

Subculture Assessment in Multicultural Organizations

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Introduction: Studies in Multinational and Multicultural Organizations

"The multinational organization (MNO) is an ascendant organizational form in today's global business environment" (Teboul, Chen, & Fritz, 1994, p. 12). More than a decade ago, many Japanese companies established and started operations in the United States. According to the Ministry of Economy, Trade, and Industry (2003), about 3300 companies have started their operations in the US by 2000, and many American workforces have been working in Japanese-owned company (Morrow, 1992). This fact leads to a question; how could these organizations overcome or integrate cross-cultural gaps between Americans and Japanese? This point of view immediately refers to the study question of organizational culture; how do these national cultures influence to form organizational culture? Do these two cultures mix and build the third culture or do they coexist with pluralistic arrangement? Are there strong idiosyncratic organizational cultures or significant similarities among Japanese-owned companies in the United States?

Workplace diversity and multiculturalism are crucial issues in the American workplace (Cox, 1993). One reason is that cultural diversity in organizations has potential problems; heterogeneous workplaces are more risky than homogeneous ones because differences often become sources of conflicts. Since multiculturalism is a dynamic process move from monoculturalism to cultural expansion and awareness (Chen & Starosta,

1998), effective multicultural workplace has the capability to overcome cultural heterogeneity and serious conflicts. Effective MNOs emphasize and facilitate effectiveness of multiculturalism that can transform negative aspects of cultural heterogeneity to positive power and beneficial aspects of cultural diversity, such as more creativity, more flexibility, better organizational competence of creative solution and effective decision-making, and more sensitivity to human relationship and corporate environment. Thus, the purpose of this study is to identify how multiculturalism is shaped in the multinational organizations.

In the field of intercultural communication, many studies of multiculturalism have focused on interpersonal level, such as sensitivity, communication competence, and training (Sue, 1991; Fine, 1991; Chen & Starosta, 1996, 2000; Limaye 2000). Multiculturalism in workplace must be studied in various contexts since it is dynamic and varied. Namely multiculturalism is not monolithic and it is significantly relying on the specific context.

One important approach therefore is analysis in organizational level. This study investigates how cultural profiles are shaped in the multicultural organizations and how the members can assimilate different cultural contexts. The central question in the present research is what cultural traits the effective multicultural organizations have? Whether host (American) culture or corporate-owner's (Japanese) culture more significantly influence formation of multiculturalism? These questions are more and more meaningful in practice and concept. Johnson (1993) points out that it is important to assess configurations of subcultures within the organization as well as corporate culture in MNOs. Thus, the focuses of this study is on the assessment of organizational cultures in which Japanese-owned companies have survived and relatively succeeded in the United States as multinational / multicultural organizations.

The goals of this research are to assess the configuration of

subcultures in multicultural organization and identify how multiculturalism is shaped in terms of subcultural configuration. For this end, the present research has three steps of subculture assessment: (1) identification of idiosyncratic corporate culture among the companies, (2) illustration of subculture profiles between Americans and Japanese groups, and (3) discovery of either dominant subcultures or pluralistic arrangement of subcultures. Eventually, the study will discuss and imply subculture configuration in effective multicultural organizations.

Organizational Culture and Subcultures

Organizational culture has become one of the most important perspectives and major approaches to understand organizations. This literature has proliferated in the past two decades (Denison, 1996; Hinings, et al, 1996; Bate, 1991). A majority of studies assumes that organizational culture is considered an 'integrating mechanism' (Geertz, 1973; Schein, 1985), so culture is viewed as a normative consensus. This is a typical approach in management literatures. Harquail and Cox (1994) classify two primary dimensions, such as culture strength and contents of organizational culture. The former considers a culture as strong, weak, or in other categorical terms (Deal & Kennedy, 1982) while the latter considers culture as values or norms that characterize the organization, such as a managerial style (Zamanou & Glaser, 1994). Regardless of different approaches, most early studies assume that a company has an idiosyncratic organizational culture as a unique feature.

However, Parker (1995) claims that conflict is as prevalent as consensus, and that culture should not be a priori conceptualized as a unified whole. Similarly, Meyerson and Martin (1987) and Martin (1992) stress cultural heterophily. They introduce three perspectives for a fundamental framework of organizational cultures: (1) integration, (2) differentiation,

and (3) ambiguity¹. The first conceptualization assumes that organizational culture is monolithic, that a dominant culture works as an integrating mechanism or as an umbrella. In contrast, the second conceptualization assumes that organizational culture is more complicated and is not monolithic. 'A culture is composed of a collection of values and manifestations, some of which may be contradictory' (Meyerson & Martin, 1987, p. 630). This second perspective emphasizes multiple subcultures in an organization and focuses on differentiation and diversity as roles of culture. The research interest from this point of view is how different types of subcultures can be distinguished within an organization. For example, subcultural differences may represent disagreements with a dominant organizational culture, like a counter-culture. On the other hand, some subcultures may enhance a dominant culture. Johnson (1993, p.83) asks whether or not there is a dominant subculture or more of a pluralistic arrangement of subcultures in organizations. According to Gregory (1983), there is no unique corporate culture, but rather an arbitrary amalgamation of subcultures. Although Gregory's approach is an extreme case, the present research emphasizes that 'subculture-to-subculture relationships' (Johnson, 1993) form very important configurations in the multicultural organizations. Thus, since the MNOs exist with cultural heterogeneity, it is very informative for a subculture approach to 'define organizational culture as a nexus where broader, societal 'feeder' cultures come together' (Meyerson and Martin, 1987, p.631). In this point, it is meaningful to investigate whether different subcultures coexist or conform to a dominant culture. If subcultures mix and build a dominant third culture, it would depend on the nature of the organization and its environment, which are investigated on the MNOs' social and cultural contexts. Thus, in the present research, there are three steps to achieve the goal of subculture assessment; (1) to identify idiosyncratic corporate

culture, (2) to explore subculture profiles between American and Japanese groups, and (3) to investigate whether there are dominant subcultures or pluralistic arrangement of subcultures in multicultural organizations.

Previous Studies of Subcultures

There have been many subculture studies, which have research interests and foci that differ from the organizational culture literature. Many studies investigate what represents a culturally meaningful unit. In other words, it is a common approach to study factors that differentiate subcultures. For example, Gregory (1983) states that distinct subcultures may reflect functional, national, ethnic, or project affiliations. In more recent studies, Hofstede (1998) and Sackmann (1992) empirically demonstrate that functional groups or formal structures influence differentiation of subcultures. Similarly, Parker (1995) and Bovasso (1992) show that ethnic backgrounds are affecting subcultures. Gottfried and Graham (1993) show that gender differences affect subcultures in the work force of an auto assembly plant.

In these studies, an important research issue is the differences that affect differentiation among subcultures. These factors are linked with group identity, such as ethnicity, culturally similar groups, same-language groups, gender, functional groups, task groups, and so on. Cox (1993) more precisely categorizes and classifies two types of group identity, 'phenotype identity group' and 'culture identity group.' The former stems from physical and virtual difference while the latter stems from different values and norms. Such group identity and social factors mutually influence each other. Findings from previous studies indicate that there are several internal and external factors affecting subculture formation. External factors are recognized as differences in ethnic backgrounds, nationality, language, and sex. These social contexts are associated with phenotype identity groups (Parker, 1995; Bovasso, 1992). On the other hand, Hofstede

(1998) focuses on work groups in a large organization. He finds that the formal-functional grouping becomes an internal factor for subculture differentiation. This is related to culture identity groups based on organizational norms and values.

However, this research pays more attention to the larger cultural context; national culture. The present study inquires how subculture shaped by Americans and Japanese relate to each other and how they fit together to form the larger organizational culture (Hatch, 1997) in cross-cultural context. Thus, the independent variables are specified and limited to cross-culture differences between the US and Japan². Although there are many other larger contextual issues, such as industry and gender, cross-cultural difference must be the most primary issue handled by management (Cutcher-Gershenfeld, et al., 1998). It is crucial to observe how different national cultures are synthesized in multinational organizations. Thus this research needs to delineate the profiles of different subcultures shaped by two countries and to analyze what context most significantly affects subculture building.

