

INTERFIRM DIVERSITY, ORGANIZATIONAL LEARNING, AND LONGEVITY IN GLOBAL STRATEGIC ALLIANCES

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Abstract. Organizational theorists have correctly argued that the emergence and maintenance of robust cooperation between global strategic alliance partners is related to the diversity in the partners' characteristics. Yet previous research has failed to systematically delineate the important dimensions of interfirm diversity and integrate the dimensions into a unified framework of analysis. This paper develops a multilevel typology of interfirm diversity and focuses on organizational learning and adaptation as critical processes that dynamically moderate diversity's impact on alliance longevity and effectiveness.

On March 6, 1990, West Germany's Daimler Benz (\$48 billion in sales) and Japan's Mitsubishi Group (\$200 billion in sales) revealed that they had held 'a secret meeting in Singapore to work out a plan for intensive cooperation among their auto, aerospace, electronics, and other lines of business. However, combining operations of the two companies seems remote: Daimler's orderly German corporate structure doesn't mesh well with Mitsubishi's leaderless group management approach' [*Business Week* 1990b].

This example illustrates an important paradox in international business today. On one hand, global strategic alliances (GSAs) are being used with increasing frequency in order to, *inter alia*, keep abreast of rapidly changing technologies, gain access to specific foreign markets and distribution channels, create new products, and ease problems of worldwide excess productive capacity. Indeed, GSAs are becoming an essential feature of companies' overall organizational structure, and competitive advantage increasingly depends not only on a company's internal capabilities, but also on the types of its alliances and

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the scope of its relationships with other companies. On the other hand, GSAs bring together partners from different national origins, with often sharp differences in the collaborating firms' cultural and political bases. As in the above illustration, there may also exist considerable diversity in *firm-specific* characteristics that may be tied to each firm's national heritage. Interfirm diversity can severely impede the ability of companies to work jointly and effectively [Adler and Graham 1989; Harrigan 1988; Perlmutter and Heenan 1986], since many GSA partners—relative newcomers to voluntary cooperative relationships with foreign firms—have yet to acquire the necessary skills to cope with their differences. Not surprisingly, the rapid growth of GSAs is accompanied by high failure rates [Hergert and Morris 1988; Porter 1986].¹

Before probing the nexus between diversity and alliance performance, however, it is fruitful to begin with the recognition that (1) in GSAs, significant interfirm diversity is to be expected, and (2) this diversity can be analytically separated into two types. Type I includes the familiar interfirm differences (interdependencies) that GSAs are specifically created to exploit. These differences form the underlying strategic motivations for entering into alliances; an inventory of such motivations is provided, for instance, by Contractor and Lorange [1988: 10]. Thus, Type I diversity deals with the reciprocal strengths and complementary resources furnished by the alliance partners, differences that actually facilitate the formulation, development, and collaborative effectiveness of GSAs.

Type II diversity, the major focus of this paper, refers to the differences in partner characteristics that often negatively affect the longevity and effective functioning of GSAs. Over the life of the partnership, the dynamics of Types I and II are very different, since the two types are differentially impacted by the processes of organizational learning and adaptation. In the case of Type I, learning through the GSA may enable one partner to acquire the skills and technologies it lacked at the time of alliance formation, and eventually rewrite the partnership terms or even discard the other partner. Thus, the GSA becomes a race to learn, with the company that learns fastest dominating the relationship and becoming, through cooperation, a more formidable competitor. Conversely, organizational learning and adaptation can progressively mitigate the impact of Type II differences, thereby promoting longevity and effectiveness. To summarize, a minimum level of Type I differences are essential to the formation and maintenance (*raison d'être*) of an alliance, and their erosion destabilizes the partnership. Type II differences, though inevitably present at the initiation of an alliance, may be overcome by iterative cycles of learning that strengthen the partnership.

A large number of previous studies have examined how Type II interfirm differences can play a major role in frustrating the joint efforts of GSA partners. For example, Adler and Graham [1989] found that cross-cultural negotiations are more difficult than intra-cultural negotiations. Several other

studies have also established that negotiations between businesspeople of different cultures often fail because of problems related to cross-cultural differences [Adler 1986; Black 1987; Graham 1985; Tung 1984]. Harrigan [1988] studied the influence of sponsoring-firm asymmetries in terms of strategic directions (horizontal, vertical, and relatedness linkages with the venture) on performance. Hall [1984] analyzed the effects of differing management procedures on alliances. Still other researchers have examined the influence of variations in corporate culture [Killing 1982] and national setting [Turner 1987] on successful collaboration. This brief overview, while not exhaustive, conveys the basic directions in which research to date has progressed.

Unfortunately, the usefulness of these important studies in an overall assessment of international interfirm interactions is limited, since they examine the impact of selected aspects of interfirm diversity on cooperative ventures in a piecemeal fashion. The academic literature thus remains fragmented at different levels of analysis, with no overarching theme cohesively pulling together the various dimensions of interfirm diversity in systematic theory-building. Therefore, the main contributions of this paper will be to extend current theory (1) by developing and justifying a typology of the major dimensions of interfirm diversity in the context of GSAs; and, (2) by examining diversity's impact on alliance outcomes through a dynamic model rooted in organizational learning theory. For this purpose, the following questions will be addressed: What are the theoretical dimensions of diversity between GSA partners? In what ways and under what circumstances does each dimension, individually or collectively, translate into reduced collaborative effectiveness? To what extent can deliberate learning/adaptation actions by firms deter expensive alliance failures and promote longevity?

