

Division of Research  
Graduate School of Business Administration

January 1987

SOME CULTURAL AND SOCIAL BASES OF JAPANESE  
INNOVATION: SMALL GROUP ACTIVITIES IN  
COMPARATIVE PERSPECTIVE

Working Paper #493

Robert E. Cole  
University of Michigan

FOR DISCUSSION PURPOSES ONLY

None of this material is to be quoted or  
reproduced without the expressed permission  
of the Division of Research.



**SOME CULTURAL AND SOCIAL BASES OF JAPANESE  
INNOVATION: SMALL GROUP ACTIVITIES IN COMPARATIVE PERSPECTIVE\***

Robert E. Cole

University of Michigan, December 1986

The subject of the role of borrowing in Japanese economic development has a long and venerable history in the Western literature on Japan. Much of the treatment has focused on the ability of late developers to borrow technology from more advanced industrial nations thereby permitting them to leapfrog stages of development or develop new and successful approaches (Veblen,1922; Ohkawa and Rosovsky,1961; and Dore,1973). Henry Rosovsky (1973) discussed the "social capability to import technology," suggesting that Japan had displayed some distinctive capacities in this area. He went on to discuss the rise of specific institutions (zaibatsu and permanent employment practices) that facilitated such outcomes.

-----  
\*I am indebted to the East Asia Program of the Woodrow Wilson International Center for Scholars for providing the congenial intellectual and physical environment that allowed me to pursue this research.

\*\*Prepared for the Japan Political Economic Research Committee, Volume III, Hawaii Conference, January 4-10,1986. Not to be cited or quoted without author's permission.

In our treatment, we are interested in examining Japan's receptivity to specific organizational technologies for what they tell us about the social and cultural bases of innovation in Japan. The organizational technology we discuss is that of small group activities in industry (e.g., quality circles, self-managing teams). We will examine the evolution of these small group activities between 1960 to the present with a particular concentration on the borrowing process. To discover what if anything is distinctive about the Japanese approach, however, we need comparative analysis. Moreover, simple U.S.-Japan comparisons can be misleading. Therefore, we will include a comparison of Sweden, Japan and the United States in order to explicate our discussion.

### 0.1 General Motivational and Definitional Aspects of Small Group Innovation

We begin with an explanation of why we have focused on small group activities as the organizational technology in question. Over the last 25 years in the advanced market economies and even among some of the command economies, a movement has grown for building small group activities among lower ranking production and office employees. Small group activities refer to workshop or office-based work groups that are given a greater opportunity to exercise direct control over everyday work decisions and the

solving of workshop problems. In the United States, the rise of quality circles (employee involvement groups) and of late, self-managing teams, have come to symbolize this movement. We focus on direct participation first, because direct participation represents an area where the Swedes and the Japanese have been most innovative. Second, scholarly research suggests it is the area that matters most to workers (e.g., Kohn, 1976:111-130).

The movement has been associated in varying degrees and ways with a broader effort for the expansion of employee participation in managerial decision-making. In many countries, this movement arose as a response to a crisis in management confidence that, in turn, derived from a need to respond to a threatened or lost competitive ability. The idea was to find a more effective way to recruit and make better use of employees to achieve organizational goals while satisfying individual employee needs for control over their immediate work environment. There were significant national variations in this regard and indeed such variations are the subject of our analysis.

Advocates strongly maintain that small group activities provide individuals significant participation in organizational decision making. This in turn is said to be a strong democratizing force that finally brings the benefits of political democracy into the workplace. Notions of self-governance and self-determination underlie this perspective (see Dachler and Wilpert, 1978:p.5). Have small group activities, in fact,

operated to produce this outcome and if so under what conditions? How do we square this claim with the neo-Marxist view that small group activities are just one more management technique to control workers. The neo-Marxists see these evolving practices as part of a new corporatist strategy that, by fostering a sense of participation on the part of employees to the organization, destroys collective solidarity among workers and makes workers vulnerable to a higher level of management control (Edwards,1979;Burawoy,1983).

What are we actually comparing when we say that we are trying to explain the spread of direct shop and office floor participation in decision-making in the three countries? It is hard to get "your arms around" the concept of participation in decision-making. This is because participation can occur in many work domains and in different parts of the decision-making process. It is possible to have small group activities with greater or lesser degrees of employee participation. Thus, the term small group activity provides us a generic term without being weighed down by the high value loadings of "direct participation." Such a neutral term makes it possible to examine the processes operating in the three countries with less likelihood that we will attribute values and intentions to actors that do not apply.

Our focus then will be on the introduction of small group activities at the workplace. Specifically, we will examine

quality circles in the U.S. and Japan and the semi-autonomous work groups in Sweden. Quality circles refer to small groups of employees who belong to the same workshop or office, and voluntarily engage in problem solving activities typically focused on improving quality and reducing obstacles to effective work performance. By semi-autonomous work groups or self-managing teams, we refer to a higher level of participation in which the work group collectively makes its own decisions regarding work allocation, recruitment, planning, budgeting production, quality, maintenance and purchasing. The small group activities represented by these labels vary in structure and process across the three nations and indeed over time in a given nation.

