p. 105).

The firm's choice to enter into an alliance can be distinguished in terms of its motivation to exploit an existing capability or to explore for new opportunities. This dichotomy applies equally to the choice of any strategy available to the firm. However, in this paper we consider only the choice of entering into alliances. The most common form of an exploitation alliance involves the joint maximization of complementary assets by sharing in the residual returns from a business activity. The structure of such an alliance often, but not exclusively, takes the form of establishing a daughter company in which the parents have equity positions. Licensing, franchising, and networks are also instances of exploitation alliances. Licensing and franchising involve an alliance form by which one party exploits a core capability. Network alliances, such as code sharing arrangements in the airlines

industry and referral networks in professional service industries, are a means whereby participating members obtain residual revenues (e.g., referral fees) on certain assets which are made available to the network of alliance members (see also Jones et al. 1998).

The intent behind entering an exploration alliance involves a desire to discover new opportunities. Again, an exploration alliance is but one of several strategies by which firms can discover new opportunities (cf. Haspeslagh and Jemison 1991), but the only one through which discovery is undertaken jointly with at least one partner who, typically, seeks to maintain its independence. Learning alliances represent the prototypical example of exploration alliances and typically, although not exclusively, do not involve joint equity relationships. Such alliances take on many forms from structuring bilateral exploration/learning relationships to co-operative learning networks (Hanssen-Bauer and Snow 1996, Browning et al. 1995). Often the equity relationship in an exploration alliance is structured as an option (Kogut 1988, Lawless and Lewin 1998) whereby one party obtains an equity option in return for investing capital in the discovery process (Liebeskind et al. 1996, Powell et al. 1996).

The choice to engage in exploitation and/or exploration strategies can be modeled as a function of the expected returns from such strategies, managerial cognition of the environment, and strategic intent. March (1991, 1995) and Levinthal and March (1993) note that the returns to exploitation of existing capacities are proximal in time and more certain, whereas the returns associated with exploration for new opportunities are distant in time and highly variable. Furthermore, they note that positive returns from exploitation activity make continued exploitation in that domain more desirable, thus reinforcing the preference for exploitation strategies. This observation suggests the following proposition.

PROPOSITION 1. Ceteris paribus, the prevalence of exploitation alliances in an industry will be greater than exploration alliances.

In stable markets, the firm's focus on exploiting (refining, improving, cost reduction of) existing capabilities can lead to a stronger competitive position in that market. However, in changing competitive environments, the same self-reinforcing exploitation strategies may negatively affect the firm's survival by creating a competency trap (Levinthal and March 1993). Many firms react to exogenous changes affecting their industry in proximal time horizons and frequently will develop more heterogeneous capabilities as they strive to serve growing markets and changing customer needs (Levinthal and Myatt

1994). For example, von Hippel (1988) noted that attending to leading edge customers creates opportunities for firms to discover new opportunities (e.g., new product markets) and adapt or learn new capabilities (e.g., new technologies, marketing tools). More generally, firms are sensitive to the changing attributes of markets and of customer needs, which they serve, and to the new demands on existing capabilities affected by these changes. The following proposition summarizes the effect of changes in the competitive environment on the firm's mix of exploitation and exploration alliances.

PROPOSITION 2. Ceteris paribus, in industries whose competitive environments are changing, the incidence of both exploration and exploitation alliances will be greater than for industries with stable competitive environments or where markets have been stable for a long time.

#### Co-evolution

Recent years have seen an increase in studies of organization adaptation at different levels of analysis (Koza 1988, Romanelli 1991). The literature addresses issues of the evolution of populations of organizations, emergence of new industries (Aldrich and Mueller 1982, Aldrich and Zimmer 1986), short term adaptation of organization forms (Levinthal and March 1993), the influence of imprinting conditions (Stinchcombe 1965), or the role of technological innovations in transforming industries (Perez 1983, 1985; Schumpeter 1934). McKelvey (1997) has argued that evolution of organizations cannot be understood independently from the simultaneous evolution of the environment. In his paper, McKelvey (1997) advocates a co-evolutionary perspective to studying organization adaptation. He notes the importance of studying organizations over a long period of time with an historical perspective (Kieser 1994, Calori et al. 1997) emphasizing the co-evolution of the firm and its environment. Levinthal and Myatt (1994) have attempted to study the evolution of the mutual fund industry as the outcome of the co-evolution of distinctive firm capabilities and of industry market activity. Lewin et al. (1998) have advanced a theory of the evolution of new organization forms as an outcome of the co-evolution of the competitive environment, firm intentionality, and the institutional environment of the firm under conditions of stochastic or chaotic environmental uncertainty. The theory distinguishes between periods of population variation and periods of organization mutation (emergence of new forms). A coevolution perspective has the potential to inform and redirect research on alliances. In this section, we outline a co-evolution framework for research on alliances.