Subculture Profiles in the Competing Value Model

The researcher is interested in a culturally diverse work organization, which is composed of Americans and Japanese. Two countries have different cultural traits, business customs, and communicative behaviors, which many intercultural communication scholars have pointed out (Nishida, 1996; Gudykunst & Nishida, 1994; Durlabhji & Marks, 1993; Goldman, 1993). Hofstede's (1980) cross-cultural scales are one of the most famous and popular examples to show cross-cultural gaps between Americans and Japanese in organizational settings. As Table 1 shows, recent scholars more precisely described and illustrated differences of business practices and management cultures (Durlabhji & Marks, 1993;

TABLE 1: Japanese and Western Organizational Behavior and Protocol

Japanese Protocol	Western Protocol
• Generalist workers	• Specialist Workers
• Advancement by seniority	• By accomplishment
• Private, prescribed channels for grievances	• Public areas for grievance and disputes
• Public conciliatory	• Publicly more argumentative
• Organizational relationship are highest priority	• Task/goals are highest priority
• Long-term organizational agendas	• Shorter term organizational agendas
• Primarily vertical upward and horizontal communication	• More vertical downward communication
• Clean distinction between <i>tatema</i> and <i>hona</i>	• Less distinction between surface communication and true intentions
• Accessible informal channels for manager-employee communication	• More formalized channels for manager-employee communication
• Decision-making via complete consensus	• Decision-making via majority vote or designate leaders
• <i>Amae</i> (interdependencies) crucial in intra- and interorganizational communication (e.g., <i>keirestu</i>)	• <i>Amae</i> less pronounced and not publicly sanctioned (e.g., antitrust legislation)
• Strong dependencies (<i>giri</i>) and commitment between organizations and employees	• Less binding, more flux in commitments between organizations and employees
• Organizational security via lifetime employment in large MNOs	• More turnover, less security; layoff, firings
• Close workplace proximities	• More individualized work spaces
• Ritualized, restricted formal codes for interaction	• More informal; less restricted codes
• Interactions more situationally bound	• More ideologically bound
• Valuing of intuitive, nonverbal communication (<i>haragei</i>)	• Values analytical logic over intuitive communication
• More reliance on face-to-face communication	• Greater use of print communication

(Glodam, 1993, p. 55)

Goldman, 1993).

In order to contrast cultural profiles of American and Japanese business, the present study uses Ouchi's conceptualization: market, bureaucracy, and clan (Ouchi, 1980). The Japanese management system is famous for quality control circles and small group activities. Basically, decision-making styles are consensus based, and employee participation and organizational commitment are popular in decision-making processes. Thus, teamwork, workplace harmony, wholistic concern for people are important principles in Japanese business practice (Ouchi, 1981). This cultural trait of Japanese business is called a '*clan*' type. On the contrary, American style decision-making tends to be top-down, and discussion and argument are important tools for American business. Competition is a strong value within American business. Results of competition are directly related to one's salary and/or promotion. Outcomes are emphasized in the US while processes are emphasized in Japan. American business culture relies on competition, and Ouchi (1980) calls it a '*market*' type. Thus, these two types reflect different principles between two national cultures. The present study attempts to identify gaps between a *market* type of American culture and a *clan* type of Japanese culture in the multicultural organizations. More precisely, the researcher expects that a subculture in Japanese is group and human-relations oriented while a subculture based on Americans tends to be competition and goal oriented.

Moreover, Japanese business tends to emphasize hierarchy rather than American business. Japanese industrial relations are famous for life-long employment and the use of seniority systems (Durlabhji & Marks, 1993; Kuwahara, 1993; Ouchi, 1981). These features underlie the hierarchical system of Japanese organizations. Most Japanese business people traditionally enjoy taking a long time to climb the hierarchical ladder. Therefore, Japanese business is categorized as a more hierarchical and

bureaucratic culture than American business. In order to examine these assumptions of cultural profiles, the researcher introduces the research instrument of the Competing Values Model (CVM).

Competing Value Model (CVM)

The Competing Values Model (CVM), which is initiated and developed by Quinn (1988), is very effective to compare corporate cultures and illustrate cultural profiles. The new book by Cameron and Quinn (1999) reintroduces the CVM as an effective instrument for diagnosing and

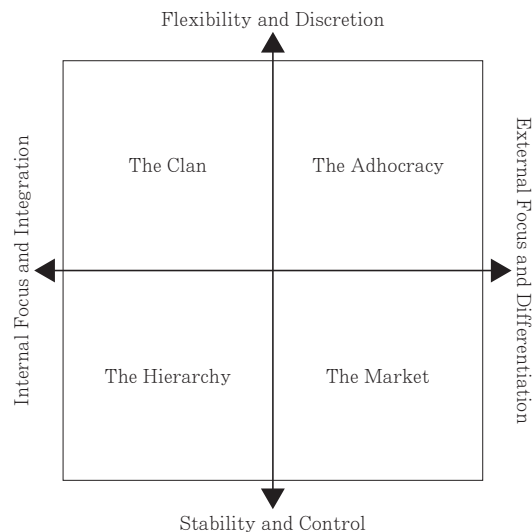
FIGURE 1: The CVM Dimensions

The Clan Culture

An organization that focuses on internal maintenance with flexibility, concern for people, and sensitivity to customers.

The Adhocracy Culture

An organization that focuses on external positioning with a high degree of flexibility and individuality



The Hierarchy Culture

An organization that focuses on internal maintenance with a need for stability and control.

The Market Culture

An organization that focuses on external positioning with a need for stability and control.

changing organizational culture. The CVM is a means to define types of organizational culture and to interpret the characteristics of those cultures (Denison & Spreitzer, 1991), and it aims to improve organizational effectiveness.

The four dimensions are carefully selected through the developmental process of the CVM instrument since there were so many dimensions proposed by other organizational culture literatures and they are complex and ambiguous (Cameron and Quinn, 1999). The CVM is parsimonious and it is composed of *Group Culture*, *Developmental Culture*, *Rational Culture*, and *Hierarchical Culture*. These four types are categorized by two axes (see Figure 1). The vertical axis reflects the competing demands of change and stability; namely it emphasizes flexibility, discretion, and dynamism over stability, order, and control. The horizontal axis reflects the conflicting demands created by the internal organization and external environment; namely it emphasizes an internal orientation, integration, and unity over external orientation, differentiation, and rivalry. These two axes divide four quadrants; the Clan quadrant (the upper left), the Adhocracy quadrant (the upper right), the Market quadrant (the lower right), and the Hierarchy quadrant (the lower left). Three of these quadrants are equivalent to Ouchi's (1980) categorizations. In addition, these quadrants are closely linked with the perspectives of organizational theories; human relations, open system, rational goal, and internal process theories respectively (see Table 2). Thus, four dimensions are carefully and systematically created. This research assumes the CVM can detect idiosyncrasy and commonality among multicultural organizations through comparing relative emphasis of each company and these four dimensions are considered as comprehensive to profile many types of organizational cultures.

Figure 1 introduces the description of each cultural profile. As Ouchi (1980, 1981) is claiming, Japan's culture is mainly located in the Clan

TABLE 2: Four Dimensions of Organizational Culture in CVM

Dimensions	Orientation	Features
Group Culture	Human relations theory	emphasizes flexibility and focuses on the internal organization for group maintenance.
Developmental Culture	Open system theory	emphasizes flexibility and change and focuses on external environment in terms of growth, stimulation, and creativity
Rational Culture	Rational-goal theory	emphasizes productivity, performance, goal fulfillment, and achievement, and focuses on goal-settings and motivation in terms of efficiency
Hierarchical Culture	Internal process theory	emphasizes internal efficiency, uniformity, coordination, and evaluation and focuses on the internal organization in terms of stability and regulation.