## 0.2 The Language of Small Group Activity

Consider the following: in Japan, the key term used to explain the innovation as it began to be applied was decentralization of responsibility. By decentralization, the Japanese do not generally mean delegation of authority to offices down the hierarchical structure. rather for them decentralization means the taking of responsibility for objectives by large numbers of people(cf.Kalleberg and Lincoln,forthcoming:p.247). Generally, the Japanese simply talked about small group activities (shoshudan katsudo). It was

commonly introduced as part of a corporate strategy to mobilize all resources in the firm to overcome foreign and domestic competitive threats. In this sense, management sought to make participation a responsibility, an obligation, of each employee rather than provide an opportunity for them to express their individual talents or self-actualize, California style. Moreover, the term democratization was seldom heard. It was not until the late 1970's that one even began to hear a stress on participation in management (keiei sanku) in the sense even approximating how Americans use the term. Rather, the focus initially was on engineers aiming to solve quality and cost problems at the workplace; the motivational aspects were an afterthought that only came to be explicitly discussed many years later.

One of the earliest scholars to talk about small group activity in the context of participation was Ueda Toshio. In his 1975 book with Hirota Kimiyoshi (Kimiyoshi and Ueda, 1975:25), they discuss the newly raised expectations that small group activities may be a good path toward achieving greater participation (sanku). This was some 13 years after the first quality circles were formed. The increasing tendency of interpreters of the movement to link it to participation occurred partly in response to positive American definitions of what they were doing. Prior to this time and even to a great extent today, when the Japanese use the term keiei sanku and democratization of management, they don't even think of small group activities. Rather, they think



primarily in terms of systems of indirect participation such as the widely diffused labor-management consultation system. For the Japanese, thinking internationally, the term keiei sanku conjures up images of the German co-determination system and other formal representational approaches in continental Europe.

There is another sense in which participation has been used by the Japanese and it is quite revealing. This usage refers to the necessity of the act of participation in small group activities. Shoji Shiba(1983,p.13) summarizes this perspective well when he bluntly states: the real meaning of participation is that:

Every worker participates in the same workshop. Let us say that there are 7 workers in the workshop who work together in the same production line in the workshop. All 7 workers have to participate in the circle activities. Isolation of workers in the workshop is not allowed. Small group activity with the participation of every workers is aimed to perform improvement of the work in which they are engaged in. QCC activity is not an activity for amusement but is an activity for the improvement of the work.

We see clearly here just how their use of the term focuses on the behavioral dimension of all-employee involvement rather than the volitional dimension.

In the U.S., participation in management, quality of worklife, and employee involvement are terms often used by managers to explain what they are doing (Kanter,1983:pp.44-46). Because of the common terminology, we often mistakenly equate participation in the American sense with what the Swedes and the Japanese have been doing in the area of small group activities.

To a somewhat greater degree than Japan, the term democratization (and humanization) of the workplace has been used - and often confused-in the United States. Nevertheless, it is a rather subdued theme relative to other terminology. One leading academic consultant explained to me in 1985: "I used to use the term democratization but I don't anymore because I find it gets in the way of operational objectives." There appears to be considerable confusion about what is meant by the terminology that is used in the U.S. A 1982 study by the New York Stock Exchange focused on the concept of QWL (Quality of Work Life) and human resource investment (New York Stock Exchange.1982:p.22). The study defined QWL as "the effort to encourage employees to participate in the key decisions that affect and determine day-to-day work patterns." The concept of participation appears to be central to how most American managers have understood what they are doing. Through participation, management sees itself as developing tools to tap unused human resources. The motivational consequences in terms of job satisfaction and worker morale are commonly highlighted. A strong element of voluntarism in these initiatives, at least for lower- level employee participants, runs through U.S. managerial thinking

In Sweden, the early movement was strongly punctuated by expressions stressing joint influence and democratization of the workplace. In an influential book in Scandanavia entitled Form and Content of Industrial Democracy, Emery and Thorsrud argued that the objective of industrial democracy could not be fulfilled

alone with worker representation on boards of directors. Rather it must be supplemented with an approach and at a level where "a large proportion of employees are both able and willing to participate."(Emery and Thorsrud,1969 p.86). They had in mind, of course, direct shop and office floor participation. The Swedes stressed changing power relationships between managers and employees at all levels. As one Swedish commentator noted, even when the North American advocates talk about workplace democracy as a goal of new work structures, they commonly have in mind "democratic leadership styles" rather than a transformation of structural relationships as was envisioned by many Swedes(Leymann,1982:pp.47).

The popular symbols and choice of language used to characterize a social movement tell us a great deal about the motivation of actors and the kinds of constraints they impose or have imposed on them. In the case of Japan, focusing the debate on decentralization of responsibility tells us that management was pretty much in charge and they could impose their own categories and labels on developments. In the case of Sweden, the focus on industrial democracy tells us first that management did not have full control of the agenda. Moreover, the Swedes had a highly centralized labor management decision-making system. This meant that advocates of semi-autonomous work groups within labor, management, and academic circles could argue forcefully and believably that there was something missing at the shop and office floor level in terms of democratic decision

making and that semi-autonomous work groups could fill that vacuum. In the U.S. unlike many Western European countries, we had a labor movement with an active shop floor presence at least in the unionized sector. This preempted to a considerable extent the industrial democracy theme and instead we have a rather more modest focus on participation and employee involvement, with the motivational consequences being given great emphasis.

The major implication of this extended discussion is that inevitably there is an element of comparing apples and oranges as we examine small group activities in the three countries. Small group activities are not really the same compared across nations. Rather than trying to completely eliminate the difference in what is being compared--which I judged to be a futile exercise-- the strategy adopted here is to acknowledge those differences. The task is then to try to develop some plausible explanations for why these differences exist and the effects of these differences.