Various studies of alliances have included a time dimension. For example, Gulati (1995) studied the preference for equity-based alliances as a function of repeated multiple alliances transactions between partners. Ring and Van de Ven (1994) have proposed a process framework for understanding and researching the issues, which arise when the partners negotiate, implement, and adjust the terms of the alliance as it unfolds over time. Doz (1996) explores the relationship between initial conditions and performance as a function of different learning processes. Similarly, there have been studies of the dynamics of networks (Barley et al. 1992, Powell and Brantley 1992) and longitudinal single case studies of alliances. However, singularly absent from the literature are studies of the evolution of alliances over time, as they coevolve with the changing strategies of firm, evolving industry strategic practices, and the changing regulatory and institutional environment.

Case studies of single alliances over time can be important sources of insights about the evolution of cooperation. For example, Sedaitis (1998) investigates the role of founding conditions, Zajac and Olsen (1993) considered processes for negotiating expectations about creating and distributing common value, and in their case study, Ariño and de la Torre (1998) track an alliance from its inception to its dissolution. Hennart et al. (1998) investigate the form of alliance dissolution: liquidation or spinoff as a function of the longevity of the alliance. The idea being that early on in the evolution of alliance liquidation is more prevalent because little common value has been created. Larsson et al. (1998) model alliance as dynamic processes over time with specific attention to sources of asymmetry and to processual barriers to joint learning. Kumar and Nti (1998) develop a model of the developmental path and evolutionary process of knowledge intensive learning alliances as a function of certain sequences of events and interaction among the partners. Madhok and Tallman (1998) model the creation of value over time and the management of instability as a function of the evolving relationship between production and exchange. Monge et al. (1998) develop a formal theory, anchored in public goods theory, of joint value creation and the appropriations of the value by the alliance members. Jones et al. (1998) model the stability of collaboration in a network as a function of differential rates of change in network membership, scope, governance form, and the strategic choice of tensions that arise over time. Ariño and de la Torre (1998) report on a case study of an international joint venture from its inception to its dissolution. They describe the evolution of the joint venture through a longitudinal analysis of key events. Ariño and de la Torre's analysis illustrates the embeddedness of the alliance strategy within the overall strategy of one joint venture partner and the co-evolution of the joint venture with the evolving strategy of this joint venture partner.

Rarely, however, has research on alliances explicitly considered alliances to be embedded within the strategy portfolio of each partner and/or within accepted industry practices or as a function of the regulatory environment, institutional arrangements, and culture of the nation state form of capitalism (Lewin et al. 1998). Thus, the decision to enter into an alliance as well as the type and form should be a function of such founding conditions as the firm's own experience with alliances, prevalence of such alliances in the industry (social comparison), and regulatory, institutional, and cultural constraints. Thus, for example:

PROPOSITION 3. Ceteris paribus, isomorphic mimetic reasons will be cited for entering and structuring an alliance when the firm in question has no prior experience with such an alliance. Similarly, the greater the past success of a firm with certain types of alliances, the greater the persistence with such alliances.

And.

PROPOSITION 4. Ceteris paribus, a firm which has entered into an alliance primarily on the basis of isomorphic mimetic consideration will dissolve an alliance sooner than when it has firm-specific experiences with such alliances.