A PREFATORY NOTE ON TERMINOLOGY

It is important at the outset to define terminology. Interfirm cooperative relationships have previously been defined by Borys and Jemison [1989], Schermerhorn [1975], Nielsen [1988], and Oliver [1990]. However, the conceptual domain of GSAs must include the additional properties of being international in scope, mixed-motive (competitive + cooperative) in nature, and of strategic significance to each partner, i.e., tied to the firms' current and anticipated core businesses, markets, and technologies (commonly referred to as the corporate mission). Thus, GSAs are the relatively enduring interfirm cooperative arrangements, involving cross-border flows and linkages that utilize resources and/or governance structures from autonomous organizations headquartered in two or more countries, for the joint accomplishment of individual goals linked to the corporate mission of each sponsoring firm. This definition delineates GSAs from single-transaction market relationships, as well as from unrelated diversification moves, while accommodating the variety of strategic motives and organizational forms that accompany

global partnerships. For example, GSAs can be used as transitional modes of organizational structure [Gomes-Casseres 1989] in response to current challenges as firms grope to find more permanent structures including, sometimes, whole ownership after the GSA has achieved its purpose. Often, however, longevity is an important yardstick of performance measurement by each parent company [Harrigan 1985; Lewis 1990].

It must be clearly noted that longevity is an imperfect proxy for "alliance success." Longevity can be associated, for instance, with the presence of high exit barriers. And in some alliances, success can also be operationalized in terms of other measures such as profitability, market share, and synergistic contribution toward parent companies' competitiveness (cf. Venkatraman and Ramanujam [1986]). Yet, achievement of these latter objectives can be thwarted by premature, unintended dissolution of the GSA. Furthermore, objective performance measures (e.g., GSA survival and duration) are significantly and positively correlated with parent firms' reported (that is, subjective) satisfaction with GSA performance and with perceptions of the extent to which a GSA performed relative to its initial objectives [Geringer and Hebert 1991], so that for many research purposes the use of longevity as a surrogate for a favorable GSA outcome is probably not too restrictive. With the above limitations acknowledged, we focus mainly on the subset of GSAs where longevity (not planned termination) is sought by each partner, but is threatened by problems stemming from Type II interfirm diversity; however, inasmuch as planned termination represents an important potential alliance outcome involving the deliberate erosion of Type I diversity, it is treated as a special case of a more general diversity/longevity dynamic model later in the paper.

Interfirm diversity refers to the comparative interorganizational differences on certain attributes or dimensions [Molnar and Rogers 1979] that continually shape the pattern of interaction between them [Van de Ven 1976]. In sum, this paper examines the interorganizational interface at which inherent interfirm diversity between GSA partners often makes effective management of pooled resource contributions problematic.

THE PROBLEM OF DIVERSITY

Just as modern business organizations are complex *social* entities (and therefore studied in the ambit of the social sciences), GSAs represent an emerging *social institution*. As researchers in sociology, marketing, and interorganizational relations theory have long noted, dissimilarities between social actors can render effective pairwise interactions difficult, and vice versa.

Evans' [1963] "similarity hypothesis," for example, maintains that "the more similar the parties in a dyad are, the more likely a favorable outcome." The proposed mechanism is: Similarity leads to attraction (sharing of common needs and goals), which causes attitudes to become positive, thus leading

to favorable outcomes [McGuire 1968]. Likewise, Lazarsfeld and Merton [1954] identify the tendency for similar values and statuses to serve as bases for social relationships, as a basic mechanism of social interaction. These same principles may explain the characteristics of linkages between organizations [Paulson 1976]. And Whetten [1981:17] argues that “potential partners are screened to reduce the costs of coordination that increase as a function of differences between the collaborating organizations.”

Although the above literatures primarily focus on problems of surmounting communication difficulties and establishing a common set of working assumptions, a broader set of dimensions is crucial in understanding GSA interactions, given the nature of GSAs as defined above. These dimensions are developed next.

DIMENSIONS OF INTERFIRM DIVERSITY IN GSAs

The major dimensions of Type II interfirm diversity in global strategic alliances are described below; Table 1 summarizes this discussion.² In a departure from previous studies that have focused on limited aspects of interfirm diversity, Table 1 spans multiple, critical levels of analysis that are indispensable in providing a fuller understanding of the factors that may lead to friction and eventual collapse of the GSA. In addition, the following discussion also includes an analysis of how each diversity dimension can influence ongoing reciprocal *learning* within the partnership, an important consideration in the study of alliance longevity and effectiveness. Table 1 distinguishes between levels of conceptualization and levels of phenomena. Levels of phenomena refer to dimensions of interfirm diversity that can, with arguable intersubjectivity, be observed and measured. (Hofstede [1983], for example, operationalized culture in four dimensions.) Conceptual levels deal with ideas and theories about phenomena. Thus, the social behavior of interfacing managers from each GSA partner firm is an output of the managers' respective societal (meta), national (macro), corporate-level (meso), and operating-level (micro) influences. While the actual behaviors can be observed, appreciating the often significant differences between them requires an abstraction to the underlying conceptual level of analysis. Finally, it is noted that the dimensions in the typology are often interrelated, and therefore cannot be treated as mutually exclusive.