(Denison & Spreitzer, 1991, p5.)

quadrant, and it is assumed to emphasize Group Culture. In contrast, American culture is basically located in the Market quadrant, and it is assumed to emphasize Rational Culture. Thus, two national cultures compete with each other. The present study expects that distinct subcultures might be depicted with contrasting subculture profiles in the four quadrants of the CVM.

Hypothesis and Research Questions

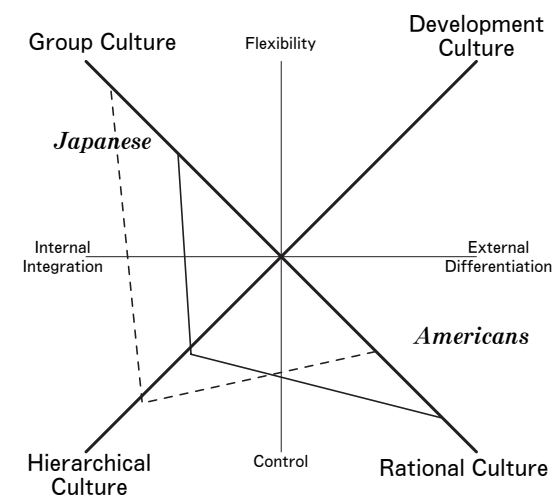
First, this study will examine whether there are idiosyncratic corporate cultures identified in Japanese MNOs in the United States. According to Deal and Kennedy (1982), a strong culture assumption leads to the existence of idiosyncratic cultures in an organization. Namely, different companies have different cultural strengths, and such distinct strengths emerge into different patterns of cultural profiles on the four quadrants of the CVM. Therefore, this research will compare corporate cultures among the research sites and attempt to identify their idiosyncrasy.

Hypothesis 1: *Each company will show different patterns of cultural profiles on the CVM scores and show idiosyncratic organizational*

culture.

Second, the study will pay attention to subculture assessment in each company. It is expected that there are two different subcultures existing in Japanese-own MNOs at the US since the host country of the US and the owner's country of Japan jointly influence subculture formation. As the previous section illustrates, Japanese and American cultures and their business perspectives are characterized as a *clan* type and a *market* type respectively. Therefore, it is assumed that a Japanese group in a firm may have a high score in Group Culture while an American group may have a high score in Rational Culture. In addition, as Japanese tend to emphasize hierarchical systems, a Japanese group may have a high score in Hierarchical Culture more than an American group. In these regards, this research hypothesizes that subcultures profiled by Japanese groups incline toward Group and Hierarchical Cultures while subcultures profiled by American groups incline toward Rational Culture. These subculture differences are visually hypothesized in Figure 2.

FIGURE 2: CVM Profile for Visual Hypothesis



Hypothesis 2-a: *The Japanese groups will emphasize Group Culture rather than Rational Culture, while the American groups will emphasize Rational Culture rather than Group Culture.*

Hypothesis 2-b: *The Japanese groups will emphasize Hierarchical Culture rather than Development Culture, while the American groups will less emphasize Hierarchical Culture than Japanese groups.*

In these processes, the study will prepare for analyzing the relationship between dominant subculture and other subculture arrangement in the Japanese MNOs. At first, since it is expected that there are two different subculture profiles between American and Japanese, there might be major distances in the scores of the CVM dimensions: Group, Rational, and Hierarchical Cultures in particular. In this case, these subcultures do not conform to a dominant culture, but they coexist as pluralistic arrangement or arbitrary amalgamation of subcultures (Johnson, 1993; Gregory, 1983). On the other hand, in case of little gap identified between two groups, it implies that subcultures conform to a dominant culture. Namely, there is no significant cultural gap between Americans and Japanese. Rather, a dominant culture might be constructed among organizational members. In this point, it is interesting to investigate how a dominant culture is profiled. There are three possibilities. If American culture is working as a dominant culture, subculture profiles of both groups incline to Rational Culture. If Japanese culture is dominated in a firm, subculture profiles incline to Group and Hierarchical Cultures. The third possibility is a mixed culture between Americans and Japanese. This is a case of multiculturalism. In this case, subculture profiles may incline to both Group Culture and Rational Culture. Namely, the cultural profiles are stretched toward both Clan and Market quadrants in the CVM. Thus, the research questions of subculture assessment are described as follows.

Research Question A: *Are there large gaps between American and Japanese*

groups? Do American and Japanese subcultures coexist with pluralistic arrangement?

Research Question B: *Are there little cultural gap between American and Japanese groups? If so, how are these subcultures commonly illustrated? Do they incline to Group Culture, Rational Culture, or both ends between Rational and Group Cultures.*

Method

Measurement

In order to quantitatively measure and compare cultural traits, I operationalize culture and define it as values that organizational members share, create, and recreate. This research chooses the CVM scales for a measurement instrument.³

There are many advantages to use the CVM. First, it is very reliable since many empirical and theoretical studies have used the CVM in management literatures (Kalliath, Bluedorn, & Gillespie, 1999; Kalliath Bluedorn, & Strube, 1999; Harris & Mossholder, 1996; Bluedorn & Lundgren, 1993; Cameron & Freeman, 1991; Yeung, Brockbank, & Ulrich, 1991; Quinn & Spreitzer, 1991). *Human Resources Management* (Neill & Quinn, 1993) has a special issue of empirical studies using the CVM. Second, it is realistic and feasible. The CVM has four subscales and the original instrument has four items for each subscale of 16 items. Bluedorn and his colleagues (Kalliath, Bluedorn, & Gillespie, 1999; Kalliath Bluedorn, & Strube, 1999) have improved the original scale. They created both a 32-item version and a new 16-item version. Sixteen items are a feasible number to ask in business organizations. The improved scale is statistically very strong in psychometrics. Third, the most important point of selecting an instrument is to meet the research design and goals. The researcher assumes that the CVM enhances face validity. The present

study concerns how different subcultures compete and contrast in one organization. Four dimensions of the CVM scale are divided by two axes, and two dichotomous relationships show contrasting values (see Figure 1). The CVM is very effective for illustrating subculture profiles between Americans and Japanese. Thus, the CVM is the best fit for the present research goal and design to understand subculture profiles.

The most updated scale of the CVM has both 32-item and 16-item versions (Kalliath, Bluedorn, & Gillespie, 1999; Kalliath Bluedorn, & Strube, 1999). The present researcher pilot-tested the 32-item version on 50 subjects (Americans and Japanese). Many comments were made to reduce the number of items. The 16-item version of the CVM was adopted. Additionally, some of 32 items were very difficult to understand because of abstract and unfamiliar management terms. Then, the researcher switched one item: one of 32 items is used to create a new 16-item version for this research (refer to Table 5). Supplemental descriptions for difficult and abstract terms were added. For example, since some comments reported difficulty in the item of 'creative problem solving' in Development Culture, the researcher created the supplementary explanation: 'appreciation to various opinions to overcome some impasse' (refer to Table 5).

The newly completed CVM scale for an English version was translated into Japanese. A bilingual Japanese first translated it into Japanese. Then, two bilingual Japanese who are Ph.D. students back-translated the instrument. They translated it to English, and these results of back-translation were compared with the original English questionnaire. Then, the two translators and the researcher discussed each term and decided the most appropriate expression for every single item. Thus, the CVM scales were prepared for both English and Japanese versions. Seven-point Likert-type scales were used in each version. The participants were asked to answer each items in terms of their organizational value and their

personal value; each item of organizational culture was calculated by sum of two values.