As the Ariño and de la Torre case study (1998) illustrates, alliances co-evolve with the strategy of the firm. Specific experiences will be reinterpreted in light of the evolving strategy of the firm. However, the evolution of industry practices as well as changes in the regulatory environment or institutional arrangements also affect the evolution of an alliance. In their paper, Levinthal and Myatt (1994) considered co-evolution of distinctive capabilities and market activity as functions of positive feedback effects of market activity, feed forward effects (managerial social construction of anticipated feedback effects), and attention directing effects such as transfer agent referrals and relative size of a business segment (e.g., the custody business). However, as a general observation, co-evolutionary research on alliances which incorporates embeddedness conditions and process variables remains an unexplored area of research.

#### Trust in the Success and Failure of Alliances

Successful alliances exhibit trust between the partners; unsuccessful alliances exhibit a lack of trust. No other statement about alliances would produce the universal agreement that this assertion would receive. Trust in alliances has been examined in many settings and alliance

types, including, but not limited to, international alliances (Madhok 1995), manufacturer-retailer relationships (Kumar 1996), the auto industry (Bensaou and Vekatraman 1995), and Keiretsu alliances (Gerlach 1992). While many idiosyncratic factors have been attributed to explain alliance success, failure, and stability, trust seems to have emerged as the magic ingredient necessary for alliances to succeed.

What is trust? Kumar (1996) defines trust as "dependability" by the partners in which a "leap of faith" is made that each partner is interested in the welfare of the other. The theme of mutual welfare is developed by Madhok (1995). He defines trust as the "perceived likelihood of the other not behaving in a self interested manner". Gulati (1995), citing Bradach and Eccles (1989), defines trust as "a type of expectation that alleviates the fear that one's exchange partner will act opportunistically".

Obviously, trust among alliance partners is important, as it is in all relationships (cf. Gouldner 1960, Bidwell 1970). We do not deny the importance of this variable. However, we wish to make several observations. First, in the extant literature on alliances, trust is treated as a residual term for the complex social-psychological processes necessary for social action to occur. Gulati (1995), for example, does not provide a direct measure of trust, but, instead, employs three proxy measures: the number of prior alliances by the same pair of firms, whether they were domestic or international, and the number of partners involved. Thus, trust in the alliance literature is similar to the use of "luck" in the stratification literature (Jencks et al. 1972). People achieving high status are "lucky"; people achieving low status are "unlucky". Similarly, successful alliances have trust; unsuccessful alliances do not have trust. And, typically, trust is attributed ex post. For trust to be a useful concept, its principle components must be identified, operationalized, and measured. There is an extensive social-psychological literature which examines trust (cf. Johnson George and Swap 1982, Kramer 1994, Shapiro et al. 1992, Sitkin and Roth 1993, Sitkin and Stickel 1996), which could be a useful foundation for research on the role of trust in strategic alliances. Second, trust is a social phenomenon. It may mean different things at different times to different alliance partners. National culture and institutional arrangements are important sources of trust (cf. Parkhe, 1993). Applying a single definition of trust, and then defining trusting relationships by this definition runs the risk of assuming away one of the most interesting phenomena in alliances. Finally, it is unlikely that actors suspend selfinterest any more in alliances than they do in other organization settings. It is more likely that in successful alliances organizational structures and processes have

been developed which align interests so that cooperation evolves naturally (cf. Axelrod 1984). Madhok and Tallman (1998), for example, provide a non-trust explanation for why firms knowingly might forego opportunities to take advantage of their partners. Thus, trust may be reasonably viewed as an emergent and epiphenomenal property of successful alliances. Whether or not trust has an independent effect on alliance performance is an important, but as yet, not fully researched question.

#### The Alliance Process

Trust may be a significant factor in successful strategic alliances. However, we argue that trust is most likely to evolve as the design and management of the alliance matches the exploitation and exploration intents of the parents.

PROPOSITION 5. Ceteris paribus, the greater the fit between the intent and morphology of an alliance, the greater the alliance members will experience trust.

Alliances vary in the outcomes they seek to produce for the parent. Exploitation alliances are intended for achieving specific performance objectives or revenue enhancement expectations of the parents. Similarly, exploration alliances are intended to facilitate learning or prospecting expectations of their parents.

PROPOSITION 6. Ceteris paribus, the greater the exploitation intent of an alliance, the greater the alliance will be organized to produce performance outcomes.