Societal Culture

The influence of a society's culture permeates all aspects of life within the society, including the norms, values, and behaviors of managers in its national companies. The cross-cultural interactions found in GSAs bring together people who may have different patterns of behaving and believing, and different cognitive blueprints for interpreting the world [Kluckhohn and Kroeberg 1952; Black and Mendenhall 1990]. Indeed, Maruyama [1984]

TABLE 1
Interfirm Diversity in GSAs:
A Summary

Conceptual Level	Phenomenological Level	Dimension of Diversity	Sources of Tension	Coping Mechanisms	Proposition
Meta	Supranational	Societal culture	Differences in perception and interpretation of phenomena, analytical processes	Promote formal training programs, informal contact, behavior transparency	1a, 1b
Macro	National	National context	Differences in home government policies, national industry structure and institutions	Emphasize "rational" (i.e., technological and economic) factors	2
Meso	Top management	Corporate culture	Differences in ideologies and values guiding companies	Encourage organizational learning to facilitate "intermediate" corporate culture	3
Meso	Policy group	Strategic direction	Differences in strategic interests of partners from dynamic external and internal environments	Devise flexible partnership structure	4
Micro	Functional management	Management practices and organization	Differences in management styles, organizational structures of parent firms	Set up unitary management processes and structures	5

argues that cultural differences are at the epistemologic level, that is, in the very structure of perceiving, thinking, and reasoning.

Excellent examples of the deep impact of culture on GSA management can be found in the partners' approaches to problem solving and conflict resolution. In some cultures, problems are to be actively solved; managers must take deliberate actions to influence their environment and affect the course of the future. This is the basis for strategic planning. In contrast, in other cultures, life is seen as a series of preordained situations that are to be fatalistically accepted [Moran and Harris 1982]. Similarly, GSA partners must routinely deal with conflicts in such areas as technology development, production and sourcing, market strategy and implementation, and so on [Lynch 1989]. In some cultures, conflict is viewed as a healthy, natural, and inevitable part of relationships and organizations. In fact, programmed or structured conflict (e.g., the devil's advocate and dialectical inquiry methods) has been suggested as a way to enhance the effectiveness of strategic decision-making (cf. Cosier and Dalton [1990]). But in other cultures, vigorous conflict and open confrontation are deemed distasteful. Embarrassment and loss of face to either party is sought to be avoided at all costs by talking indirectly and ambiguously about areas of difference until common ground can be found, by the use of mediators, and other techniques.

Effective handling of such cultural differences must begin with developing an understanding of the other's modes of thinking and behaving. For example, reflecting on the failed AT&T-Olivetti alliance, AT&T group executive Robert Kavner regretted, "I don't think that we or Olivetti spent enough time understanding behavior patterns" [Wysocki 1990]. Avoidance of such preventable mistakes may become increasingly essential, and investments in sophisticated programs to promote intercultural awareness may become increasingly cost-effective, given the accelerating trend of GSA formation and the often enormous losses stemming from failed GSAs.³ Ethnocentric arrogance (or cultural naivete) and GSAs simply do not mix well.

Nonetheless, Black and Mendenhall [1990] report from their survey of twenty-nine empirical studies that the use of cross-cultural training (CCT) in U.S. multinationals is very limited. Essentially, American top managers believe that a good manager in New York or Los Angeles will be effective in Hong Kong or Tokyo, and that a candidate's domestic track record can serve as the primary criterion for overseas assignment selection. Such a culturally insensitive approach is particularly unfortunate in light of CCT's proven success in terms of enhancing each of its three indicators of effectiveness: cross-cultural skill development, adjustment, and performance [Black and Mendenhall 1990: 115-20]. Clearly, CCT can be a powerful catalyst not only in enhancing intrafirm foreign operations, but also toward overcoming cultural diversity between GSA partners and facilitating ongoing mutual learning that promotes alliance longevity. More formally:

Proposition 1a: Societal culture differences will be negatively related to GSA longevity. However, this relationship will be moderated by formal training programs that enhance intercultural understanding.

Furthermore, bridging the culture gap between GSA partners may be facilitated by effective communication at all interfacing levels. This suggests the need to improve behavior transparency at each level, including effective recognition, verification, and signaling systems between the partners.

Proposition 1b: The relationship between differences in societal culture and longevity of the alliance will be further moderated by structured mechanisms that improve behavior transparency.

National Context

A company's national context primarily includes surrounding industry structure and institutions, and government laws and regulations. The great diversity that exists in the national contexts of global companies can hamper effective collaboration. For instance, disparities in the national context differentially impact global companies' ability to enter and operate GSAs. Of central relevance to this paper are national attitudes about simultaneous competition and cooperation. As noted below, however, national differences notwithstanding, important common patterns may be emerging internationally.