### 0.3 Search, Discovery, and Transmission

Let us turn now to the source of the ideas that formed the basis for small group activities in each of the three countries. As I began investigating small group activities in the three countries, I was soon struck by the importance of the flow of ideas across national borders. How this process operated and its

significance became the subject of further investigation. This in turn led me to examine the nature of the search process used by the national actors at different phases of the diffusion process. In so doing, it shed further light on the nature of decision-making models in use by the various social actors.

In this connection, we need to clarify how we think about the diffusion of ideas and organizational practices across national boundaries. Our approach to this matter is to see the cross-national transmission of ideas and organizational practices such as small group activities as an issue of technology transfer, not so different fundamentally from the transmission of say steel-making technology.

#### 0.4 Swedish Developments: The Paradox of Success

The ideas adopted by the Swedish employers during the early 1970's can be traced to a small degree to the contributions of American behavioral science and particularly the work of Maslow, McGregor and Likert (see SAF,1970). The central line of influence, however derives from developments at the Tavistock Institute in England (Emery and Trist,1969). The Tavistock researchers were strongly influenced by group dynamics and particularly the research of Kurt Lewin, a German Jew who came to the United States in 1932 (Homans,1968,p.259). Lewin did pioneering work in the areas of the determinants of group

decision-making, the productivity of groups, and the influence on individual behavior of participation in group discussions and decisions.

The first social science experiments that display a direct lineage with the early 1970 Swedish efforts to adopt self-steering groups were conducted by Tavistock researchers in the early 1950's. These efforts began in a study of English coal mines and involved systematic comparisons of different kinds of work organization and wage systems and their impact on work performance. They led the researchers to conclude that "composite" forms of work organizations with a holistic approach and stressing group work and responsibility were superior to conventional approaches. The aim was to develop small work groups that maintain a high level of independence and autonomy. This involves high levels of group-oriented work processes and group decision-making. As a consequence, it is expected that jobs and learning possibilities will be enriched and individual responsibility increased. All this is to be achieved without any loss in productivity compared to conventional work organization.

English employers were slow to adopt these ideas, but they were carried to Scandinavia--especially to Norway by Einar Thorsrud, a charismatic and visionary Norwegian scholar (see Cherns, 1979). The ideas came to Sweden directly and indirectly, directly through the work of some scholars like Eric Rhenman(1964), a researcher associated with the Swedish Employers

Federation and Reine Hansson, a Swedish scholar who conducted studies during 1967-69 on work motivation.

The ideas were also carried to Sweden indirectly through Norway. Three of the key events that served as a transmission belt from Norway to Sweden were: a visit to Norway in 1966 by a Swedish union and management team led by Reine Hansson who was close to Thorsrud's research, the translation of Thorsrud's research into Swedish in 1969 under the auspices of a joint labor-management publication company (Thorsrud and Emery, 1969), and a grand conference (a "hallelujah conference" as some Swedes called it) held in Stockholm in 1969 with Thorsrud as guest speaker. The conference was sponsored by the technical department of the Swedish Employers' Confederation (SAF) and attended by officials of major companies as well as selected union officials.

Interestingly, Thorsrud's ideas were never as fully accepted in Norway as they were in Sweden. This is commonly explained by the lack of suitable mass production industries in Norway, middle management opposition, too heavy reliance on academic consultants, and the hostility of organized labor. Swedish scholars often say that the ideas developed in England, were tried out in Norway, and achieved their widest diffusion in Sweden.

The sociotechnical approach is a diffuse package with far-reaching implications for the firm's organization. This

diffuse quality, deriving from ambiguous operational goals and technology, undoubtedly slowed the diffusion process. It was not the packaged solution with known costs and outcomes that management preferred. As Per Gyllenhammer, the President of Volvo, remarked in a 1984 speech at a Volvo workshop on production technology and quality of working life, "management wants balanced change where you know what will happen-where you can manage change- and therefore it is good."

In addition to this diffuseness, we noted earlier that the socio-technical package had strong democratizing overtones. Thorsrud's and his collaborator's books typically focused on the theme of industrial democracy and democratizing the workplace. They offered a strong challenge to the traditional hierarchical control structure. The notion of autonomous work structures explicitly was linked with the freedom of workers from oppressive and arbitrary management controls. Thorsrud was known in the early days of the movement in Sweden as "the foreman killer." We can see this challenge in the early descriptions of "psycho-social job design criteria" set down by Thorsrud and his collaborators in the early 1960's. They assume that acceptable standards for income and job security have already been achieved. The criteria they set down was expressed somewhat differently from publication to publication but it basically included the following criteria:

1. Freedom (for individual workers) to make decisions about how to work;



2.A meaningful set of tasks offering some variety and some free space to develop the job over time;

3.Opportunity for learning on the job and to continue learning on the basis of feedback of results and future needs;

4.Freedom to give and receive help on the job and to establish mutual respect between people at work;

5.Recognition outside the workplace for doing a useful job and gaining social respect for it; and

6.Some form of desirable future in the job not only in the form of promotion(Thorsrud,1984).

While a number of these criteria, seen in isolation from the others, could be supplied by management action, the very first, "freedom to make decisions about how to work" sets the tone for the whole approach to work design in a way that is diametrically opposed to the control system of traditional bureaucracy. These criteria were widely discussed in Sweden during the late 1960's and early 1970's (SAF,1971;Torner,1973).