PROPOSITION 7. Ceteris paribus, the greater the exploration intent of an alliance, the greater the alliance will be organized to produce learning objectives.

#### **Selection Process**

Exploitation and exploration alliances vary on three related, although, nonexhaustive principle attributes. These attributes function as selection mechanisms, facilitating the success and failure of individual alliances. However, in the aggregate these attributes drive the evolution of the population of alliances. Consider the cases of four prototypical alliances forms: equity joint ventures and network alliances as examples of exploitation alliances, and licenses and franchises (from the point of view of the licensee or franchisee) and co-practicing R&D alliances as examples of exploration alliances.

Absorptive Capacity. The value of alliances in facilitating learning has been well documented (Balakrishnan and Koza 1993, 1995; Barley et al. 1992; Powell et al. 1996). However, the absorptive capacity, or the ability, of a firm to utilize outside knowledge has received less attention. Cohen and Levinthal (1989, 1990) define the absorptive capacity as a firm's ability "to recognize the value of new, external knowledge, assimilate it, and apply it to commercial ends" (1990, p. 128). Lane and Lubatkin

(1998) extend this definition to inter-firm relations and argue that absorptive capacity is a function of the absorptive capacity of the dyad.

In equity joint ventures absorption issues are relatively minor, and asymmetrical between the parents and the joint venture daughter entity. Typically, absorption is limited to facilitating strategic capability transfer from the parents to the joint venture entity. The intent of the joint venture is some specific performance objective—revenue enhancement, market share, and the like—for the parents, and as such the alliance is not expected to provide knowledge back to the parent. Thus, in exploitation alliances structured as equity joint ventures, absorptive capacity is least important. In network alliances like code sharing arrangements and referral networks, absorptive capacity is somewhat more important. Alignment of organizational processes and structures may be required to facilitate the intersection of the network participants, but the production, utilization, and transfer of new knowledge is not central to the intent of the alliance. Where absorptive capacity becomes more important, however, is in exploration alliances. In licensing and franchising (from the point of view of the licensee), absorptive capacity determines the rate and effectiveness through which technology, brands, and the like may be internalized. In this case learning is asymmetrical and of substantial importance to the licensee. However, in symmetrical learning alliances, like co-practicing and joint research and development ventures, absorptive capacity will be most important. The learning race (Hamel 1991) into which many learning alliances evolve may result from asymmetries in the absorptive capacities of the partners (Larsson et al. 1998, Khanna 1998, Kumar and Nti 1998).

PROPOSITION 8. Ceteris paribus, the more challenging the knowledge creation objectives of an alliance, the greater the independence between the absorptive capacity and learning of each partner.

Control. Alliances vary in their use of control mechanisms, and match the choice of output and behavior (process) controls to the exploitation and exploration intent of the alliance. In equity joint ventures, partners create a daughter company to conduct alliance business. The equity joint venture entity is free to enter into contracts, hire and fire new employees, and the like. New management may be installed to manage the legally and administratively separate entity. The parents' involvement is, commonly, limited to board oversight. Control of an equity joint venture emphasizes evaluation of the performance of the alliance, including market share, return on equity, profit and loss, and the like. Output control mechanisms predominate. In network alliances, output controls also

predominate as performance must be monitored and incented. However, the control of network alliances also encompasses controls of intermediate processes and some behavior control of organization routines. Typically, networks employ managers to monitor and regulate the interface of the network members. Control may require monitoring of transfer prices, insuring that network members do not bypass the network (see Ariño and de la Torre 1998), and that referral income is transferred expeditiously.

In exploration alliances, control mechanisms emphasize the knowledge creation and learning processes. In licenses or franchises (again, from the viewpoint of the licensee), behavior controls are employed as the learning process is typically a time-dependent activity, in which progress is monitored through such mechanisms as person-hours spent with the licensor, number of training sessions, milestones, and the like. In co-practicing or joint research and development ventures, control is most complex because organizational processes of revelation and innovation require mutual adaptation over time (Madhok and Tallman 1998). Symbiotic processes, emphasizing behavior controls, but also including output controls, designed to both monitor and drive the mutual learning process, are employed. Thus, while alliances may mix output and behavior controls, the primacy of control mechanism varies with the intent of the alliance.

