

THE JAPANESE FACTORY RECONSIDERED

by Hiroshi Mannari

The common notion of Japan's industrial organizations is that they are radically different from their counterparts in other industrial societies. But are Japanese organizations so different? We need to formulate a more comprehensive research model to describe and explain industrial organizations and practices in Japan from a cross-cultural perspective. This paper is an attempt to evaluate the theoretical models of some classic and some more recent comparative empirical research on Japanese industrial organizations. I hope that the Japanese experience may be useful to those who are interested in social development in Asian countries.

Theoretical models based on substantial research findings by Japanese and Western sociologists reveal the complexity of the social and cultural processes of industrialization in non-Western nations. A central issue in these works is whether industrialization results in convergence of the structure and functioning pattern of Japanese factory organization with those of Western organization models, or whether the Japanese organization remains unique. There are wide disagreements between these two divergent views on causal factors in determining organizational structure and performance in the Japanese factory.

Among recent researchers, one group emphasizes historical and cultural forces persisting through the more advanced levels of industrialization and gives particular attention to the role of tradition in governing the attitude and behavior of contemporary Japanese management and workers (Abegglen 1958, 1969; Hazama 1964, 1974; Whitehill and Takezawa 1968; Cole 1971; U.S. Department of Commerce 1972; Dore 1973; OECD 1977). The other group, representing the convergence theory of industrialization, insists that technology common to industrializing societies generates increasingly uniform patterns of rational,

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universalistic, and functionally specific relationships (Taira 1970; Azumi et al. 1974; Odaka 1975; Marsh and Mannari 1976; Johnson 1977).

CULTURAL MODEL OF THE JAPANESE FACTORY

I would like to examine the theoretical framework, research methods, sample, and interpretation of the data in comparative studies of the Japanese factory. The first development of a classic cultural model was done by Abegglen in his well-known work, *The Japanese Factory* (1958). In it he denotes the national culture as the determining factor of social organization and productivity of the Japanese factory.

Abegglen believes that modern industrial organization is an outgrowth of earlier forms of social organization. He claims, "Whatever their similarities in technology and external appearance, the American and Japanese factory organizations differ in important ways" (Abegglen 1958:9). Using anthropological field research data, he indicates that Japanese factory social organizations are systematically different from the Western model in the following ways: The relationship between the firm and the employee is one of lifetime commitment—the employee enters a firm after completing school and remains in the same firm until retirement. The basic link between the employee and the firm is more a matter of loyalty and reciprocal obligation than a rational economic calculus (Abegglen 1958:17). There is a seniority system according to which base pay, allowances, and promotions depend more on age and length of service in the firm than on job performance.

Later, Abegglen elaborated his position further, saying that industrial organization in Japan has followed a different course from that of the United States; yet it has also achieved outstanding results (Abegglen 1969:100). Abegglen suggests that a functional alternative operates in the Japanese factory to achieve higher industrial performance. I shall explore the truth of his statements later.

Another important study of the Japanese factory following the cultural model was presented by Hazama (1964), giving historical depth regarding the uniqueness of Japanese personnel management. Through a detailed examination of personnel management history, he documented the thesis that paternalism or familistic management predominated in Japanese firms throughout various industries. To define *familistic management*, he analogized a corporate firm to a household (Hazama 1964:18). Familistic management is characterized by status hierarchy, lifetime commitment, seniority wages, provision of welfare programs, and paternalism in labor-management relations. These traits originated from patriarchal social organizations in the feudal period and have been transmitted to modern capitalistic firms (Hazama 1964:39). Familistic

management satisfies the needs of employees for security, status enhancement, economic reward, and emotional identity. Thus this type of organization seems quite rational in managing employees, if not formally rational. It should be noted that paternal management was an important part of organizational practice before the Second World War. In the postwar period, paternal management has been modified into a kind of welfare corporatism (Hazama 1964:43) to meet the needs of modernized and democratized industrial workers. In the present welfare corporatism, both management and employees share common goals. Industrial peace dominates their industrial relations (Hazama 1971:98).