Japanese Context. In Japan, companies have a long history of cooperating in some areas while competing in others, a practice that can be traced primarily to two factors: direction from the Ministry of International Trade and Industry (MITI), and *keiretsu*, or large industrial groups of firms representing diverse industries and skills. However, driven by recent trends in the competitive and political environments, Japanese companies are increasingly entering into GSAs, in the process forsaking their traditionally close *keiretsu* ties. In the context of this paper, the significant implications can be summed up as follows: (1) traditional Japanese industrial associations are in a state of flux; (2) a gradually diminishing role of the *keiretsu* in the future and a greater focus on the individual company; and (3) greater opportunities to enter into GSAs with Japanese firms.⁴

U.S. Context. In the U.S., the federal government has traditionally viewed cooperation between companies with suspicion, particularly if they competed in the same markets. The environment of strict antitrust regulations spawned companies with little experience in successfully managing interfirm cooperation. More recently, however, in an attempt to help correct structural problems in mature industries and to promote international competitiveness in high-tech industries, the U.S. government has adopted more favorable attitudes toward interfirm cooperation, as reflected in its patent, procurement, and antitrust policies. For example, the National Cooperative Research Act of 1984 holds that cooperative ventures between companies are permissible when such arrangements add to the companies' overall efficiency and benefit society at large.

Though intended primarily to benefit U.S. firms, these changes in American national attitudes and policies regarding interfirm cooperation may also have spillover benefits for non-U.S. firms, in that the latter may have greater opportunities to enter into GSAs with U.S. companies.⁵ Recent developments in the U.S. may also mean that the ability of U.S. companies to spot, structure, and manage interfirm cooperative relationships will improve over time.

European Context. In Europe, interfirm cooperation historically has been hampered by fragmented European markets, cultural and linguistic differences, diverse equipment standards and business regulations, and nationalist and protectionist government policies. Only in the past several years has the impending threat of a European technology gap against U.S. and Japanese competition compelled European governments to promote the integration of European firms, such as the European Strategic Programme in Information Technologies (ESPRIT). However, such efforts to build a more dynamic, technologically independent Europe do not diminish the fact that Europe is too small to support the risky, multibillion dollar commitments required in many new industries.⁶ As Ohmae [1985] argues, companies also need to establish a strong presence in U.S. and Japanese markets to survive.

Three major points emerge from the preceding discussion. First, firms from the Triad regions are heavily influenced by their unique national contexts. Second, cooperating in GSAs may be rendered difficult by the significant differences in national contexts. And third, while these differences are likely to persist, as seen above, they may be progressively overwhelmed by powerful technological and economic factors.

Proposition 2: Differences in partner firms' national contexts and GSA longevity will be negatively related. The effects of these differences on longevity will be moderated by the technological and economic imperatives facing global firms.

Before concluding this discussion of national contexts, it is essential to broach one question that may have a significant bearing on global firms' future partnering abilities and success patterns: Will experience in managing linkages within a firms' home base provide an advantage in building linkages with foreign organizations (cf. Westney [1988])? As just seen, Japanese firms have greater domestic experience in interfirm cooperation than U.S. and European firms, though the latter are also accumulating more local experience. But is this experience transferable to GSAs, where partners typically have more widely varying characteristics? Insufficient evidence currently exists to answer this question; however, systematic research may yield important insights into the differential organizational learning patterns of companies weaned in different domestic contexts.

Corporate Culture

Corporate culture includes those ideologies and values that characterize particular organizations [Beyer 1981; Peters and Waterman 1982]. The notion

that differences in corporate culture matter, familiar to researchers of international mergers and acquisitions [BenDaniel and Rosenbloom 1990], is also crucially important in GSAs. Such firm-specific differences are often interwoven with the fabric of the partners' societal cultures and national contexts, as reflected in the phrases: European family capitalism, American managerial capitalism, and Japanese group capitalism.

Harrigan [1988] argues that corporate culture homogeneity among partners is even more important to GSA success than symmetry in their national origins. (She maintains, for example, that GM's values may be more similar to those of its GSA partner, Toyota, than to those of Ford.) However, studies have shown that a corporation's overall organizational culture is not able fully to homogenize values of employees originating in national cultures [Laurent 1983], indicating the transcending importance of meta- and macro-level variables relative to corporate culture. Although the relative importance of these dimensions must be determined empirically, it is clear that each dimension can be instrumental in erecting significant barriers to effective cooperation.

For example, strikingly different temporal orientations often exist in U.S. versus Japanese corporations. The former, pressed by investors and analysts, may tend to focus on quarterly earnings reports, while the latter focus on establishing their brand names and international marketing channels, a *sine qua non* of higher order advantage leading to greater world market shares over a period of several years. Thus, Japanese partners may give GSAs more time to take root, whereas their U.S. counterparts may be more impatient. Significant differences may also exist on the issues of power and control. As Perlmutter and Heenan [1986] assert, Americans have historically harbored the belief that power, not parity, should govern collaborative ventures. In contrast, the Europeans and Japanese often consider partners as equals, subscribe to management by consensus, and rely on lengthy discussion to secure stronger commitment to shared enterprises.