Data Collection

Data were collected from Japanese owned MNOs from November 1998 to May 1999, assisted by the Japanese Business Society of Detroit (JBSD). The JBSD has 200 Japanese-owned companies as members in the Detroit area. It provided me with a member company list. Fifty companies are selected from the 200 in terms of organizational size and the proportion between Americana and Japanese workforce. Since many member companies have a few Japanese employees working with many Americans, it is unsuitable to observe subcultures. Also, in order to control organization size, the study did not choose small branch offices (five to ten workers) and huge companies that have a big assembly plant (more than 150 employees). A majority of moderate-size organizations are focussed; the number of employees is 30 to 100. The researcher communicated and negotiated with each company by mail and telephone over six months. Nine companies accepted the request of data collection regarding the CVM. The questionnaire was distributed to all employees and managers in seven companies, and also distributed to some departments in the two largest companies. The English version of the CVM questionnaire is distributed to the US American workforce, and the Japanese version is distributed to Japanese. The total number of participants is 152: 89 US Americans and 63 Japanese.

All of the nine companies are in automotive-related industries. Three companies are international trading businesses (Company B, D, and G), and the others are modest sized research and development firms with small manufacturing operations (refer to Table 3). Since many Japanese firms in Detroit have localized management to reduce their Japanese workforce, the proportion of Japanese to Americans is about 40:60. The workforce in the

TABLE 3: Description of Companies

	Business and Industry
Company A	Production, sales, and maintenance of machines: injection molding, die casting, extrusion presses
Company B	International trading: auto-related materials, equipment, parts, and investment
Company C	Production, sales, and maintenance of assembly-equipment and material handling system.
Company D	International trading: auto-related materials, equipment, parts, and plant-building
Company E	Research & development of auto-seats and seating systems
Company F	Production, research & development, marketing of auto-related / electronic parts
Company G	Marketing and trading of auto-production technique, quality, warranty, and purchase
Company H	Research & development and marketing of climate control, exhaust, and heat exchange systems
Company I	Production of surface parts (doors, hoods, etc.), manufacturing equipment and engineering service

TABLE 4: Demographic Data

Co ¹	N	Sex		Nationality ²		Corporate Status ³				Years service ⁴
		Female	Male	US	Japan	Top	Mgrs	Upr	Wker	
A	31	2	26	25	6	1	11	1	13	2.42
B	17	8	9	9	8	2	7	2	6	5.18
C	8	1	7	2	6	3	3	1	1	2.94
D	7	2	5	3	4	1	2	0	4	3.00
E	13	2	11	9	4	0	4	2	5	3.77
F	28	11	17	17	11	5	9	11	3	5.40
G	19	7	12	9	10	2	7	7	3	3.50
H	16	3	12	10	6	3	2	5	5	3.16
I	4	2	2	3	1	0	0	3	1	3.33
J	9	2	7	2	7	0	1	0	6	3.38
Total	152	40	108	89	63	17	47	32	46	3.8

Co¹: Name of company

Nationality²: Nationality is divided into the two categories, Americans and Japanese. African-, Asian-, Caucasian-, Hispanic-, and Native-Americans were classified and investigated on the questionnaire, and they were integrated in Americans since there was almost no variance as a result.

Corporate Status³: The hierarchical status in each organization are classified into four categories, such as Top Management (CEO, and directors), Managers (senior and junior managers), Upper-level Workers (senior-workers, supervisors, team-leaders), and Workers.

Years service⁴: Statistical mean of years of service.

nine firms is three-fourths male. The proportion between management and employees is 45:55. Demographics are summarized in Table 4.

Results

The CVM data were analyzed to identify corporate cultures and subcultures. Reliabilities for the four subscales were analyzed on sample-wide data based on nine companies (n=152), and also the validity of these subscales were considered through confirmatory factor analysis. In the next step, the same sample-wide data were used to detect idiosyncratic corporate cultures through multivariate analysis of variance (MANOVA). Third, corporate-level data were analyzed to assess subcultures in each organization. Corporate-level analysis on the CVM data is limited to six companies because three companies (C, D, and I) are very small sample sizes.

As a first step, the validity and reliability of the CVM scale were considered. Each of the four dimensions in the CVM, such as Group Culture, Development Culture, Rational Culture, and Hierarchical Culture, contains four items; it was assumed that they were unidimensional on each subscale. Namely, the subscale of Group Culture is composed of four items and it must be unidimensional. Cronbach's alpha was calculated for reliability on the Group Culture score: 0.87 (n=148). The Development Culture scale was 0.83 (n=146). Rational Culture yielded 0.86 (n=146), and Hierarchical Culture yielded 0.82 (n=146). Although the researcher attempted to eliminate one item from four and improve reliabilities, it did not yield higher reliability. The present four items are the best item composition for each subscale. These reliability coefficients are relatively high and considered satisfactory. Compared with the latest study in the CVM, Kalliath, Bluedorn, and Gillespie (1999) obtained strong reliabilities on Group Culture (.90), Development Culture (.83), Rational Culture (.83),

TABLE 5: Items of the CVM Scales and Factor Loading**Group Culture (Alpha = .87)**

	Items	Factor Loading
1	Participation and open discussion (through QC circles, suggestion systems, etc.)*	.82
2	Employee concerns and ideas	.77
3	Human relations, teamwork and cohesion	.85
4	Morale in the workplace (respect trust and good relationships with your coworkers)*	.71

Development Culture (Alpha = .83)

1	Innovation and change	.62
2	Creative problem solving (appreciation to various opinions to overcome some impasse)*	.81
3	Decentralization (where many people have a say in decision making)	.72
4	New Ideas	.83

Rational Culture (Alpha = .86)

1	Outcome excellence and quality (the best outputs or results are more important than the process)*	.66
2	Getting the job done	.84
3	Goal achievement	.79
4	Doing one's best	.83

Hierarchical Culture (Alpha = .82)

1	Predictable outcomes (being confident about knowing what will happen if certain actions are taken)	.62
2	Controlling the work process (including schedule and information control)**	.77
3	Order (emphasize an organization structure or rules to make smooth operations)*	.77
4	Stability and continuity (jobs become routinized and smooth without interruption.)*	.79

* The items that the researcher added supplementary explanation to the original items.

**The item that was switched from the 32-item version and entered for a new 16-item version.

and Hierarchical Culture (.80). The reliabilities in the present study are almost equivalent to their study.

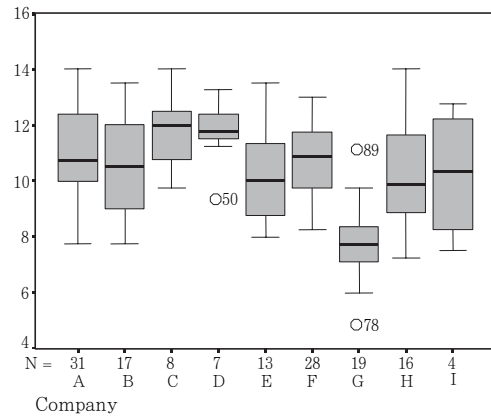
To establish reliability, Cronbach's alpha requires the condition that the unidimensional model is correct among four items. As a second step, a confirmatory factor analysis was conducted on the four subscales. A correlation matrix was calculated for 16 items, and the internal consistency theorem assessed for each subscale. In the Group Culture scale, as Table 5 shows, the correlation coefficients of four items with the true score are $r_{TG1} = .82$, $r_{TG2} = .77$, $r_{TG3} = .85$, $r_{TG4} = .71$. These factor loadings are relatively strong. Also, residuals were computed in terms of predicted correlations. The internal consistency theorem was confirmed since the largest residual was .10. Thus, it can be concluded that the subscale of the group culture is unidimensional. Similarly, .62, .81, .72, .83 are the factor loadings for the Development Culture scale, and the residuals are assessed. The same procedures were followed to assess the other scales in terms of the internal consistency theorem. The study eventually found that all four subscales are unidimensional respectively (see table 5).

