

Implications and Setbacks of the Japanization of the European Automobile Industry : Organizational Gaps Observed by Japanese Transplant Managers in the 1990s

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According to Nick Oliver and Barry Wilkinson (OLIVER and WILKINSON 1988 : 1), the term 'Japanization' was first coined by P. Turnbull in 1986 (TURNBULL 1986). Irrespective of its veracity, this term became popular in Europe, especially in the UK, only in the last ten years of the twentieth century. Turnbull studied the British automobile industry, especially Lucas Electronics, and he warned against Japanization as a package of excessive labour-intensification measures taken by the management to meet the international competition (TURNBULL 1988). As Japanization was, therefore, an alarming phenomenon for him, the term originally had a negative and pejorative connotation, which symbolized the view of the traditional labour movement.

This paper relies primarily on interviews held in the early 1990s with Japanese transplant managers, revealing the existence of gaps in organizations, to clarify retrospectively the significance of Japanization at the end of the twentieth century in Europe and the reasons for its setbacks.

1. Debates on Japanese management

Debates on Japanese management, including Japanization, have historically passed through three periods (BONAZZI 1996 : 303–304). The first period is represented by the Japanese management theory of ABEGGLEN (1958), DORE (1973), and others until the two Oil Shocks in the 1970s. The second period, expanding from the aftermath of the oil shocks to the bursting of Japan's 'bubble' economy in 1981, was characterized by the diffusion of the Japanese production methods in foreign countries. *The Machine That Changed the World* was published in 1991 by Womack, Ruth, and Jones, who participated in the International Motor Vehicle Research Program (IMVP) at the Massachusetts Institute of Technology (MIT). This book created a significant impact on the Japanization debate.¹⁾ The third period of the Japanization debate came after 1991 ; due to the excessive appreci-

ation of the yen as a result of the Plaza Accord, Japan's foreign direct investment increased sharply after 1985, and full-scale local production finally started to take off around 1990. In addition, American and European companies, which had made efforts to introduce Japanese methods in the 1980s, began to enjoy the fruits of their efforts around this time. Therefore, if we regard Japanization as the diffusion of Japanese production methods, this period can be qualified to be one in which Japanization progressed even further, both in terms of the operation of Japanese transplants and the acquisition of Japanese methods by Western companies.

Simultaneously, however, the Japanese economy began to suffer a serious structural recession in the period following the collapse of the 'bubble'; the post-war Japanese economic system itself came to be viewed as problematic. At this time, from the latter half of the 1980s to the publication of *The Machine That Changed the World* in 1991, the Japanese economy was undergoing a serious structural recession. However, the book (WOMACK *et al.* 1991), characterizing the Japanese production system as a 'lean production system', assessed it quite positively; it gave a low assessment score to European automobile manufacturers, especially German manufacturers, which were qualified as a lagging production system. On the one hand, it caused a great deal of reluctance and disapproval in Europe. On the other hand, however, this triggered the start of serious fact-finding surveys by European and American researchers on the Japanese automobile industry.²⁾

Critiques of the *lean production system* theory argued that (1) the productivity of the European automobile industry was not as low as the book stated, (2) the working conditions in Japan were not as good as the book praised and, thus, could not be used as a model, and, then, (3) the German-Swedish model was enthusiastically advocated as an alternative to the Japanese *lean production system*.

The criticism might be characterized as the perspective of the *humanization of labour* versus the *lean production system*, or from the perspective of adopting the 'human' versus 'efficient' scheme. From the European point of view, the Japanese production system should be qualified essentially as labour-intensive and inhuman; in short, the Japanese production system was so inhuman that it was unacceptable in the Western social context.

1) A huge amount of research achievements have been accumulated for Japanization. As seen in the text below, there are various positive and negative assessments of the book. However, this book certainly marked a milestone in the history of views on the Japanese production system in Europe and the USA.