This initial discussion in Sweden, however, was followed by a gradual diminution of the democratic theme as the concept was applied by management over time. That is, there was a sanitizing of the the originally radical concepts as management came to tailor the implementation process to their own needs. In the late 1960's and early 1970's the term democratization of the workplace was much in vogue, particularly as used by trade unionists, scholars, and the mass media. But gradually as management took over control of the implementation process, the theme of democratization diminished in importance at least as applied to small group activity on the shop and office floor.

Nowhere is this seen more clearly in the shift in the language describing what managers thought they were doing. The term autonomous work groups (literally self-steering groups in Swedish) fell rapidly into disuse by management as one moved into the early and mid-1970's. Increasingly the term production groups came to be used. By 1974, the Technical Department of the Swedish Employers Federation in a summary report could write:

Autonomous groups became for a time somewhat of a fad-today this term is less common and one now speaks most often of production groups which better describes what it deals with.

By the late 1970's and early 1980's, the term autonomous work groups had fallen into total disuse. Management talked rather about "group work" or "group organization" as one part of the creation of "new factories" that are characterized by: small independent production units, untying of employees from machine-pacing, jobs with more personal involvement, and fast and reliable production systems (Aguren and Edgren, 1980).

Concerns about democratization of the workplace had been replaced by a strong focus on improving productivity and quality. In 1984, a workshop at Volvo's Skovde engine plant was held for foreign and local experts to see and discuss the current status of group work and new directions in work organization at the plant. At that workshop, Rolf Lindholm, a major formulator of the Swedish Employers Federation policy in the 1970's, commented quite impishly to the plant staff as follows: "When I talked with managers in the early 1970's, it was a concern to

meet the needs of human beings that drove change forward, but today it has the smell of business." Much of the discussion in the late 1970's centered around the kind of understanding that labor and management would reach regarding the implementation of the new co-determination law. But by 1984, the Dagens Nyheter, the leading Swedish newspaper, reported that unionists and management were no longer talking about co-determination but rather about "development" which they defined as "local solutions for local problems." Furthermore, "the new slogans, 'change' and 'development' belong together with service, efficiency, and all that is now called 'management' [Dagens Nyheter, April 29, 1984, p.16).

What we see here is the conversion of a blossoming mass movement stressing democratic principles to a much narrower business tool. In the course of this transformation, a good deal of the enthusiasm and motivation that drove the original changes forward evaporated. The initial conversion of radical scholarly theories to practical management knowledge may well have been necessary to insure managerial acceptance. But this very narrowing, in dialectic fashion, seems to have limited the potential for more widespread diffusion and acceptance by employees and unions. It is not surprising, therefore, that when I met Thorsrud and Hansson in late 1984, not long before their deaths, they both expressed considerable disappointment at the direction developments had taken.

## 0.5 Japanese Developments: From Elitism to Mass Movement

In the case of Japan, we see initially a similar cross-national diffusion process, but the source of the ideas was primarily the United States. American behavioral scientists' research is well known in Japan. It is part of a broad "management boom" in the postwar period in which from the 1950's ideas of American management in all fields, especially personnel administration, achieved an especially exalted position among Japanese management officials. When the United States was unquestionably the most advanced industrial nation in the early postwar period, in addition to being Japan's conqueror and occupying power, it was not surprising that the Japanese were willing and eager to study American management techniques. Generally, the Japanese were willing to make the assumption that American management techniques were the most advanced, independent of any objective confirmation. They soon found, however, that they had to adapt them to fit Japanese environmental conditions.

In the area of small group activities, as in Sweden, the research of McGregor, Maslow, Likert, Arygris, and Herzberg, to name a few key individuals, is particularly well known in Japan. This is a function of an almost instantaneous translation of books and articles, a steady stream of Japanese students to the

United States (many of them were company employees doing graduate work), and invited lecture tours of American experts to Japan. It would be rare to find a personnel head of a major firm who was not well versed in the various ideas of leading American scholars in this area. These ideas, combined with and adapted to indigenous values and practices, formed part of the foundation of the Japanese effort in the area of small group activities.

We can see these processes in the work and influence of Juji Misumi, a noted social psychologist in Japan. He studied at the University of Michigan in the mid-1950's and came under the influence of many of the students of Kurt Lewin (e.g., Lippitt, Zander, Cartwright).<sup>1</sup> Based on these understandings of group-decision making processes he conducted research in Japan upon his return that led him and his co-workers to stress the importance of small group discussions conducted prior to self-decision as a basis for group decisions. In 1963, he began work with a large bus company stressing a series of small group meetings to devise strategies for accident reduction. The results of these activities were quite successful and the company expanded these activities throughout the entire bus department in 1969. At the same time, they merged the Misumi derived programs with the Zero Defect(ZD) program in vogue in Japan at that time (Misumi,1980). The ZD program was also a U.S.