PROPOSITION 9. Ceteris paribus, the greater the exploitation intent of an alliance, the greater the reliance on output controls.

PROPOSITION 10. Ceteris paribus, the greater the exploration intent of an alliance, the greater the reliance on behavior and process controls.

Identification. In equity joint ventures, it is common for an alliance to have an independent identity, which facilitates loyalty to the alliance, and creates a sense of shared fate among alliance members. Identification with the parent partners could be counterproductive, leading to subunit conflict within the alliance, causing alliance strategy and action to be suboptimal. This may help to explain why some international joint ventures report tension within the alliance. Members of the international joint venture daughter company may be identified with the respective parents, because of such reasons as expectations of future career mobility. Identification with the alliance, in this view, is an integrating mechanism within the alliance and a differentiating mechanism facilitating independence of the alliance from the partners (Lawrence and Lorsch 1967, Seabright et al. 1992). In network alliances, identification tends to remain with the respective

alliance partners. Identification with the alliance per se is weaker, and tends to facilitate loyalty to the alliance when alternative choices for business-to-business cooperation emerge. In code sharing arrangements among airlines, seamless travel for consumers is facilitated by network identification. However, while the autonomy and separate identity of each airline is maintained, some identification with the alliance is necessary as a means for moderating intra-alliance conflict. In exploration alliances, alliance members tend to maintain their identification to their parent organization. Identification with the opposite partner may hinder repatriation of learning and reduce returns to exploration and may also lead to alliances being extended beyond the time horizon of the learning expectations. However, identification with the alliance partner members can serve to moderate conflict between the partners and to facilitate independence and differentiation of each partner.

Proposition 11. Ceteris paribus, the greater the exploitation intent of an alliance, the greater the identification of alliance managers with the alliance organization.

PROPOSITION 12. Ceteris paribus, the greater the exploration intent of an alliance, the greater the identification of alliance managers with the parent organization.

# Conclusion and Introduction to the Special Issue

In this paper, we advanced the view that strategic partnerships-joint ventures and alliances-need to be understood and should be researched in the context of the adaptation choices of the firm over time. Strategic alliances, in this view, are embedded within the firm's history and strategic portfolio and co-evolve with the firm's strategy, the institutional, organizational, and competitive environment, and with management strategic intent for the alliance. Specifically, we have argued that alliance intent can be described as having either an exploitation or exploration objective (March 1994, 1995) and this intent may co-evolve with changes in strategy, environmental cognition, managerial preferences, etc. We further consider how the form and structure of an alliance characterized by its absorptive capacity, control practices, and identification symmetry may be isomorphic with its strategic intent, and, in the aggregate, drive the evolution of the population of alliances.

The papers in this collection serve to inform various dimensions of a co-evolutionary perspective. The collection serves to demonstrate the relevance and the challenge of undertaking research on alliances within a coevolutionary framework. Each paper in the collection informs some aspect of the evolution of alliance from the imprinting of initial relational network conditions (Sedaitis 1998) to network co-evolution and equifinal outcomes (Sydow and Windeler 1998). But the absence of co-evolutionary modeling and empirical studies is indicative of new directions that research on alliances might take. Finally, this collection of papers is noteworthy in the absence of "trust" as the causal or explanatory variable for the duration, success, or failure of alliances. It is clear that research on trust needs to advance beyond a catch-all residual in the unexplained random error. For example, what dimensions of a multi-dimensional construct of trust emerge as a function of prior interaction between partners or more importantly during the evolution of an alliance (Larsson et al. 1998)? What is the role of built up trust in the structuring and functioning of subsequent alliances between the same partners or among members of a network? What is the similarity or dissimilarity in the composition of trust between exploitation and exploration alliances? Our intent in surfacing trust as the magic ingredient represents a call for research on alliances to proceed without recourse to trust as a ubiquitous variable and, at the same time, it is a call for systemic research on the role of trust in alliances-its multidimensional operationalization, antecedents, explanatory, causal, or moderating functionality and its evolution.

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