2) Although European researchers had already begun to conduct many empirical studies on the Japanese automobile industry, this afforded a good opportunity for them to accelerate the study of this field. For example, Ulrich Jürgens, one of the leading figures in this domain, has published continually many results issued from empirical surveys. Among others, see Ulrich Jürgens, Thomas Malsch and Knuth Dohse (1993) *Breaking from Taylorism : Changing Forms of Work in the Automobile Industry*. Cambridge : UK, 464.

In the US, researchers on the labour side have criticized it as 'management by stress' (PARKER & SLAUGHTER 1988), and in Japan, the labour conditions in Toyota and other Japanese automobile factories were severely criticized as follows: 'long hours, overloading, and irregularity'. Thus, there had been a deep-rooted inclination in the European social context that declined Japanization.

However, on the one hand, despite this reluctant and moderated reception of Japanization at the level of researchers and the labour movement, the number of firms adopting the Japanese production system was steadily increasing in Europe (OLIVER and WILLKINSON 1992: 241-280). On the other hand, some Japanese managers and researchers pointed out that the Japanese production system was diffused only as a method; they, working in the automobile industry, evaluated the *lean production system* as follows: 'well, it captures the phenomenon well, but it will not be useful in practice'. As European societies showed a certain reluctance to go beyond its methodical framework, the propagation of the Japanese production system was often limited to measures for higher quality and greater productivity mainly on shop floors.

2. Gaps observed in organizations

In the deliberation on the Japanese system, one resource is yet to be fully utilized: the experiences and observations of Japanese managers of transplants in Europe. Owing to the appreciation of the yen after 1985, not only major Japanese manufacturers but also small and medium-sized manufacturers expanded their business overseas in large numbers, and many Japanese manufacturers started local production. The comparison between Japanese and local management illustrated by them was a fertile source of information on Japanization. They were in charge of the management and production of the local transplants and were well aware of the difficulties and modifications when the Japanese system was applied in local markets. Their observations were very useful to advance research in the automobile industries as well as in the social differences between Europe-US and Japan.

Japanese managers sent to manage the subsidiaries in Europe almost unanimously pointed out gaps or splits that existed commonly in organizations; there were gaps between individuals, as well as between jobs, hierarchies, and companies. We might say that gaps may be illusions or misunderstandings due to multicultural incomprehension. However, the fact that they had such an impression in their mind continues to be true, even if their observations were biased. According to the impressions they kept in mind, the social and institutional barriers that were encountered when trying to implement the Japanese system were none other than gaps in European society.

2-1 Gaps in the division of labour between jobs and processes

First, let us listen to an observation made by a Japanese manager (in charge of purchasing) of a Japanese transplant in France. Workers on the shop floor were good as long as they carried out jobs that had been previously stated and precisely defined. However, he pointed out the existence of gaps between operators as follows :

As for the quality of the workers, operators abide by the predetermined rules. As long as they work to do what was previously told, the efficiency they carry out is very good. If we compare French workers with the workers in our factories in Japan, the work efficiency is almost the same as in Japan. But they can only do what they are told and cannot be changeable according to modification of situations. In other words, they are not flexible in their working attitude. What is the most striking feature of the assembly lines in France is an absence of coordination and mutual help among operators. There are gaps between them. (Interview held on December 23, 1993. Japanese scooter manufacturer in Saint-Quentin, France.)

I found the gaps described by Japanese managers very instructive for academic research. Especially, the case of production management is quite illustrative for this comparative study. According to a Japanese director in charge of production at a Japanese copy machine manufacturer in Germany, there was a major difference in the perception and the role of production management. As stated by him, the way of thinking about jobs was very different between Europe-US and Japan :

In Japan, the basics of production management are :

- (1) Do not stop lines ;
- (2) Do not make defects ;
- (3) Do not hold too much inventory.