Organizational Culture Identification

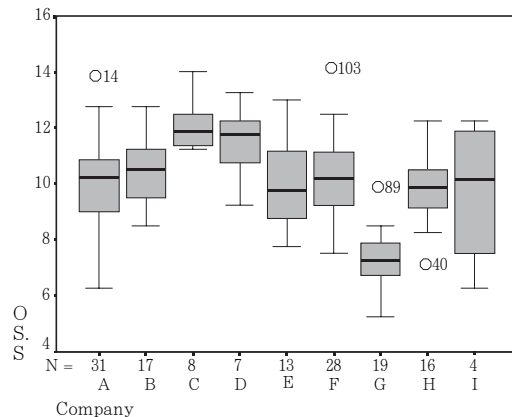
In order to detect idiosyncratic corporate cultures, multivariate analysis of variance (MANOVA) was conducted on the sample-wide data. The independent variables were the nine companies, and dependent variables were the four subscales of the CVM. The impact of companies is examined on the four types of culture. According to the multivariate tests for significance ($S=4$, $M=1 \frac{1}{2}$, $N=64 \frac{1}{2}$), results are statistically significant at $p < .001$ level. According to the univariate F test with degree of freedom (8, 134), the study shows that company variables are statistically significant on the four cultures: $F(8, 134) = 8.19$, $p < .001$ in Group Culture; $F(8, 134) = 11.72$, $p < .001$ in Development Culture; $F(8, 134) = 15.50$, $p < .001$ in Rational Culture; and; $F(8, 134) = 9.02$, $p < .001$ in Hierarchical Culture.

These results indicate that the nine companies have statistically significant variations on the four CVM dimensions. The box plots in Figure 3 illustrate differences of each company on the cultural dimensions, and it is obvious that there are variations among companies. However, these MANOVA results do not directly indicate that these variances in the CVM dimensions are caused by idiosyncratic corporate cultures. Although variances were identified in the data, they can be considered as response

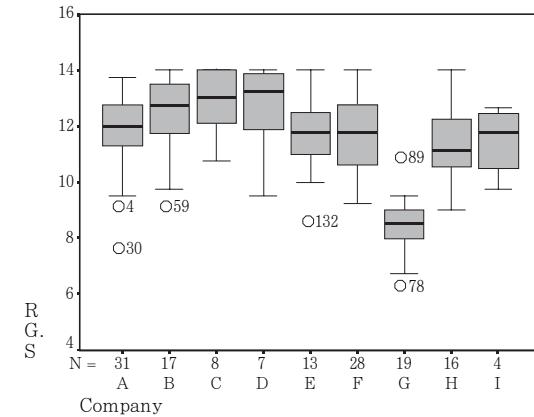
FIGURE 3: Corporate Differences in Group Cultures



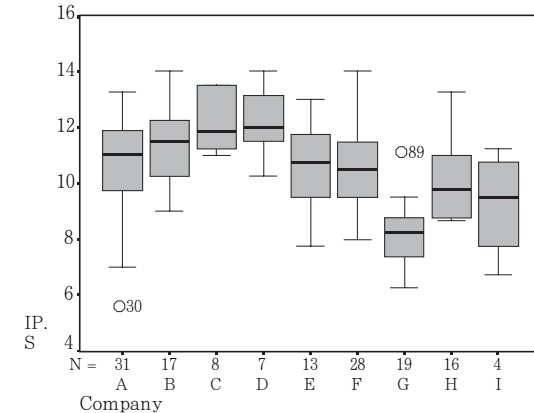
Corporate Differences in Development Culture



Corporate Differences in Rational Culture



Corporate Differences in Hierarchical Culture



- The numbers on the Chart express the ID numbers of participants, and they are outliers.
- The vertical axis expresses the scores of each CVM subscale.
- The horizontal axis shows the company names of research sites and their number of subjects.

biases. They seem to be response sets, and the significance is coming from the responses of Company G. As the box plots in Figure 3 show, Company G has considerably lower than the other companies in each dimension. Thus, these response sets should not be considered as distinct culture differences. The present research requires another approach to understand

TABLE 6: Mean Comparison and Paired Sample T-test in the CVM

Company	Group (G)	Rational (R)	Paired Sample T-test (G–R)	Hierarchical (H)	Development (D)	Paired Sample T-test (H–D)
A	10.9 (1.65)	11.9 (1.37)	-.93** (1.33)	10.7 (1.85)	10.1 (1.62)	.61 (1.97)
American	11.0 (1.68)	11.9 (1.33)	-.85** (1.37)	10.6 (2.00)	10.1 (1.69)	.54 (2.15)
Japanese	10.6 (1.63)	11.8 (1.69)	-1.25* (1.17)	11.0 (1.85)	10.1 (1.39)	.92 (1.01)
B	10.5 (1.73)	12.4 (1.44)	-1.90** (1.53)	11.3 (1.37)	10.5 (1.24)	.73* (1.36)
American	10.5 (1.51)	12.9 (.86)	-2.33** (1.49)	11.4 (1.14)	10.2 (1.22)	1.17* (1.14)
Japanese	10.5 (2.06)	11.9 (1.88)	-1.41* (1.52)	11.1 (1.66)	10.9 (1.21)	.23 (1.48)
E	10.3 (1.80)	11.6 (1.50)	-1.32** (1.05)	10.8 (1.70)	10.2 (1.77)	.56 (1.39)
American	10.1 (1.69)	11.8 (1.18)	-1.63** (.90)	11.0 (1.53)	10.0 (1.86)	1.01 (.72)
Japanese	10.5 (2.27)	11.1 (1.49)	-.63 (1.13)	10.2 (2.15)	10.6 (1.71)	.23 (1.48)
F	10.8 (1.25)	11.8 (1.34)	-.99** (1.36)	10.6 (1.45)	10.3 (1.44)	.34 (.99)
American	10.7 (1.35)	11.5 (1.21)	-.81* (1.51)	10.0 (1.04)	9.9 (.98)	.14 (.72)
Japanese	11.0 (1.19)	12.2 (1.52)	-1.27** (1.08)	11.1 (1.71)	10.9 (2.03)	.64 (1.28)
G	7.8 (1.38)	8.4 (1.05)	-.64** (.60)	8.2 (1.20)	7.3 (1.11)	.89** (.84)
American	8.5 (1.29)	8.8 (1.44)	-.25 (.40)	8.4 (1.44)	7.6 (1.07)	.86* (1.04)
Japanese	7.2 (1.18)	8.0 (.98)	-1.00** (.54)	8.0 (.98)	7.2 (1.13)	.93** (.67)
H	10.3 (2.02)	11.3 (1.28)	-.91 (1.90)	10.1 (1.43)	9.8 (1.32)	.26 (1.21)
American	10.1 (2.29)	11.2 (1.39)	-1.10 (2.09)	10.1 (1.38)	9.6 (1.47)	.55 (.97)
Japanese	10.6 (1.63)	11.2 (1.07)	-.60 (1.64)	10.1 (1.65)	10.3 (.94)	-.22 (.73)
Total	10.4 (1.91)	11.4 (1.81)	-1.05** (1.32)	10.5 (1.84)	9.9 (1.84)	.42** (1.46)
American	10.5 (1.73)	11.6 (1.60)	-1.13** (1.43)	10.3 (1.73)	9.9 (1.66)	.45** (1.56)
Japanese	10.2 (2.03)	11.2 (2.00)	-.93** (1.14)	10.6 (1.91)	10.2 (2.00)	.39* (1.33)

The left in each column is a mean score; the numbers in the parentheses is a standard deviation.
* p < .05, ** p < .01

how corporate cultures are profiled in the CVM dimensions.

Six company's mean scores in the four dimensions are summarized in Table 6, and their corporate culture can be illustrated in the charts of Appendix 1. These basic statistics show whether there are different patterns on the CVM dimensions. Interestingly, some common patterns are identified in all research sites. These six companies have the highest score on Rational Culture in the four dimensions. Also, it is important to look at the relationships between two dichotomous dimensions on the CVM. The scores of Rational Culture are commonly higher than the score of the Group Culture among six companies. The paired sample t-test between Group and Rational Cultures was conducted on total samples and each corporate-level data. In all samples, the Rational Culture is 1.05 point

higher than Group Culture, and it is statistically significant ($p < .01$). Six companies also have an identical pattern, and five of them reach a significant level. Another paired sample t-test was conducted in the relationship between Hierarchical and Development Cultures. Although the study couldn't find remarkable tendencies, there are similar patterns in all six companies. Namely, Hierarchical Culture is slightly higher than Development Culture in both sample-wide data and corporate level data; two companies reach a significant level. Moreover, the CVM charts (Appendix 1) graphically illustrate similar patterns among six companies. Thus, the data did not show remarkably different patterns of cultural profiles on the CVM dimensions. In these respects, the present study can not support the hypothesis 1. It can be concluded that idiosyncratic corporate cultures are not identified in the present research. Rather, in weak evidence, the data indicate the similar patterns among six Japanese MNOs.