For effective meshing of such diverse corporate cultures, each GSA partner must make the effort to learn the ideologies and values of its counterpart. For managers socialized into their own corporate cultures [Terpstra and David 1990], openness to very different corporate orientations may be difficult. Yet, new forms of business often necessitate the acquisition of new core skills. Among some U.S. firms, for instance, this may mean a reduced emphasis on equity control and an acceptance of slower payback periods on GSA investments in the interest of future benefits over longer time horizons. Among Japanese firms, this may mean a keener recognition of the demands on U.S. managers to show quicker results, with possible modifications in the goals of the GSA and the means used to achieve those goals. Turner [1987] found some support for the emergence of "intermediate" corporate cultures—those characterized by priorities and values between those of the sponsoring firms—as GSA partners made mutual adjustments. However, he

did not relate his findings to alliance longevity, and his study was limited to U.K.-Japanese alliances. More empirical work is needed to test the following proposition:

Proposition 3: Corporate culture differences will be negatively related to alliance longevity. This relationship will be moderated by the development of an intermediate corporate culture to guide the GSA.

Finally, corporate culture has a circular relationship with learning in that it creates and reinforces learning and is created by learning; as such, it influences ongoing learning and adaptation within and between GSA partners. Miles and Snow [1978] demonstrate, for example, that a firm's posture (defender, prospector, etc.) is tied closely to its culture, and that shared norms and beliefs help shape strategy and the direction of organizational change. These broad norms and belief systems clearly influence the behavioral and cognitive development that each GSA partner can undergo; in turn, learning and adaptation in organizations often involves a restructuring of these norms and belief systems [Argyris and Schon 1978].

Strategic Directions

As Harrigan [1985] observes, "asymmetries in the speed with which parent firms want to exploit an opportunity, the direction in which they want to move, or in other strategic matters are destabilizing to GSAs" (p.14). Partner screening at the alliance planning stage tests for strategic compatibility by analyzing a potential partner's motivation and ability to live up to its commitments, by assessing whether there may exist probable areas of conflict due to overlapping interests in present markets or future geographic and product market expansion plans. Yet, a revised analysis may become necessary as the partners' evolving internal capabilities, strategic choices, and market developments pull them in separate directions, diminishing the strategic fit of a once-perfect match. Strategic divergence is particularly likely in environments characterized by high volatility, rapid advances in technology, and a blurring and dissolution of traditional boundaries between industries.⁷

One key to managing diverging partner interests may be to build flexibility into the partnership structure, which allows companies to adjust to changes in their internal and external environments. Flexible structures may be attained, for example, by initiating alliances on a small scale with specific, short-term agreements (such as cross-licensing or second sourcing), instead of huge deals that can pose "lock-in" problems with shifting strategic priorities. In a gradually developed relationship, areas of cooperation can be expanded to a broader base to the extent that continuing strategic fit exists. Alternatively, flexibility can be attained by entering into a general (or blanket) cooperative agreement which is activated on an as-needed basis. For example, RCA and Sharp have a long-established cooperative agreement within which they have worked on a series of specific ventures over the years,

including a recent \$200 million joint venture to manufacture complementary metal oxide semiconductor (CMOS) integrated circuits.

Proposition 4: Divergence in the parents' strategic directions will be negatively related to GSA longevity. The relationship between divergence and longevity will be moderated by structural flexibility that permits adaptation to shifting environments.

Strategy can affect organizational learning, and through learning alliance longevity, in various ways. Since strategy determines the goals and objectives and the breadth of actions available to a firm, it influences learning by providing a boundary to decisionmaking and a context for the perception and interpretation of the environment [Daft and Weick 1984]. In addition, as Miller and Friesen [1980] show, a firm's strategic direction creates a momentum for organizational learning, a momentum that is pervasive and highly resistant to small adjustments.

Management Practices and Organization

The wide interfirm diversity in management styles, organizational structures, and other operational-level variables that exists across firms from different parts of the world can largely be traced to diversity along the first four dimensions discussed above. In turn, these differences, illustrated by the Daimler Benz versus Mitsubishi contrast at the outset of this paper, can heighten operating difficulties and trigger premature dissolution of the GSA. An important issue in this regard is the problem of effectively combining the diverse systems of *autonomous* international firms, each accustomed to operating in a certain manner.

Many researchers in international cooperative strategies have tended, perhaps unwittingly, to focus solely on this final dimension of interfirm diversity (e.g., Dobkin [1988]; Hall [1984]; Pucik [1988]). Among the major differences that have been noted are the style of management (participatory or authoritarian), delegation of responsibility (high or low), decisionmaking (centralized or decentralized), and reliance on formal planning and control systems (high or low). To prevent problems of unclear lines of authority, poor communication, and slow decisionmaking, GSAs may need to set up *unitary* management processes and structures, where one decision point has the authority and independence to commit both partners. Implementation of this recommendation is difficult in cases where both partners are evenly matched in terms of company size and resource contributions to the GSA (cf. Killing [1982]).⁸ Yet, agreement on the streamlining of tough operational-level issues must be reached *prior* to commencement of the GSA.

Proposition 5: Diversity in the sponsoring firms' operating characteristics will be negatively related to longevity of the GSA. This relationship will be moderated by the establishment of unitary management processes and structures.