In any organization, there will be such anomalies as 'shortage of parts from suppliers' or 'absenteeism of workforce', and so on. Production management involves all about doing anything that can be done to prevent categorically all anomalies. Every production manager in Japan does this job as a matter of course. However, no matter how much I explain the job of production management like that, people [in charge of production management] do not agree with me. They refuse to take as every task as possible to get rid of troubles or anomalies stopping normal operations. There are certainly gaps between jobs. Anomalies dropped into gaps are not handled by local management. In this case, the duty and authority like this should only be assigned to the factory manager. To tell the truth, I'm always busy with all the backward

processing around here or there to deal with anomalies on behalf of local production managers. (Interview held on March 30, 1994. Japanese copy machine manufacturer in Gerlingen, Germany.)

The interview revealed a clear-cut difference in the notion of jobs between Europe and Japan ; in Japan-style jobs, the description of the production management was neither specific nor concrete in the European sense. In Japan, the job of production management is regarded as doing anything to maximize efficiency, such as not issuing defective products, not stopping lines, minimizing inventory, and so on. However, it is abnormal in Europe not to specifically define the content for a job even if the goal is set in the first place. The duties and responsibilities are abstract and not limited in Japanese cases so Europeans would not recognize them as job descriptions.³⁾ According to the interviewee's statement, production management carried on in Japanese companies was not recognized as a skill or a job qualification in Germany.

As I interviewed Japanese managers sent to Japanese transplants in Europe, they somewhat unanimously confessed to the following observations : the labour process is fragmented and has gaps in European organizations. Although the majority of European managers and researchers did not agree with this observation and disregard the existence of gaps, nevertheless, the relationship between jobs and persons in Europe gave a very unusual impression to Japanese managers who were very baffled and embarrassed at the site.

Japanese managers had the impression of the fragmented character of the European organizations and confessed that it was one of the core problems ; more importantly, the gaps are justified in the European sense and not in the Japanese sense.

An interesting observation was made by Nick Oliver and his colleagues on the responsibility of shop floor workers. This finding indicates a clear-cut difference in the consequences caused by the attribution of responsibility and personnel. According to them, contrary to the stereotypical view, shop floor workers in Japanese plants had far less responsibility than their counterparts in UK plants.

3) Turnbull also clearly noticed that the job content in production management was very different. "One of the most significant changes introduced with the new system is that all modules will contain 'manufacturing craftsmen', 'a new breed of "super-craftsmen" proficient in various skills and working in a flexible manner'. Unlike the traditional British craftsman these new 'manufacturing craftsmen' will be expected to combine and perform both electrical and mechanical servicing of machines 'according to their ability', and they will be held generally responsible for the smooth running of all equipment within the modules. Overall, then, the system will doubtless reduce set-up time, the time spent moving from one job/task to the next, and the time spent on any one particular job, thereby increasing the pressures of work and intensifying the production process." (TURNBULL 1986 : 200)

The strongest challenge to the stereotype comes from the finding of the division of responsibility on the shopfloor. Here, in all areas apart from maintenance, Japanese operators show much less responsibility than their UK counterparts, and Japanese team leaders show more - and in some cases much more - responsibility than their UK counterparts. These quantitative data are consistent with observations on the nature of work in Japanese plants made during plant inspections, during which it was clear that Japanese operators worked consistently and diligently. However, their tasks did not appear to offer any higher discretion than those of operators in the UK. Indeed, if anything, jobs in the Japanese plants provided lower discretion work than was the case in the UK, due to the presence of standard operating procedures and to *poke yoke* [correctly, *poka yoke*] (fool proofing) efforts. (OLIVER, DELBRIDGE and LOWE 1998 : 258-259)

'The division of responsibility' is the keyword in this case ; responsibility is individually divided in Europe whereas shared conjointly in Japan. When responsibility is shared by operators, a piece of it assigned individually to a single operator is all the smaller, because the greater part of the responsibility is assumed jointly with colleagues.⁴⁾