Subcultural Assessment

Each corporate data set is analyzed for subculture assessment, and the impacts of cross-cultural differences are examined. Namely the independent variables are two cultural background of American and Japanese workforces. Subculture assessment is done by comparing mean scores of American and Japanese groups on the CVM dimensions, and also MANOVA is conducted to examine F-test. In so doing, it is possible to identify distinct subcultures that are influenced by two different national cultures.

In Company A, basically, American and Japanese groups have very similar patterns in the four dimensions (see Appendix 1). Rational Culture is the highest in the four dimensions; the scores are almost identical between two groups. On Group Culture, there is an interesting phenomenon that an American group is slightly higher than a Japanese group. This result is opposed to the hypothesis 2-a since the study expected that

Japanese have a higher score on Group Culture. Moreover, a Japanese group has a higher score in Rational Culture than Group Culture. The paired sample t-tests between Group and Rational Cultures commonly show statistical significance on American and Japanese data. The study failed to support the hypothesis 2a. However, the Japanese scored higher than the Americans in terms of Hierarchical Culture. This is what the present study expected; Japanese emphasize hierarchical structure and its power. Yet, it is not supported by one-way ANOVA. In addition to mean comparisons, MANOVA is conducted to examine F-test on subcultures. The effect of cultural background is examined and no effect is found in the multivariate tests of significance and univariate F-tests.

In Company B, some variances are found in the patterns of the two groups. Although Rational Culture is commonly highest, there is a major gap between American and Japanese groups. An American group is considerably higher than a Japanese group. Eta shows power of cultural difference on Rational Culture ($r = .35$), but this cultural gap does not have statistical significance in ANOVA. The paired sample t-test shows that Americans emphasize Rational Culture rather than Group Culture ($p < .01$). This result of American data supports the hypothesis 2-a, but the Japanese data opposes this hypothesis because Japanese also emphasize Rational Culture. Thus, the hypothesis 2-a is partially supported in Company B. In Hierarchical Culture, there is no difference between two groups. The hypothesis 2-b can not be supported. The multivariate tests and the univariate F-tests are examined and no significant differences were found.

In Company E, similarly, Rational Culture is highest in the four dimensions, and American groups are much higher than Japanese. Obviously, American workforces emphasize Rational Culture in comparison with Group Culture. A Japanese group has a high score on Group Culture more than an American group. These two points positively

indicate the hypothesis 2-a. However, an American group has a higher score in Hierarchical Culture more than a Japanese group, so this result is opposed to the hypothesis 2-b. These results are illustrated by mean comparison, but they do not gain statistical significance in F-tests. The effect of cross-cultural difference did not reach a significant level in the multivariate tests and the univariate F-tests.

In Company F, two cultural groups have parallel patterns through four dimensions; a Japanese group is always higher than American groups. Group Culture is almost similar between Americans and Japanese, but the Development and Hierarchical cultures have some differences in American and Japanese groups. In particular, a gap between Japanese and American groups are significantly expanded on Hierarchical Culture; Japanese have a higher score in this dimension. Although the effect of cultural difference on Hierarchical Culture could not have statistical significance in the multivariate tests, it showed a significant effect ($p < .05$) in a univariate F-test at (1, 24) degree of freedom. The hypothesis 2-b was supported.

In Company G, all CVM scores much deviated from the other companies, and they are very low. This might be a response bias, but there is a concern left because only Company G has such low scores in each cultural dimension. Interesting findings in Company G is that an American group is always higher than a Japanese group on four dimensions, and they shape a parallel pattern. This is a opposite phenomena to Company F. F-tests did not find significant effect of cultural background.

In Company H, American and Japanese groups have almost same subculture profiles in the four dimensions. A slight difference is found on Group and Development Cultures. The Japanese is higher than the Americans in these two cultures. The result on Group Culture partially indicates the hypothesis 2-a although F-tests did not show significance.

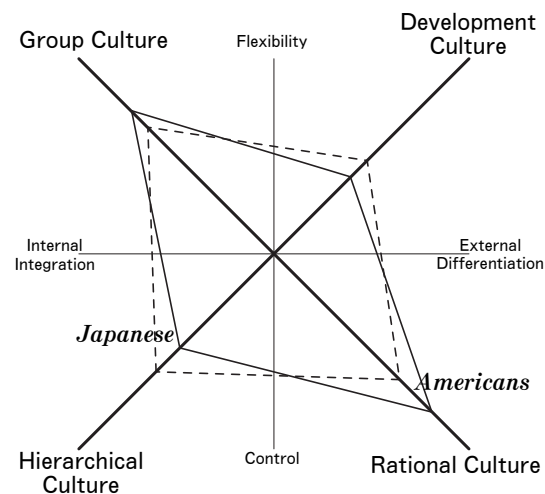
As a whole, the hypothesis 2-a is supported by the American data, but

it is not supported by the Japanese data. In all companies, American groups emphasize Rational Culture rather than Group Culture, and the paired sample t-test has statistical significance in four of six research sites. On the contrary, the Japanese emphasize Group Culture less. Rather, Japanese groups have a similar cultural profile with American groups, and they stress Rational Culture rather than Group Culture; similarly the paired sample t-test has significance in four of six companies.

The hypothesis 2-b is partially supported by the data of Company A and F; Japanese groups are higher than Americans in terms of Hierarchical Culture. In particular, One-way ANOVA found a statistical significance in Company F data. This company is a very large organization, and Japanese workforce may have so-called 'big-company disease'; managers tend to focus more on internal human relations, hierarchical structures, and organizational politics, and not work at hand. The other companies did not show a significant difference in this cultural dimension.

In six companies, the cultural profiles are very similar between

FIGURE 4: CVM Profile for the Results of Subculture Formation



American and Japanese groups. Interestingly the subculture profiled by Americans inclined to not only Rational Culture but also Group Culture. The Japanese subculture is basically close to American's. It is slightly lower on both Rational and Group Cultures but slightly higher on Hierarchical Culture. These subculture profiles are visually summarized in Figure 4.

Thus, the study can not find considerable differences between American and Japanese subcultures. When considering Research Question A, the study can not conclude that American and Japanese subcultures coexist with pluralistic arrangement. The subculture profile of American groups inclined to both Rational and Group Cultures. The subculture profile of Japanese groups also inclined toward Rational Culture. These results show that both American and Japanese subcultures tend to conform to a dominant and common culture profile, which is stretched to both ends of Rational and Group Cultures. Therefore, when considering Research Question B, in weak evidence, the present research indicates that these two subcultures tend to be integrated into a form of multicultural organizations: embracing both *clan* and *market* types.

Discussion

The present study succeeded in comparing corporate cultures among six research sites of Japanese MNOs by applying the Competing Value Model. The first point of discussion is whether there are any common features in organizational cultures across the research sites. Using the CVM dimensions, the present research shows that there are similar patterns identified among six Japanese MNOs although there is no distinct corporate culture.

All research sites have the highest score on Rational Culture. According to Cameron and Quinn (1999), the companies that stress this

cultural dimension tend to be more market-oriented and emphasize goal achievement. It is reasonable that MNOs emphasize rational culture and competition because of the developmental history of MNOs and the state of the world economy. MNOs were established and developed through highly competitive global markets (Shuter & Wiseman, 1994); the market must be their first concern. In particular, the Japanese economy was the worst in the 1990s, so many Japanese firms were trying to rationalize their management and reduce costs. In addition, the same auto-related industry might affect emphasis on Rational Culture and cultural commonality.