-----

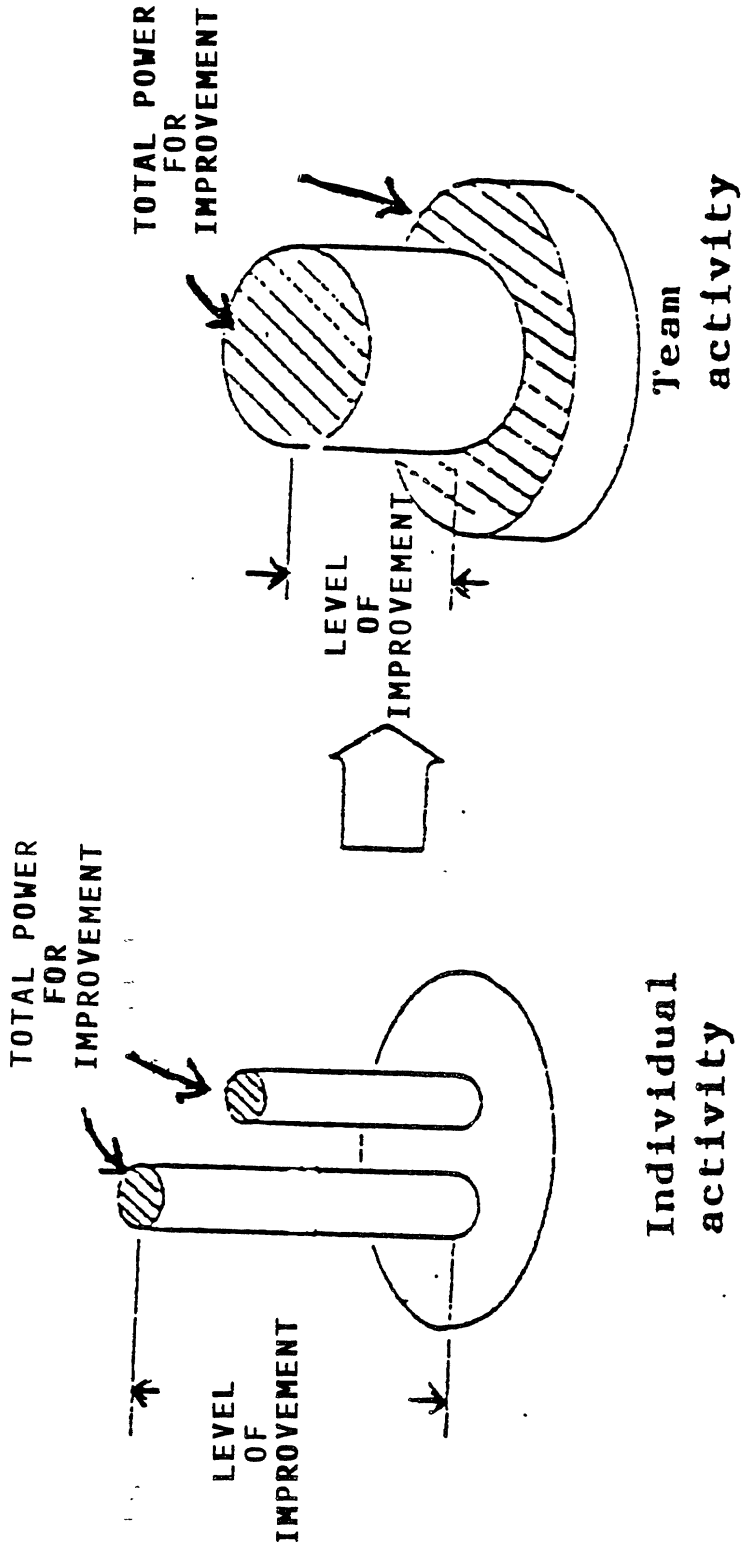
1. Kurt Lewin may come about as close as we can to the intellectual godfather of industrial applications of small group activities.

originated program begun by quality control personnel in the Martin Company in connection with their contract for the Pershing Missile System for the United States Army in the early 1960's (Halpin,1966). ZD became identified as a motivational campaign for workers aimed at zero defects in production. The program was modified by the Japanese to stress small group processes and in turn has subsequently merged with the quality circle effort in the eyes of most Japanese managers. We see in microcosm here the process by which Japanese students of American social science and organizations incorporated their new ideas and modified them in the course of applying them to Japanese work organizations. We also see how they merged with the different streams of development arising from the technical quality control discipline.

These streams also merged with traditional approaches to group activity in industry. In the interwar period, Japanese firms had carried on discussion and study practices among work teams (see Okuda, 1968-1971). Thus, they had in their behavioral repertoire (tradition) experience with small-group activities, albeit on a more authoritarian model. Underlying these experiences is a view that lots of small improvements will be superior to a few large scale initiatives. This, in turn, leads to the perspective that large numbers of lower ranking employees can make a major contribution to organizational objectives. We can see these culturally-based ideas in a diagram developed by the Bridgestone Tire Company and used in their training

FIGURE 1

RELATIVE CONTRIBUTIONS OF ALL-EMPLOYEE INVOLVEMENT SYSTEM



\*Adapted from Training Materials of Bridgestone Tire Company.

activities (see Figure 1). The message is clear; the contributions of team activity outweigh selected individual contributions, however excellent they may be. superior initiatives.

We can pursue the contribution of the quality control discipline in Japan to the small group activity movement through an analysis of the evolution of quality circles. This will also give us a sense of the Japanese capacity to borrow and adapt Western organizational technology to their own needs. The quality control circles are the essence of the Japanese approach to small group activities. They represent a most creative example of the process of borrowing and adaptation in the personnel policies of large Japanese companies.