Though structure is often seen as an outcome of organizational learning, it plays a crucial role in determining the learning process itself [Fiol and Lyles 1985]. This observation can be important in the context of GSAs, where one firm's centralized, mechanistic structure that tends to reinforce past behaviors can collide with another firm's organic, decentralized structure that tends to allow shifts of beliefs and actions. More broadly, different management practices and organizational structures can enhance or retard learning, depending upon their degree of formalization, complexity, and diffusion of decision influence.

Theory and practice are linked in Table 2, which illustrates how significant Type II differences between GSA partners can impact the entire spectrum of alliance activities. For the sake of brevity, Table 2 outlines only a select number of characteristics that are derived from the typological dimensions of Table 1. Yet, a review of Table 2 clearly indicates that: (1) the extent of interfirm diversity in global strategic alliances may be high; and (2) as stressed earlier, the various dimensions of diversity are not distinct and unrelated, but rather share a common core that touches GSAs.

Furthermore, Type I and Type II diversity can undergo distinctly different patterns over time, generating different alliance outcomes. The dynamic model of longevity presented in the next section suggests that a pivotal factor in the interfirm diversity/alliance outcome link is organizational learning and adaptation to diversity by the GSA partners.

LONGEVITY IN GSAs: A LEARNING-BASED DYNAMIC MODEL

Organizational theorists [Lyles 1988; Fiol and Lyles 1985] define learning as "the development of insights, knowledge, and associations between past actions, the effectiveness of those actions, and future actions," and adaptation as "the ability to make incremental adjustments." Learning can be minor, moderate, or major. In stimulus-response terms, in minor learning, an organization's worldview (tied to its national and corporate identity) remains the same, and choice of responses occurs from the existing behavioral repertoire. In moderate learning, partial modification of the interpretative system and/or development of new responses is involved. And in major learning, substantial and irreversible restructuring of one or both of the stimulus and response systems takes place [Hedberg 1981]. This conceptualization parallels Argyris and Schon's [1978] single-loop (or low-level) learning that serves merely to adjust the parameters in a fixed structure to varying demands, versus double-loop (or high-level) learning that changes norms, values, and worldviews, and redefines the rules for low-level learning.

Using a contingency theory perspective, we may expect the extent of learning (minor, moderate, or major) necessary for a given level of GSA longevity to be commensurate with the extent of interfirm diversity. Highly similar

TABLE 2
Selected International Differences
and Impacted Areas of GSA Management

Characteristic	Value	Country Examples	Description	Impacted Areas of GSA Management
Ownership of Assets	Private Public	"Free World" Countries, ¹ East Bloc Countries, ¹ Communist China ²	Factors of production predominantly privately owned. Factors of production predominantly publicly owned.	Sourcing strategy, pricing flexibility, quality control, technology transfer, profit repatriation
Coordination of National Economic Activity	Market Command	"Free World" Countries East Bloc Countries, ¹ Communist China ²	Consumer sovereignty, freedom of enterprise, equilibration of supply and demand of resources and products by market forces. Centralized planning of production quotas, prices, and distribution. Pyramidal hierarchy of control.	Sourcing strategy, pricing flexibility, quality control, technology transfer, profit repatriation
Perceived Ability to Influence Future	Self-determination Fatalistic	USA Islamic Countries	Individuals and firms can take actions to influence their environment and improve prospects for the future. People must adjust to their environment. Life follows a preordained course.	Long-range planning, production scheduling
Time Orientation	Abstract, Linear Concrete, Circular	USA Argentina, Brazil	The clock serves to harmonize activities of group members. Punctuality is important. Time is money. Activities are timed by recurring rhythmic natural events such as day and night, seasons of the year.	Productivity, joint project deadlines
Communication	Low Context High Context	USA Saudi Arabia	Most information is contained in explicit codes, such as spoken or written words. Articulation ("spelling it out") is important. Sending and receiving messages is highly contingent upon the physical context and non-verbal communication.	Initial negotiations, ongoing communications

TABLE 2
(continued)

Information Evaluation	Pragmatic Idealistic	U.K. Soviet Union	Emphasis on practical applications of specific details in light of particular goals. Utilization of abstract frameworks for structuring thinking processes which are molded by a dominant ideology.	Structure of the GSA management
Conflict Management Style	Confrontation Harmony	USA Japan	Openness and directness in work relations is promoted. Conflict resolution is preferred over conflict suppression. Wa (maintaining harmony in Japanese) is important. Saving face is preferred over direct confrontation and disharmony.	Conflict management
Decisionmaking ³	Autocratic Group	South Korea Japan	Decisions fully formulated before being announced, either individually or with input from experts. Information is shared with subordinates, whose input is sought before decisions are made.	Negotiation and bargaining
Leadership Style	Task Oriented People Oriented	West Germany Japan	Enforcement of rules and procedures. Focus on technological aspects. Greater attention to human factors, including morale and motivation. Utilization of group dynamics to reach organizational goals.	Decisionmaking, leadership
Problem Solving	Scientific Traditional	Most Occidental Countries Most Oriental Countries	Logic and scientific method are the means of solving new problems. Accurate data are more important than intuition. Solutions to new problems are derived by sifting through past experiences.	Decisionmaking process