Abegglen's and Hazama's studies represent the classical model of cultural determinism of Japan's factory social organization. These writers claim that Japanese cultural patterns persistently shape the organizational structure of the factory and its effective functioning. Robert M. Marsh and I called these approaches the *paternalism-lifetime commitment model* of the Japanese factory (Marsh and Mannari 1976:6). Although Abegglen and Hazama built their concept on their field research, either anthropological or historical, their presentations lack systematic and precise comparisons between Japanese and Western factory organization, but they do indicate there are differences.

Later studies of Japanese factories made progress in methods for comparing complex organizations both in intra-cultural and cross-cultural approaches. Whitehill and Takezawa (1968) compared the perceptual framework of unionized workers in a selected comparable sample (four factories each in four industries) in the United States and Japan. They found that Japanese workers, in comparison to the U.S. workers, exhibit "more loyalty in the sense of total commitment or overall expression of positive identification with the enterprise" (Whitehill and Takezawa 1968:345). In examining cultural determinism versus the rational convergence model among industrial societies, they arrive at the conclusion that despite common needs of industrialization in Japan and the United States, national cultures in the two countries have a persistent effect upon perceptions of workers.

Cross-cultural comparative studies of Japanese factories and British factories were presented by Dore (1973) and Hazama (1974). These were the outcome of their collaborative field research. They selected comparable factories in Japan and Britain, justifying the comparability to the sample by the facts that both countries represent highly capitalistic industrialized nations, and that the selected factories produced the same product. The sample thus shared common characteristics in economic systems and technology in the broad sense. According to Hazama, all differences in social relations in labor and management relating to structure and function can be attributed to the social and cultural dif-

ferences of the nations. He describes how class culture, individualism, group solidarity of workers, and other cultural factors in Britain determine labor-management patterns and organizational structure in British factories. Differences in productivity between the two nations are attributed to the social and cultural conditions in each nation since World War II. These conditions either directly or indirectly determine factory productivity through organizational structure.

Even though he compares factory organizational variables of the two countries, Hazama holds the position of cultural determinism and emphasizes that although social relations in factories may change, the change is caused by changes in the culture. He neglects to consider the impacts of technology, affluence of workers, democratization of workers, and industrial social relations. Do these factors not determine structure and functioning patterns in modern large scale factories in both countries?

In a comparison between a British and a Japanese factory, Dore constructs a conceptual framework describing the various ways in which the industrial practices in the two countries differ from each other, and explains where the differences come from. Diversity in industrial relations is explained by differences in cultural and historical backgrounds of the two nations.

Dore depicts British industrial relations as rooted in a market-oriented approach, sharply contrasting with welfare corporatism. He characterizes Japanese practices, which are by now familiar, thus: the typical Japanese factory is "organization oriented," that is, employees have a lifetime commitment to one firm; there is a seniority-plus-merit wage system; one has a career within the firm, is trained in and by the firm; unions are specific to the firm; the source of one's welfare is the firm, not the government; and a high degree of consciousness of the firm as such is nurtured. These characteristics are contrasted by Dore with the British model, which is "market-oriented," with considerable inter-firm mobility, "a market-based wage and salary system, self-designed mobile rather than regulated careers, publicly provided training, industrial or craft unions, more state welfare and a greater strength of professional, craft, regional or class consciousness" (Dore 1973:264).

At a deeper level, Dore declares, the two types of employment systems vary along three pervasive cultural dimensions: the Japanese are more group oriented, are more submissive, and have a stronger work ethic than their British counterparts. Furthermore, he indicates that present Japanese industrial practices originated in pre-industrial employment systems of personal paternalism. Institutional continuity persists in their later industrial practices. He claims that many factors of the modern Japanese system (bureaucracy, moral commitment, in-firm training, recruitment,

and selection) may all be seen in a government-owned dockyard in the 1880s. In the course of Japan's industrialization, its industrial system has evolved to shape a corporate paternalism or a welfare corporatism.