Before 1945, Japan had only modest experience with modern methods of statistical quality control. The Japanese Union of Scientists and Engineers (JUSE) was established in 1949 and became the focal point of efforts to introduce modern quality control practices and later quality control circles in Japan. An early postwar effort to improve quality was organized by U.S. occupation officials as they sought to restore basic services such as telecommunications. They helped arrange for American statisticians to go to Japan and teach American wartime industrial standards to Japanese engineers and statisticians. Prominent in this early effort was a series of postwar lectures beginning in 1950 undertaken by Dr. William Edwards Deming to



teach the Japanese statistical quality control practices (e.g., control charts and sampling inspection).

In 1954, Dr. Joseph Juran, the noted quality control expert arrived in Japan for a series of lectures. He emphasized a newer orientation to quality control stating that it must be an integral part of the management function and practiced throughout the firm. Feigenbaum's book on quality control in 1960 was also influential with its emphasis on total quality control (TQC).

These ideas spread rapidly in Japan from the mid-1950's through the early 1960's but there were some critical innovations (adaptations) on the part of Japanese firms as they began to adopt these ideas in their daily practices. In the Japanese reinterpretation, each and every person in the organizational hierarchy from top management to rank-and-file employees were to study quality control concepts and take responsibility for their implementation. As they began to teach foreman the concepts of quality control, the idea evolved to create study groups at the workshops composed of the foreman and his subordinates as a means of getting workers to take more responsibility for quality (JUSE, 1971:9). In particular, these study groups were seen as a solution to the problem of how to make the workers read the materials on QC that were being prepared. Group activity would encourage those to read who were otherwise not so inclined.<sup>2</sup>

-----

2. Interview with Ishikawa Kaoru, 1977.

Such developments, in turn, evolved into the quality control circles of today. An examination of the first issue of The Workshop and QC published in April 1962 by JUSE reveals a conception of workshop activity relating to quality that was still somewhat removed from the actual operation of quality circles today. The focus was on training foreman how to work with their employees to get the employees to accept and maintain work standards so that quality objectives would be met. Getting workers more involved in taking responsibility for setting and revising work standards was the strategy advocated (JUSE, 1962). The circles developed as a rather spontaneous adaptive process as management began to extend the new ideas of quality control. Gradually, these ideas growing out of the quality movement merged with the ideas of decentralization of authority and group decision making.

Not only were all employees from top to bottom to be involved in taking quality responsibility but all functions of the organization from marketing and design, and purchasing down through sales were also to take responsibility for quality in the new Japanese reinterpretation. Unlike Feigenbaum's narrow conception of TQC which still left responsibility for quality assurance with the quality control department, the broadened Japanese conception stressed that all departments had to take responsibility for quality control through coordinated action. In a similar fashion, they developed creative strategies for coordinated departmental action through incorporating customer

demands into the product design and production cycles.

In summary, we see dramatic adaptations of Western ideas on quality control as innovations were introduced in the course of its adoption in Japan. Of particular significance for our subsequent discussion is the Japanese conversion of the Americans' elitist-anchored system of specialists in quality control taking responsibility for quality to a mass system in which all employees and departments were expected to take responsibility for quality. It was in this special sense a "democratization" of the elitist American approach to quality control. Similar when the definitive history of the quality control movement in postwar Japan is written, it will include a strong emphasis on the role played by the "democratization of statistical methods." These developments made it possible for ordinary employees to participate in organizational change. As such, it is exactly the opposite of the process that took place in Sweden where the democratic ideas of the Tavistock researchers were sanitized to make them acceptable. This is not to say that the Japanese adopted a Tavistock perspective on democratization. For the Japanese, democratization in this context meant mass participation rather than expanded autonomy for individuals and groups of employees at the expense of the hierarchical control system.

Many of the Japanese innovations arose in incremental and spontaneous fashion as managers and workers extended Western

ideas to their logical conclusion in ways totally unanticipated by either the American experts and often not even the Japanese leaders. The general principle of taking Western management strategies developed for use, by and on, management personnel and applying them to blue collar workers has been a characteristic practice in postwar Japanese corporations. Thus, the evolution of quality circles fit with a more general borrowing pattern that reflects egalitarian trends in the postwar period that broke down the barriers between white- and blue-collar workers (Shirai,1983:pp.117-143). The extension of monthly pay systems and bonuses to blue collar workers in the postwar period is one manifestation of this egalitarianism. Still another example is the transfer of American ideas on career development to Japanese firms. These ideas on the importance of developing careers for employees and associated policies were developed in America and designed for application to managerial employees. The Japanese characteristically borrowed many of these ideas and extended their application to blue collar employees (Cole,1979:pp.41,172-173; Koike,1983:pp.29-61).

#### 0.6 Limiting Factors in the U.S.

To appreciate the different trends in the U.S. at the very time the Japanese and Swedes were moving rapidly toward adopting small group activities, we turn to a consideration of the

contributions of Charles Kepner and Benjamin Tregoe. The comparisons take on added meaning in the light of the aforementioned propensity of the Japanese to extend Western ideas developed for management personnel to blue collar workers.