TABLE 2
(continued)

Employment Duration	Variable	USA	Employees can quit to accept better jobs. Employers can terminate low-performing employees.	Human resources management
	Lifetime	Japan	Employees are a "family" which cannot be abandoned. Termination causes enormous loss of prestige and must be avoided.	
Power Distance ⁴	Low	Austria	Relative equality of superiors and subordinates. Greater participation of subordinates in decisionmaking.	GSA structure and communication
	High	Mexico	Distinct hierarchical layers with formal and restricted interactions. Emphasis on ranks. Top-down communication.	
Uncertainty Avoidance ⁴	Low	Denmark	Uncertainties are a normal part of life. Business risks are judged against potential rewards. Flexibility and innovation are emphasized.	Choice of projects tackled, information and control systems
	High	South Korea	Business risks lead to high anxiety, leading to mechanisms that offer a hedge against uncertainty: written rules and procedures, plans, complex information systems.	
Individualism ⁴	Individualistic	Canada	Reliance on individual initiative, self-assertion, and personal achievement and responsibility.	Accountability, performance evaluation systems
	Collectivistic	Singapore	Emphasis on belonging to groups and organizations, acceptance of collective decisions, values, and duties.	

TABLE 2
(continued)

Masculinity ⁴	Masculine	Italy	Machismo attitudes. Valued ideals are wealth, power, decisiveness, growth, bigness, and profits. Compensation in monetary rewards, status, recognition, and promotion is expected in proportion to achievement of ideals.	Organizational design, reward systems
	Feminine	Netherlands	Nurturing attitudes. Care of people, interpersonal relations, quality of life, service, and social welfare are valued ideals. Members seek cooperative work climate, security, and overall job satisfaction.	

¹The situation in the East Bloc countries is in a state of flux, with political reform toward democratization and economic reform embracing free markets and private property. However, Western companies rushing to enter into cooperative ventures with these countries are likely to encounter considerable inertia from past practices (see *Business Week* [1990a]); as such, managers must remain aware of fundamental differences and their implications for alliances.

²The international business environment in Communist China has deteriorated considerably following the Tiananmen Square Massacre, forcing corporate strategists to reassess their commitments in the PRC and Hong Kong (see *New York Times* [1990]).

³From Kolde [1985].

⁴From Hofstede [1983].

partners would require relatively little mutual adjustment for sustained collaborative effectiveness. Highly dissimilar partners would need to expend greater (double-loop) efforts and resources toward learning, absent which longevity may be expected to suffer.

Moreover, Type I and Type II diversity may shift dynamically along different phases of alliance development. Regarding the former, Porter [1986] observes that:

Coalitions involving access to knowledge or ability are the most likely to dissolve as the party gaining access acquires its own internal skills through the coalition. Coalitions designed to gain the benefits of scale or learning in performing an activity have a more enduring purpose. If they dissolve, they will tend to dissolve into merger or into an arm's-length transaction. The stability of risk-reducing coalitions depends on the sources of risk they seek to control. Coalitions hedging against the risk of a single exogenous event will tend to dissolve, while coalitions involving an ongoing risk (e.g., exploration risk for oil) will be more durable. [p. 329]

Thus, Type I strategic motivations and organizational learning interact to shape alliance stability and outcome. Similarly, the impact of Type II diversity on alliances can be dynamically altered by organizational learning that itself is an outcome of certain types of deliberate management investments during different phases of alliance development. The pattern of these investments may be a function of the configuration of Type II diversity, i.e., the *degree* and *type* of interfirm differences. If the relatively stable dimensions of societal culture, national context, or corporate culture constitute salient interfirm differences, then organizational learning becomes a threshold condition for alliance success, and management attention must be targeted at the relevant dimensions during the earliest phases of alliance development (such as partner screening and pre-contractual negotiations). In cases where significant diversity arises from the relatively more volatile dimensions of strategic direction and management practices and organization, later adaptive learning under new partner circumstances is a necessary precondition for GSA longevity.

It is evident, then, that the magnitude and timing of Type I and Type II diversity shifts contribute to different alliance outcomes. Specifically, when Type I diversity (mutual interdependency) is larger than Type II diversity, *ceteris paribus*, longevity will be high. In this situation, additional alliances between the GSA partners become more likely, and ongoing organizational learning in repeated successful collaborative experiences may further reduce Type II diversity, reinforcing the alliancing process.

But when Type II diversity is larger than Type I diversity, *ceteris paribus*, longevity will be low. This situation can arise in one of two ways: shrinkage of Type I diversity, or escalation of Type II diversity. The first way represents the stepping-stone strategy (planned termination), in which one partner rapidly internalizes the skills and technologies of the other; after the process is

completed, that is, when Type I diversity vanishes, little incentive remains for the internalizer firm to remain in the partnership. The second way represents untimely dissolution of the GSA, as a lack of learning and adaptation exacerbates problems of social interaction among managers from the alliance partners. Such unplanned termination is more likely when the partner firms are working together for the first time and have yet to establish a history of prior successful collaborative experiences; differ sharply on one or more of the Type II dimensions; and the efforts and resources committed to learning and adaptation are not commensurate with this diversity.