The importance of standardized operations is emphasized in the text cited above, and the mutual trust that Oliver and Wilkinson insisted on is the key concept. In an organization lacking mutual trust, criticism of the difficulties induced by gaps would be nothing more than a one-sided move to the capital side. Of course, sharing responsibility requires indispensable conditions, a long history, and great care.⁵⁾

4) Further on, Oliver and his colleagues state that :

"Third, what do these findings imply for the Japanization debate? It is clear that early understandings of Japanese manufacturing methods skated over many of the subtleties found in Japanese factories, perhaps due to an over-eagerness to fit Japanese practices into a Western-style frame of reference. This has led to a simplification – if not distortion – of Japanese practice with respect to shopfloor responsibility, and a down-playing of the external pressures on issues such as suggestions and problem-solving. Perhaps more seriously, these misconceptions may have led some companies in the wrong direction in terms of strategies for performance improvement." (OLIVER, DELBRIDGE and LOWE 1998 : 258-259).

It is with great sadness that I refer to the sudden passing of Nick Oliver in the summer of 2020. I was lucky enough to accompany him on several occasions when he conducted empirical research in Japan. Nick was a warm and open-minded person who left a deep impression on members of our Japanese team. His early passing was deeply mourned by IKEDA Masayoshi, Nick's elder friend, professor emeritus at Chuo University ; he also passed away a year later.

5) As far as I know, Nick Oliver visited many factories and observed sites seriously and fairly judged 'good for good' and 'bad for bad'. He was, I think, free from narrow-mindedness towards other cultures.

"Amongst the academic community, however, whole-hearted supporters of the idea of the Japanization of British industry have been few. Perhaps the best known supporters are Oliver and Wilkinson (1988, 1992), who argued that British manufacturing was increasingly adopting Japanese

2-2 Gaps in the Inter-firm division of labour

Just like gaps or ruptures between jobs in a company's internal organization, there were also gaps between companies. We can see a typical example in subcontracting transactions. Theoretically, firms are equal in Europe, and, therefore, ordering firms and receiving firms are in equal positions with each other in subcontracting transactions. However, even in subcontracting transactions, we can highlight gaps hidden behind this relation.

In subcontracting, customers take part in the development of products and provide designs to suppliers who are in charge of manufacturing. Gaps between companies in subcontracting appear clearly as the clear-cut division of jobs for each party : development and manufacturing. With the existence of gaps, it is much more difficult for the parties to exchange technical know-how and especially for the customer to get useful suggestions from subcontractors.

In business transactions in Europe and the USA, each transaction is usually settled and paid on a case-by-case basis. Therefore, even in the case of a long-term customer-supplier relationship, the contents are characterized merely by repetitions of one transaction at a time. Compared with the long-term and stable transactions in Japan, we can qualify the traditional transaction behaviour in subcontracting in Europe and the USA as a one-off behaviour. A Japanese manager of a French-Japanese joint venture electronics manufacturer (the only Japanese in the company) said the following :

Customers employ engineers [*i.e.*, technicians in Europe] and especially high-level engineers [*i.e.*, cadres] in the design department who are confident in their abilities. They show us drawings and say, "Build the products as they are shown like this". The subcontractor's skill is to manufacture exactly as what is shown in the drawings of customers. Usually, things go well. But there are often problems with the drawings. Even if we find problems and point them out from the standpoint of production, there is no discussion about whether this item matters in design technology or production

production techniques ; so much so that Japanization was, by the late 1980s, a reality for sections of British industry." (PROCTOR and ACKROYD 1998 : 237)

I feel slightly uncomfortable with the assessment of Nick as a 'whole-hearted supporter of the idea of Japanization'. Rather than being a full-fledged supporter of the Japanese-style system, it is more appropriate to describe him as a researcher who studied without prejudice and sincerely sought the truth. My impression from talking with him was that Nick was proud of being British. He was researching Japanese-style systems neither to support Japan nor because he liked Japan. He just wanted to revive British manufacturing. It is with a sense of abject loss I note that he, all of a sudden, passed away prematurely, and the opportunity to discuss this subject with him was lost forever. My lamentation is all the greater as there are very 'few' impartial researchers like him in Western academia.