Kepner and Tregoe were quite influential in American management circles in the 1960's and 1970s with their introduction of an approach to problem solving and decision making for individual managers. At the time that the Japanese were developing quality circles, these researchers were crystallizing their approach for teaching individual managers how to systematically solve problems. In their 1965 publication, The Rational Manager, they claimed to have put 15,000 American managers through their courses. An examination of their text leads to a number of interesting observations. First, the techniques espoused for identifying, prioritizing and solving problems, though on an individual level, were not so fundamentally different from those being taught to blue collar workers in Japan. In some respects, the Japanese techniques came to be more sophisticated! For example, the Japanese took another American development, value engineering, developed for engineers to use for assuring that the essential functions are provided at minimum overall cost, and introduced it for use among circle members. Many American managers would be ill-prepared to handle this technique. It is also a minor irony to note that in the late 1970's and early 1980's, a number of major U.S. corporations explicitly absorbed some of the features of Kepner-Tregoe

training into their quality circle training materials. It was not until their 1987 workshop schedule that Kepner-Tregoe announced that their new materials included:

a totally new approach to statistical process control which permits this powerful tool to be used not only by managers but other key shop floor workers and specifically develops trouble-shooting skills enabling them to participate in quality improvement opportunities.

Perhaps, they might someday get to the point of developing materials that not only key shopfloor workers could use, but all shopfloor employees.

Secondly, in their discussion of the research of the noted scholar Rensis Likert, Kepner and Tregoe criticize his advocacy of group action and participative management for lacking problem-solving and decision-making techniques. In retrospect, we can see that what was required for the equivalent of small problem-solving groups at the shop and office floor to have emerged at this time was first to have combined Likert's ideas on group action with Kepner and Tregoe's ideas and secondly to have had the imagination to recognize that these ideas could apply to employees at all levels of the firm. The proprietary nature of the Kepner-Tegoe materials limited those opportunities. But even more importantly, we can see that the emphasis on the individual and on the decision-making authority of the manager blinded American managers and researchers at this time from seeing the advantages of group action at the shop and office-floor level.

In the history of technology transfer the process by which the inventors of a technology are not necessarily the commercializers is common. The jet engine, for example, was invented in England but successfully commercialized in the United States (Miller and Sawers, 1970). The causes of this disjuncture became the basis for an interesting intellectual inquiry.

Why has American management been so slow in adopting the ideas of American scholars in contrast to the interest shown in their work by foreign scholars? We have already suggested some explanations through our analysis of the Kepner-Tregoe contributions and why they took the form they did.

At another level, Japan and Sweden are oriented to the outside world to an extent that is hardly for Americans to understand. Both perceive themselves as relying heavily on export industries to sustain their standards of living. In the case of Sweden, some one third of the GNP is accounted for by exports. In Japan, there is the sense that it is only by adding value to imported raw materials and then exporting the product that they are able to secure the basis for national survival. As a result, in both cases, they believe that their success, indeed, their very survival as nations, depends on their ability to search out and absorb ideas from abroad rapidly and efficiently. In both countries, if a solution to a problem is not immediately at hand, it comes as second nature to management to look for solutions outside their national borders. To succeed in foreign

markets, they have learned to be open to different cultures. In Japan, this stems in large part from the "catch-up" mentality that has dominated the thinking of industry and government officials for over the last one hundred and twenty five years. To catch-up, you had to be prepared to adopt the better ideas developed in the more advanced Western nations. Moreover, the loss to the United States in World War II and subsequent occupation by a foreign power for the first time in its long proud history had a profound humbling effect that is hard for foreigners to understand. In the case of Sweden, the humbleness necessary for strong receptivity to foreign ideas seems to derive more from the small size of the country. As one industry official explained to me:

Swedes believe that there is always something better somewhere else. It is inconceivable for them with only eight million people and such limited resources to think that they have arrived at the best solution to a given problem. Therefore, they are always looking for ideas from abroad.

The net result is that for diverse reasons mapping their foreign environment in a systematic fashion is a well-institutionalized practice in both countries.

The situation of the United States is very different. Until recently, Americans appeared confident of their own managerial abilities and technology and not very attuned to learning from abroad. Even in the area of hard technology, not to speak of organizational technology, American companies maintained few listening posts in Japan relative to the size of the Japanese



effort in the U.S. Indeed, even with all that has happened between 1970-1985, it can be said without the slightest fear of contradiction that U.S. monitoring of global developments in technology is woefully inadequate. Yet, increasingly our firms operate in an environment where new developments in management and technology are occurring outside U.S. borders (cf. Rowand, 1985:p.15). To take the example of organizational technology, we have seen how few American managers are directly aware of the contributions of Emery, Trist, and Thorsrud; the same can be said to an even greater degree for the Japanese gurus of small group activity. With a vast domestic market, the U.S. economy cannot be said to be export oriented to the extent of Japan or Sweden. American managers were accustomed to being on top, and until recently there was not the same incentive to learn from others.

Moreover, the ideas put forward by American behavioral scientists seemed to fit much better with existing organizational practices in Japan and with their prevailing managerial philosophy than they did in the United States. The Japanese scholar Shin'ichi Takezawa (1976, p. 31) caught the sense of this in the following remarks:

The behavioral science model of management, however, is not perceived as an antithesis of the organizational reality as it might be in the United States. Instead, Japanese managers tend to accept the model as an idealized goal which essentially lies in the same direction as their own behavioral orientation. Often, they are puzzled to find out that American management in practice fits the scientific management model far better than that of the behavioral sciences.

This difference provides an explanation for why these ideas were so eagerly received in Japan and why, once exposed to small group activities, they led to a choice opportunity. Similar judgements could be made in comparing the Swedish management response with the American.