Although Dore supports the divergence model in industrial development, he adds a striking new theory to this issue. He develops a *reverse* convergence model, in which industrial practices in Britain will change to resemble Japanese practices, rather than Japan changing in the British direction. Specifically, Dore sees Japanese and British firms as converging toward a new set of universal properties of modernization—welfare corporatism. This complex includes company-based trade union and bargaining structures, the firm as the unit of welfare and security, greater stability of employment and integration of manual workers as “full members” of the firm, greater bureaucratization, and a corporate ideology. This, not earlier Western individualism, is the wave of the future in all highly modernized societies, says Dore. And Britain has more catching up with the welfare corporatism complex to do than Japan, because Japan's traditional and “early modern” phases already resembled the complex more than do Britain's corporations even today. Since Japan was a latecomer to modernization, the large corporation set the pace in Japanese industry from the beginning; the second major element underlying welfare corporatism—democratic and egalitarian ideals—hit Japan in a great post-1945 flood before union-management relations acquired the institutional rigidity they have in Britain.

As a whole, Dore claims a certain trend toward convergence between the British and Japanese industrial relations, using a historical approach. His idea is different from the convergence theory, in which the process of industrialization (through the demands brought about by factors such as bureaucratization, technology, rationalization, and industrialization) forces any modern industrial society to find similar solutions to increasingly similar problems, while unique national identities determined by different environmental factors are bound to fade away. Here I do not wish to go into detail concerning the questions of cross-cultural research in organizations. Instead, I would like to present a model that examines whether present Japanese industrial organizational structure and performance can be explained by convergence theory in the sociology of comparative organizations (Marsh and Mannari 1976).

Before discussing this research model, however, I must briefly summarize my criticism of the methodology of the cultural model. The proponents of the paternalism model of the Japanese factory present their analysis in a qualitative way. When they use statistics about attitude and perceptual data of workers, they are descriptive. Moreover, they represent national culture as the determining factor of organization and performance. But the concept of national culture or tradition is not defined operationally

and not measured at all. So when they claim that the organizational structure of the Japanese factory is determined by a certain trait in the national tradition, the causal relations are not quantitatively proved. All the works discussed above are dependent upon the traditional case study method, therefore the validity of their findings is limited.

The research results reviewed are important contributions to understanding social organizational aspects of Japan's industrialization. But they do not answer to what degree Japanese factory organizations differ from their Western counterparts. We need studies whose design permits us to answer a central question in organizational theory: to what extent do organizations and their members vary as a result of cultural differences, and to what extent do they vary as a result of structural factors (size, technology, goals, and other aspects of environment besides culture), regardless of differences in national culture?

CONVERGENCE MODEL OF THE JAPANESE FACTORY

Robert Marsh and I (1976) have tried to examine the relative validity of the paternalism model of the Japanese factory and the convergence theory of modernization. Instead of studying the organizational uniqueness of the Japanese factory, we constructed a universal model to describe and analyze all factory organizations, gathered data from three Japanese firms (a sake company, an electric company, and a shipbuilding company), and tested the two sets of hypotheses deriving from the paternalism model and the formal organization theories, mainly the theory of bureaucracy by Max Weber (1946). (Details of the conceptual scheme, research method, and firms studied are shown in our book, *Modernization and the Japanese Factory*.)

In the three Japanese factories, we set up seventeen organizational variables as dependents to be explained. These included extent of bureaucracy (knowledge of procedures), job satisfaction, value orientation (pleasure versus work versus family), pay, job classification, rank, perceived promotion chances, employee cohesiveness, paternalism, residence (company housing versus private housing), participation in company off-the-job activities, concern with the company, perceived relative advantage of current employer, lifetime commitment, performance, recruitment channel, and previous inter-firm mobility.

We tried to find out what the determinants are for each of these dependent variables. Some thirty-five independent variables were selected as determinants. Through applying multiple regression techniques, we identified the independent variables in the order of importance. In explaining the knowledge of procedure, job satisfaction, and pay, etc., we identified multiple causal factors (thirty-five independent variables) to

determine each dependent variable.