Another plausible explanation for this result is the perspective of a 'dominant culture' shaped by the Americans, which the present research hypothesized. Americans emphasize goal achievement and competition more than Japanese (Goldman, 1994; Cox, 1993; Durlabhji & Marks, 1993; Ouchi, 1980, 1981). In fact, Americans have higher scores on Rational Culture in Companies B, E, and G. Paired sample t-test shows that Rational Culture is always higher than Group Culture in statistical significant level. These results imply that Japanese management styles do not constitute a dominant culture in these Japanese-owned MNOs. Rather, it can be interpreted that American business style dominates the workplace, even in Japanese workforces in overseas MNOs. One of major strategies for globalization is localization of management, so Japanese management may incline toward American culture as a host country. It implies geocentric arrangement of Japanese management in Japanese MNOs in the United States. Another supportive explanation for this dominant subculture is that economic competitiveness might have become a key organizational value among organizational members. Such external environment in automotive industries might facilitate that rational and goal-oriented culture based on competition becomes a dominant subculture across Japanese MNOs. Furthermore, types of institution may affect the

results. For example, R & D institutions are characterized as the market-basis, so the limited research sites of R & D institutions might be associated with the rational culture.

In addition to the strength of Rational Culture, although evidence is weak, it is necessary to mention that American subculture emphasizes Group Culture as a second highest. Japanese companies have traditionally emphasized teamwork and cooperative cultures. When many Japanese transplants were established in the 1980's, they attempted to diffuse Japanese styles of participative management and lean production systems (Cutcher-Gershenfeld, et al, 1998). This context still remains in some corporate cultures of Companies A, F, G, and H; they have the second highest scores on Group Culture (see Appendix). Particularly, since Company A has its plant on-site, Group Culture is emphasized. Interestingly, Americans emphasize teamwork cultures in two of these four companies more than Japanese: Companies A and G. Also, American data show that Group Culture is a second highest on sample-wide level (see Table 6). Thus, Americans seem to stress a *clan* type of culture in Japanese-owned MNOs. Perhaps, this might be a result of diffusion of Japanese management styles. On the contrary, the present results suggest that Japanese emphasize teamwork and human relations less than Americans, and Japanese stress competition; for them, goal achievement and market conditions are more important than other measured aspects.

Americans' understanding of Japanese management and market-orientation of Japanese might facilitate to conform to a dominant subculture. Namely, emphasis on both cooperation and competition is more easily accepted by Americans and Japanese. In other words, *market* culture and *clan* culture are able to exist simultaneously and create a new types of organizational culture in multicultural organizations. This competitive-cooperative (C-C) organizational culture implies the cultural

product from multiculturalism. Such a mix culture between *clan* and *market* types must be jointly created by Americans and Japanese. Multiculturalism is not created by one of two parties but constructed through mutual respects and joint efforts. It looks similar to the third-culture building (Shuter, 1993) that is usually discussed in the relationship development in the interpersonal level. The dynamic process of third-culture development building is interactive and benefits both parties. Namely, this is a necessary process to facilitate interactive multicultural building: promote mutual respect and tolerance of cultural difference (Belay, 1993). C-C culture is regarded as an outcome of cultural synergy in multicultural organizations.

Idiosyncratic corporate cultures did not appear, and Japanese MNOs commonly foster a C-C type of multicultural organizations. As I discussed previously, it is reasonable to think that this C-C cultural type are generated through industry-wide factors, such as the global market and other industrial market conditions and diffusion of Japanese management. Since the MNOs are born in the global market conditions, they have the characteristics of open system. The external environments might become strong stimuli to facilitate the C-C type of culture. Although there might be an internal efforts, such as multicultural training, the external conditions seem to be significant factors for the MNOs as business and open-system organizations. This is important distinction from multiculturalism in educational context, which emphasizes educational intervention in the development of multiculturalism (Chen & Starosta, 1998). The creation of C-C culture is highly relying on the characteristics of MNOs; best suited to external economic conditions. Both competitive and cooperative cultures are expected to survive the current industrial conditions.

Lastly, another important discussion is generalizability of this study.

It is important to consider the impacts of industrial differences among the research sites. All companies are auto-related, but they are divided into two different industries or business, such as international trading and R&D. Companies B and G are in trading business, and the others are in R & D industry. However, this research can not identify idiosyncratic profiles between two industries. Rather, similar tendencies are identified across six companies. This does not imply that the results of this study can be generalized into any kinds of MNOs. The conclusion of this study is very limited in specific organizational context; namely, the Japanese-owned, small and moderate sized organizations, and auto-related business. Other kinds of MNOs are defined and characterized by different conditions, market environments and cultural background, so there must be different subculture configuration.

The present research limits variables to cross-cultural difference. However, there are some other possible variables, such as gender and organizational factors. According to Cox (1993), culture identity groups are constructed by not only racioethnicity and/or nationality but also by relative importance and the value that an individual places on a particular culture identity group. The former is called the culture identity profile, and the latter is called identity strength. For example, Hofstede (1998) could succeed in detecting subcultures based on formal functional structure. He identifies three major subcultures through hierarchical cluster analysis, and they are closely associated with formal organizational structures. His work provides an evidence of identity strength that functional groups can be sources of subcultures. If idiosyncratic organizational cultures are identified, these organizational variables might be more effective than larger contexts. In addition, gender is one of important issues for workplace diversity (Ibarra, 1997, 1993, 1992), and it might become a source of subculture differentiation¹. These variables must be considered with

cross-cultural factors, and this is an important direction for a future study.

Concluding Remarks

The present study took three research steps; (1) identification of idiosyncratic corporate culture, (2) illustration of subculture profiles between Americans and Japanese in MNOs, and (3) discovery of dominant subcultures or pluralistic arrangement of subcultures. This research failed to identify distinct corporate cultures among nine Japanese MNOs, but the present study found similar patterns of corporate culture across companies. Subculture shaped by Americans and Japanese are profiled with a similar pattern in the CVM quadrants. Both American and Japanese workforces tend to emphasize competition: a *market* type of culture. Americans were also emphasizing cooperation: a *clan* type of culture. Although empirical evidence is weak, this study implies that these cultural profiles identified in Japanese MNOs may reflect the economic environment (competitive global market and Japanese economic crisis), the context of an automotive industry, diffusion of Japanese management, and geocentric arrangement of MNOs. Such external contexts force subcultures to conform to a dominant subculture in Japanese MNOs. Americans and Japanese mutually create a new organizational culture that emphasizes both competition and cooperation. This C-C culture implies the cultural synergy and an outcome from multiculturalism which are jointly created by Americans and Japanese. Multiculturalism is not created by one of two parties but constructed through mutual respects and joint efforts. The C-C culture is identified as the result of subculture assessment, and it is cultural configuration in Japanese MNOs. The competitive-cooperative culture of multiculturalism is more appropriate for surviving in global economy.

In these regards, subculture assessment is an effective way to analyze multicultural organizations in practical sense. The CVM is also an

effective instrument for profiling and comparing cultural traits; particularly comparing American and Japanese business cultures. This instrument is systematically composed of four key quadrants, and a *clan* quadrant and *market* quadrant can typically illustrate Japanese and American business cultures. In particular, the CVM instrument helped to show that Japanese-owned MNOs emphasized the market and goal achievement and promoted more rational style of management.

The present study has several limitations. First of all, the sample size is relatively small; female samples in particular. Therefore, some statistical analyses did not reach a significant level. In order to improve empirical evidence, the future study has to consider the effect size of data collection. This research only uses a self-reported type of quantitative method. Some qualitative methods may enhance research, and multiple approaches will make subculture assessment richer. The research sites are limited to the Detroit area, and the data rely on one industry: limited in the context of automotive industries. In addition, the research was only conducted on Japanese owned MNOs. Other types of MNOs must have different subculture profiles and may have different outcomes. Moreover, a future study can focus more on communication structure and subcultures: communication networks, multiculturalism and the role of communication.