In the United States these same ideas did not lead to a choice opportunity; rather, they were seen as threatening to many managers and union leaders. The prevailing adversary relationships between managers and workers and managers and unions constitute a formidable obstacle to the adoption of new ideas about organizing work in a cooperative fashion. The notion that worker loyalty and cooperation can lead to significant improvements in productivity tends to be seen as either trivial or impossible to achieve. In short, the gap between existing practices in American industry and the new managerial philosophies has been so great as to make search and adoption problematic. Small group activities were simply not on the agenda of solutions for most American managers in the 1960s and 1970s, nor was the issue the province of any particular managerial level or department. It is no wonder then that Japanese and Swedish managers acted more quickly than American management in searching out, adopting, and transmitting ideas concerning small group activities.

## 0.7 Cultural Aspects of Borrowing and Adapting Small Group

### Activities: Concluding Observations

What if anything about the Japanese experience with small group activities in the last 30 years that suggests a distinctive and important role of national and/or organizational culture in their achievements? At the national level, their attitude and behavior as regards borrowing comes immediately to mind. There is no hesitation about recognizing backwardness in economic and overall organizational performance, but rather than accept that status, we see a fierce determination to overcome obstacles, borrowing whatever and from wherever was necessary. The catch-up mentality associated with their late-developing status is paramount. Associated with this mentality is the sense that existing institutions and rules are only temporary. Change and innovation are the norm. One cannot emphasize enough the significance of this point. As I watch American workers and managers struggling against the glue of past practices and ways of thinking, the sheer difficulty of conceptualizing alternatives much less implementing them becomes overwhelming.

What the Japanese borrowed from abroad typically was combined with indigenous ideas and practices to produce something new. The "new things" were often organizational inventions such as quality circles and systems that operationalized the idea that

every employee regardless of status and every department (TQC) has a contribution to make to quality improvement.

The cultural element in this borrowing process arises from Japan's experience as an island nation seeing itself surrounded by superior nations throughout much of its history-first the Chinese and then the West. Out of those interactions developed an almost instinctive tendency to look abroad for solutions almost as easily as one searched for domestic resolutions. One can not help but contrast that to the insularity of American management, its slowness in recognizing the international economic challenge and its slowness in responding through intense study of the Japanese experience. While there was a vogue of studying the Japanese in the early 1980's, it was soon followed by a reaction of "I can't bear to hear anything more about the Japanese." The Japanese by contrast have been studying America, its institutions, and practices for almost 125 years. While there have been moments of xenophobia, they seem not to have tired of the effort, even now when they are acknowledged to be leaders in many areas.

While we see the same ability to borrow from abroad among the Swedes, it is not associated with that same aggressive catch-up mentality and does not give rise to the same level of adaptation in creating new organizational inventions and an ability to implement these innovations. In the case of small group activities, despite the image of Sweden as a pragmatic society,

ultimately we see that the rhetoric of democratization and management's foot dragging reactions reflected the strong hold of a class society where neither party to the labor market was prepared to give up its vision. We can say that to date Sweden is a society that tried more and accomplished less in this arena while Japan was a society that tried less and accomplished more.

What about the focus on all-employee participation in achieving organizational improvement? At one level, the notion of cooperation and participation of all employees in achieving organizational goals does have cultural roots and we have discussed these. Yet, it is also true the prewar Japanese organizations were noted for their autocratic style. Defeat in World War II discredited those prewar and wartime autocratic leaders and opened the way to new talent and a stress on all-employee participation.

The breaking down of barriers between white-and blue-collar workers was particularly important. It meant that management had less of a tendency than in either the U.S. or Sweden to tailor new job opportunities, compensation systems and human resource programs in general, to one or the other group. In avoiding this differentiation, they minimized the construction of two classes of citizenship with all the negative implications for management-worker cooperation. If not a part of national culture, the openness to utilizing human talent is at least a major feature of the organizational culture of large Japanese

firms-at least among regular male employees. To be sure, there are some companies, typically upstart newcomers like Honda and Sony, that excelled relative to their more bureaucratic counterparts. But overall, the performance of Japanese companies in this regard has been strong-perhaps because viewed from the perspective of the world economy they have all been upstart companies. In the same connection, the stress on small incremental changes adding up to big contributions can be said to be an integral part of the Japanese cultural inheritance. It underlays the focus on mobilizing all-employee participation in small group activities.

Yet, while many Westerners want to stress cultural aspects of Japanese economic success, many Japanese involved in forging the new postwar organizational systems are likely to stress the enormous efforts involved in transforming organizational practices and culture. Company histories and management recollections are full of melodramatic scenes of crisis as the protagonists seek to turn around their organizations against all odds. Many of the practices that we identify as culturally distinctive in large Japanese private sector firms such as lifetime employment can be seen as impediments to change. These impediments are seen as being overcome by the same strong dose of top management commitment and vision and follow through, that students of Western organizations stress. Group activity may have a long history in Japan but there is nothing in that cultural tradition that guarantees a task orientation to

organizational improvement. Strong managerial direction was necessary to turn the tide.

Yet, in the end it must be said that Japanese managers in the postwar period have shown a strong ability to maximize employee potential without losing their sense of organizational purpose. The focus has been on decentralization of responsibility more than democratization. Ultimately, these kinds of choices and the ability to make them stick rest on powerful cultural constraints rooted in traditional authority systems. Once the militant unions in the private sector were broken in the early postwar period, there was little fear on the part of management that their movement toward decentralization would lead to a challenge of their authority. Such confidence was and is far less apparent in the United States and Sweden.