technology. Most of the time, the only thing they say is “This is good enough”. In Japan, if a product doesn’t work well, subcontractors will try to figure out what’s wrong and collaborate with the customer to solve the problem. Subcontractors in charge of manufacturing in Europe will point out that something is wrong here or there, but they will not go into the design process. The design side does not accept it either. In Japan, production companies suggest to customers what can be improved. When I proposed to our technicians that they should propose any improvement to customers, Frenchmen of this company firmly refused, saying, “We don’t do that”. There is no need to suggest it to subcontractors, as client companies will not accept it as well. (Interview held on December 10, 1993. French-Japanese electronics manufacturer in Soisson, France.)

According to Japanese managers, there was almost no consultation between clients and subcontractors over drawings. Their observations should be regarded as a question of degree because it is hard to imagine little to no exchange of views between the parties. However, as it was insufficient, this should be recognized as evidence of gaps.

3. Consequences and causes of gaps

The observation of the Japanese manager cited above showed us the existence of gaps between jobs not only at the production site but also in the white-collar indirect departments. As a result of gaps between jobs and processes, the following results, which are obstacles to mass production, have occurred in Europe :

- 1) Lack of quantitative and qualitative flexibility ;
- 2) Indifference among employees to corporate performance and final products ;
- 3) Repetition of one-shot transactions.

3-1 Consequences of gaps

3-1-1 Lack of quantitative and qualitative flexibility

One of the first measures to take on-site to increase flexibility is to assign plural machines or operations to each operator according to market variations. For example, operators work first on press A and, then, on press B, and so on, always executing the same kind of operations. This practice is called *plurivalence*. *Plurivalence*, that is, having ability of several operations or capabilities, frequently creates sufficient flexibility as the first step in production management. However, it was not promoted in France because it was not evaluated as a skill.⁶⁾

For further flexibility, *polyvalence* (multi-value) was proposed in France. *Polyvalence* means having the ability to perform several duties with different skills ; multi-skilled workers at the operator level were often regarded as good examples. *Polyvalence* indeed increases the elasticity of the workforce, because it allows them to respond to variations in production volume and production items with greater agility (RÉRAT 1986). Then, was the qualitative elasticity of labour in French firms acquired through *polyvalence*?

French researchers define *polyvalence* as a complete change of duties, with a change of working skill. In this case, something different is done differently. Operators usually carry out assembly operations ; in addition to these operations, when different tasks requiring different skills and know-how, such as supply, coordination, monitoring, inspection, and programming, are executed by a single person, the worker is practising *polyvalence*. Their socially recognized skills (their qualifications) are enhanced by their *polyvalence*. This definition of *polyvalence* in France has caused serious problems when introducing new technologies.

In France, jobs are positioned within a classification (NAKAGAWA 2021c). Further development from the original skill and acquisition of another skill brings about another position in classification. Therefore, according to the conventional professional relationship, *polyvalence* leads to higher positioning in classifications and higher wages. For example, when management tries to introduce NC machines, the newly introduced jobs will be placed in a new position in the classification because their skill is different and higher from the traditional machines (EYRAUD 1986).

Skill acquisition is personalized and not aimed at solving the company-wide problem of inflexibility. In other words, it is not targeting to overcome gaps ; thus, it is unclear whether *polyvalence* can overcome defects caused by gaps (e.g., lack of flexibility).