Although we found some support for the paternalism model, many of the best predictors of behavior and attitudes among the Japanese factory workers we studied are those variables we commonly expect to be operative in Western organizations (age, education, rank, organizational status, and job satisfaction). Some of our important research findings in relation to the issue of convergence or divergence of organization are summarized as follows:

1. Job satisfaction of the Japanese factory workers is not determined by paternalism-lifetime commitment factors, but by other factors (including organizational status, age, perceived promotion chances, sex, group cohesiveness, and technology) that are also likely to determine job satisfaction in the West. An analysis of value orientation reveals that the modal value preference is pleasure, not work. Job satisfaction and work value among Japanese workers follow a universal trend in higher industrial societies rather than a particularistic trend.

2. Contrary to the popular image that pay and promotion in Japanese firms are always determined by seniority and education, our causal analysis of determinant factors in pay, job classification, rank, and perceived promotion chances reveal that pay and promotion are determined by both extra-organizational status (sex, age, and number of dependents) and bureaucratic statuses (education, seniority, rank, informational level, and performance). The Japanese reward system is a well mixed complex of achievement and ascriptive elements. But it should be noted that pay, job classification, rank, and promotion chances are virtually unaffected by whether the employee ranks high or low in such attributes as cohesiveness, participation in company activities, paternalism, or lifetime commitment.

3. A majority of employees in all three firms prefer diffuse, paternalistic relationships with superiors and with the company to functionally specific relationships. Only a small minority of personnel live in company housing, however, and those who do are not more favorable to paternalistic relationships than are those who live in private residences. Our data also disprove the implication of the paternalism model that living in company housing has significant positive consequences, independent of the influence of other variables, for employees' participation in company recreational activities, performance in terms of company instrumental goals, and job satisfaction.

4. To explain variations in lifetime commitment among males in large Japanese factories, we have retained the basic conceptual distinctions between lifetime commitment role behavior (degree of actual inter-firm mobility) and lifetime commitment norms and values. Reciprocity of support between the Japanese employee and his company exists, but its symmetry is

both less than, and different from, what the lifetime commitment role claims. Often, employees who exhibit lifetime commitment role behavior (i.e., who stay in one firm) do so not on the basis of lifetime commitment values, but rather for a variety of reasons extraneous to these values: job satisfaction, cohesiveness, security and other economic reasons, lack of opportunity to move to another firm, family and local ties, and age.

We disagree with those who argue that there is a distinctively Japanese pattern of lifetime commitment. Insofar as Japanese employees in large firms do remain in one firm, their lack of mobility is due mainly to factors other than moral commitment to the company. Japanese employees' motives for staying in one firm are essentially the same reasons that tie Western employees to a firm.

5. The proponents of the paternalism model assert that despite variation in product, technology, or age, Japanese firms have a uniform social organization. Abegglen (1958:13) says his model describes "the general rule in the large factories of Japan," and Dore declares, "the features which make up what we shall call the 'Japanese system' . . . are generally shared by all Japanese large corporations" (1973:301). I shall refer to this as the *uniformity of social organization hypothesis*.

Contrary to the uniformity hypothesis, Marsh and I found strong or moderate (statistically significant) differences among the three firms studied in the following aspects of social organization: in the percentage of company personnel who live in company housing, in preference for a job classification wage system or a seniority wage system, in previous inter-firm mobility of employees, in degree of employee job satisfaction, in employees' perceived promotion chances, in objective promotion chances, in employee cohesiveness, and in participation in company recreational activities.

The ideal-typical formulation of the paternalism model has served a useful purpose in focusing attention on certain uniformities among large Japanese firms, especially those uniformities that may stem from Japanese cultural traditions and societal patterns. The proponents of this model would not argue that all large Japanese firms are alike in all aspects of their social organization. However, insofar as studies using this model are interested in the sources of cross-national organizational variation, they tend to focus on only one source: the national cultural setting. Abegglen, Hazama, Whitehill, and Takezawa have been asserting that the extent to which organizations vary is determined because they are Japanese or American or British.

Although I have stated my criticism of some selected studies of the Japanese factory based on the cultural model, I recognize that my research with Marsh is limited to a comparative study of only three factories at a

single point in time, using the uniformity of social organization hypothesis on the basis of variations among only three firms. An adequate test requires data from a larger and more representative sample of large Japanese firms as well as firms in other societies, to see whether the degree of inter-firm variation differs across societies.