This is a beginning study of multinational and multicultural organizations. The more societies and economies world-merge, the more critical an understanding of multicultural organizations will become in the future.

Endnote

¹Ambiguity is an important concept to integrated cultural diversity. It might be very useful to describe Japanese culture. However, this study would like to focus on the contrasting concepts of integration and differentiation, and the ambiguity approach will be discussed in a different study.

²Other social and organizational factors will be investigated in a different study. These external and internal contexts will make a research design complicated, so they are controlled in this study.

³The recent organizational culture studies use a variety of quantitative research methods with many different kinds of instruments (Xenikou and Furnham, 1996), so there are many options. It is dependent on a research goal and design.

⁴As Cox(1993) categorizes sex as one of phenotype identity groups, which are based on physical, virtually observable differences, sex is related to group identity. Gottfried and Graham(1993) brought up the gender issue in the subculture study, and they conducted research in a Japanese auto-assembly plant in the US. They found that gender is a source of workplace politics. Interestingly, they address hegemonic masculinity created on the shop floor, not in corporate policies or managerial system. Thus, gender will be intertwined with cross-culture issues in MNOs, and it may make subculture study more complicated.

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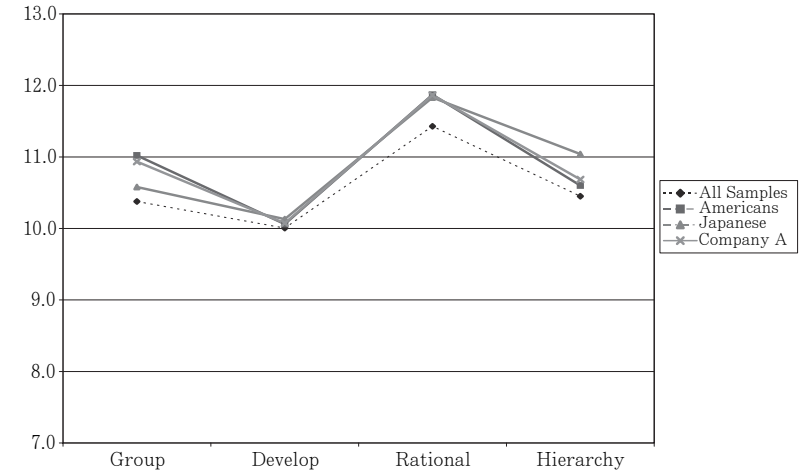
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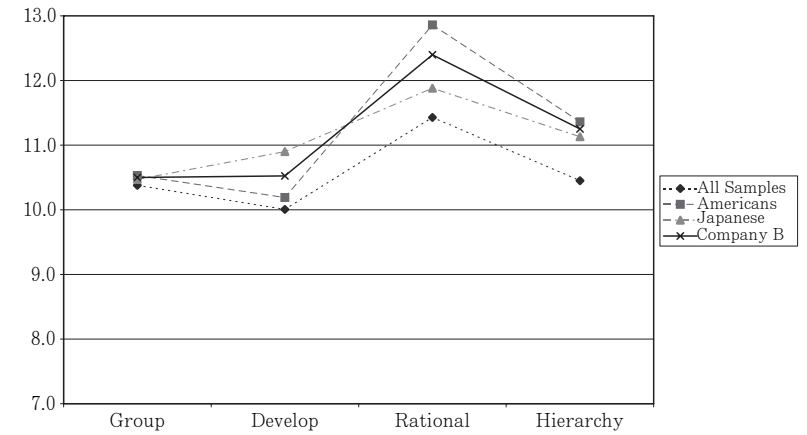
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Appendix

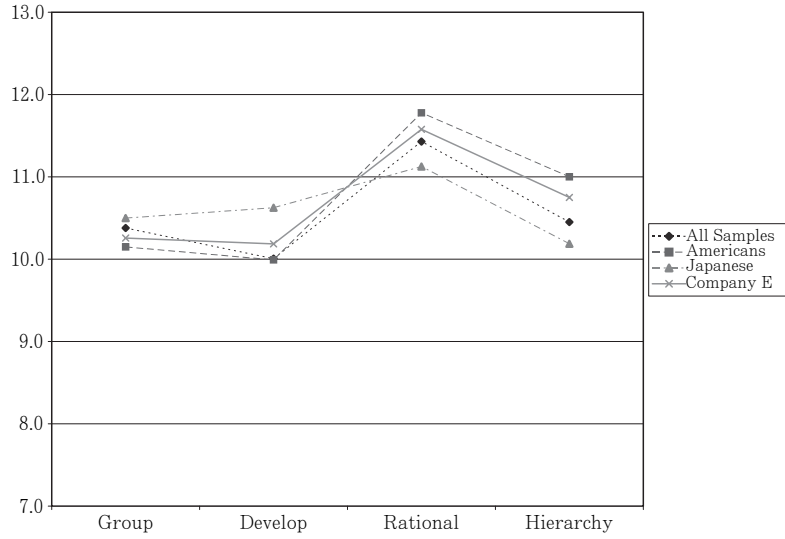
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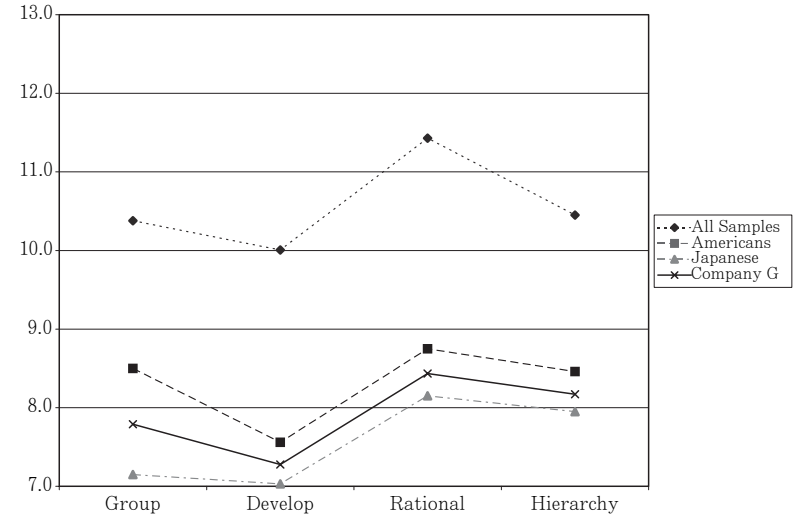
Subculture Assessment: Company B



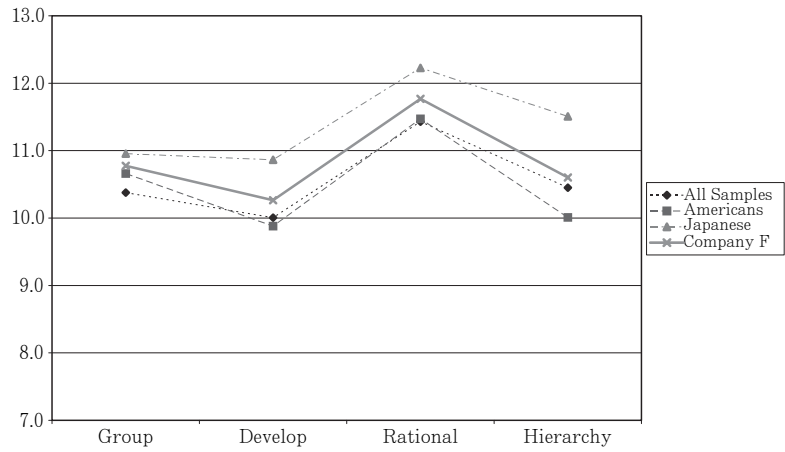
Subculture Assessment: Company E



Subculture Assessment: Company G



Subculture Assessment: Company F



Subculture Assessment: Company H