Thus, the relationship between diversity and longevity is dynamic, and is strongly influenced by the amount of learning and adaptation occurring between the GSA partners. The greater the amount of learning, the greater the negative impact of Type I diversity on longevity, but the smaller the negative impact of Type II diversity on longevity.

IMPLICATIONS AND CONCLUSIONS

The process model of longevity proposed in this paper, drawing upon learning-based management of differences in the properties of the partners, offers rich and exciting opportunities for improved research and practice in GSAs. Only a few of these are touched upon below.

First, there is a need for inductive theory-building (following covariance structure modeling and empirical research) on the relative importance, patterns of interconnectedness, and tension-inducing capacity of the typological dimensions of diversity in a variety of partnering situations, especially in longitudinal studies focusing on the phases of alliance development. Such research will be timely and useful for developing *ex post* alliance performance generalizations as well as *ex ante* partner selection criteria. Although preliminary work has been done in both of these areas, as noted above, the research has been fragmented and theory-building in GSAs has been slow, reflecting the lack of systematic conceptualization of a typology of interfirm diversity, much less a dynamic link between diversity and longevity.

The propositions and model developed here draw attention to the crucial aspect of *learning* among interfacing managers of GSA partners; important corollary implications flow from this emphasis. For example, faced with rapid internationalization and even faster growth of interfirm cooperation, how best can global firms quickly enlarge the severely limited cadre of culturally sophisticated, internationally experienced managers (cf. Strom [1990]; Hagerty [1991])? Since coping with interfirm diversity (e.g., formal training programs) is not costless, how are (or methodologically should be) the costs and benefits of such coping efforts assessed by managers or researchers? Fledgling attempts toward institutionalizing learning within the company and enhancing the cumulateness of cooperative experiences with other companies are already evident, such as General Electric Company's establishment

of GE International in 1988. Created as a special mechanism to efficiently handle the swift growth of GSAs and facilitate organizational learning, GE International's primary roles are to identify and implement GSAs, to promote enhanced international awareness within GE, and to permit the sharing of international partnership expertise throughout the company.

In conclusion, as global firms' technological, financial, and marketing prowess increasingly becomes tied to the excellence of their external organizational relations, "GSA sophistication"—the ability to diagnose important differences between partners and fashion a productive partnership by devising novel solutions to accommodate the differences—is likely to become an imperative. GSAs represent a type of competitive weapon, in that they involve interorganizational *cooperation* in the pursuit of global *competitive advantage*. Sharpening the edge of this competitive weapon may require the adoption of multifirm, multicultural perspectives in joint decisionmaking, a process rendered difficult by the perceptual blinders imposed by culture-bound and corporate-bound thinking (e.g., respectively, the "ugly foreigner" mentality and the NIH, or not invented here, syndrome).⁹ Thus, future research on GSA longevity and performance must take into account the partners' cognition of, and adaptation to, the important dimensions of diversity that is an integral, inescapable part of such alliances.

NOTES

1. Although other factors, such as hidden agendas and conceptually flawed logic of the GSA may also account for a portion of these failures, interfirm diversity remains a prime culprit. Moreover, as noted shortly, dissolution of a GSA does not necessarily constitute failure. When GSAs are used as "stepping stones," their termination may be viewed by the parents as a success, not a failure.
2. This typology is suggested as a parsimonious framework to be built upon in future research on GSAs, not as the comprehensive final word. For instance, differences in industry-specific considerations and firm sizes can be significant factors in some cases; these factors are not explicitly considered here.
3. GSAs typically involve commitment of substantial resources on both sides, in cash and/or in kind. Failure can result in a loss of competitive position far beyond merely the opportunity cost of the resources deployed in the GSA itself; synergistic gains and expected positive spillover effects for the parent firm may not be realized.
4. However, the speed with which these changes may occur should not be overestimated, in light of the deeply embedded industry structure and institutions in Japan.
5. One example is the GM-Toyota alliance called New United Motor Manufacturing, Inc. (NUMMI). NUMMI was approved despite strenuous objections from Chrysler and others, whose traditional (antitrust-based) arguments were rejected by the U.S. Department of Justice.
6. This is likely to remain true even after taking into account (a) the move toward a more genuine Common Market in 1992, which creates an integrated economy of 320 million consumers, and (b) the increase in the size of the market arising from East Bloc upheavals.
7. For example, the growing inseparability of data transmission and data processing has created hybrid businesses among companies in computers, telecommunications, office products, modular switchgears, and semiconductors. Similarly, auto firms, driven by cost, quality, and efficiency considerations, increasingly invest in electronics, new materials, aerodynamics, computers, robotics, and artificial intelligence.
8. GSAs must ultimately be guided by careful consideration of the respective management practices and organization of the parents, as well as the operational needs of the venture, such as response time

to market developments and management information systems that accurately reflect the magnitude and scope of the alliance.

9. This problem may be particularly severe for Japanese companies, whose overseas activities until recently strongly emphasized exports and direct investments in wholly owned subsidiaries. The historically closed nature of Japan's society and corporations makes integrating outsiders—even other Japanese—difficult.

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