Important progress has taken place in comparative study of formal complex organization. Sophisticated measurements of internal structure and functioning of organizations have been developed both within and across cultures (Blauner 1964, Woodward 1965, Hickson et al. 1969, Fullan 1970, Perrow 1970, Blau and Schoenherr 1971). Substantial progress in research on the Japanese factory has also been made (Azumi et al. 1974, 1978, Tracy and Azumi 1976, Johnson 1977).

Employing identical instruments, Azumi et al. (1974) have measured various facets of organizations matched for size, products, and organizational status in Britain, Japan, and Sweden. This research design is useful to isolate the effect of "country" or "culture" upon organizational structure by controlling for what are known to be major determinants of structure. Their data show overwhelming similarities across the sample: there is no evident pattern of cultural variation. Indeed, on the three major scales of bureaucratic structure (centralization of authority, formalization of rules and procedures, and functional specialization), the scoring is virtually identical (Azumi et al. 1978:8).

In contrast to the differences predicted by the cultural model of the Japanese factory, the structure of Japanese organizations as well as the relationships among the structural variables seem to be similar to those in Britain and Sweden, leading the researchers to suspect that there are universal tendencies behind organization everywhere (Azumi et al. 1978:34).

Starting with the divergence theory, Johnson (1977) ended up supporting the convergence theory. He tested convergence versus divergence hypotheses in communications and decision-making while exploring the similarities and differences of Japanese and American companies. His assumption is that common approaches to everyday managerial activities, such as communication and decision-making, should evolve independent of culture. His research results indicate that "to some degree, managerial differences across culture appear to persist, but the preponderance of evidence suggests wide areas of commonality (i.e., convergence) between Japanese and American communications and decision-making practices." In conclusion, he points out the risks of approaching cross-cultural phenomena with the presumption that culture is the dominant explanatory variable (Johnson 1977: 21).

CONCLUSIONS

So far, I have contrasted the research models and research results of the Japanese factory studies in the two opposing approaches. Now let me review my findings.

First, earlier research on Japanese factories has centered about how the typical Japanese factory differs from the typical Western factory, using case studies. The researchers neglect how much variation exists among firms within a single country. The proponents of the paternalism model demonstrated a unique pattern of Japanese factory organization in ideal typical concepts, which are useful in identifying organizational differences. In so doing, however, they commit an error not uncommon in comparative analysis. In striving to report what is most distinctive or unique about the Japanese factory they fail to keep what is most important in perspective. The lifetime commitment pattern may be distinctive to Japan—relative to the United States or Britain—but it may not be the most important characteristic of Japanese firms.

Second, according to the proponents of the convergence model in the Japanese industrial organizations, variation of organizational structure and functions measured in universal concepts and scale shows similarities in dominant facets. The differences are minor. The cultural differences between Japanese and Western firms are evidently not so all-powerful that they override the influence of structural differences at the level of the firm or factory. Some social institutions often thought of as uniquely Japanese are characteristic of other economies at Japan's stage of economic development (Caves and Uekusa 1976). The Japanese factory organizations have not only rationalized technology and economics but also rationalized social organization in the course of industrial development.

Third, implications of this report concerning the social development of post-traditional societies must be mentioned. Each nation has a different culture, which dominates social life in the family, community, and social class; but culture is not the single dominant factor in industrial organizations, which are designed for higher efficiency. Industrialization has its origins outside of traditional national culture in Asia. It is determined by demands foreign to any particular nation. In order to achieve higher industrialization, economic organizations and practices must meet industrial demands, i.e., rationalization, bureaucratization, industrial democracy, etc., as well as meeting cultural demands. The national cultural setting should be treated as one determinant factor in industrial organization and in a more narrow and parsimonious fashion, as indicated by convergence theorists.

ACKNOWLEDGMENT

This paper is largely dependent on findings of research projects in Japanese factories done in collaboration with Professor Robert M. Marsh of Brown University.

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