3-1-2 Indifference among employees to final products and company performance

The existence of gaps within and between organizations means that each individual and each company is concerned practically only with their interests ; they do not pay attention to other people and other companies with which they share a division of labour. I will quote a manager of a Japanese audio manufacturer in France :

In Japanese factories, operators are largely graduates of high school and technical high school. In addition, they can afford the assistance of their elder colleagues who are good at manufacturing experience and knowledge. In France, it costs a lot of

6) The implications of *plurivalence* was rarely discussed in French academic societies. When discussed, it was mentioned negatively. "Nous en concluons que la situation des femmes s'apparente plus souvent à l'ajout de tâches de même niveau, à une *polyvalence* horizontale, au rabais, que certaines personnes qualifieront de *plurivalence*." (TREMBLAY & de SÈVE 1996 : 100)

money to control these shop floor people. That is why the industry cannot exist without cadres [managers and executives]. A control system must be installed and various checkpoints must be set up. Otherwise, it would be impossible to produce homogeneous products like those made in Japan. In Japan, almost everyone has the mindset that they must make good products. This is not the case here. We have to create checkpoints here and there, and we have to create a system to make products. (Interview held on July 22, 1993. Japanese audio manufacturer in Saverne, France.)

Subcontractors essentially execute only what they are told by their ordering companies and do not bring any further spontaneous ingenuity into the product because of gaps in subcontracting relationship. They are usually indifferent to the final products in which the parts are integrated and put on the market. The most serious consequence of gaps in subcontracting is deterioration in the competitiveness of final products. A quality-oriented and customer-oriented way of thinking and attitude is incompatible with such a fragmented relationship. Naturally, French suppliers are probably very dissatisfied with these negative assessments. However, they do not put the top priority on the final products sold in the consumer markets. The indifference to the final products had been allowed in the past when the competition was not so harsh. If suppliers do not give top priority to the sales of final products, they are far from being winners in the harsh competitive markets.

3-1-3 Repetition of one-off transactions

The third consequence of the gaps is the repetition of one-off transactions. We can find this practice in business relations where every expenditure of labour-power is individually settled. A long-term relationship is not warranted if every expenditure of labour-power is paid each time. It is merely a repetition of one-off transactions.

In subcontracting transactions, only the defined work agreed upon between ordering firms and subcontracting firms in advance is carried out. Therefore, if additional work that was not agreed upon in advance arises, compensation is demanded for each expenditure of labour. Although this procedure seems completely legitimate and appropriate for European observers, this practice of demanding compensation for each expenditure of labour often creates a very severe nuisance in subcontracting. This is because it makes subcontracting of subassemblies quite intricate or effectively impossible.

The procurement of circuit boards is not good yet. We inevitably have quality problems. Of course, the cost is high. The invisible costs are high here. When additional processing is needed because of design changes or quality problems, Japanese vendors [suppliers] try to absorb the cost over a long period of business and do not charge for it. European vendors are always trying to make a profit in a closed busi-

ness, so they have to consider the profitability of each additional job. Local manufacturers try to make a profit on a case-by-case basis. Therefore, from our point of view, the cost is inevitably high. We used to buy circuit boards from a lot of local vendors. When we got the initial quotation, if we added items other than what was discussed at the time (quality, inspection, etc.), those items would be added to the cost. The base, strictly defined, does not include "other than what we said" at the beginning of the business. We suffered from regretful troubles. So, as a result, we reduced local procurement. (Interview held on March 30, 1994. Japanese copy machine manufacturer in Gerlingen, Germany.)

The most typical example of the practice of 'charging and settling for each expenditure of labour' is charging additional costs in subcontracting. This practice makes subcontracting of subassemblies quite difficult. For example, as shown in the example above, a company that wants to subcontract printed circuit boards (PCBs) decides on the specifications and requests quotations from several subcontractors (only reliable companies are eligible). The ordering company decides to place an order with a supplier that offers a reasonable price chosen among the quotations received. Now, with the final product in mind, the ordering company tries to add specific instructions to the parts (in this case, PCBs) to realize the design quality. For example, if one adds something to increase the strength or the inspection method, the subcontractor will immediately raise the price due to additional costs incurred.

In Europe, a basic price may be low at the time of quotation, but it rises rapidly when the ordering company demands additional measures necessary to improve quality. Almost all the Japanese managers in charge of purchasing were uniformly unsatisfied with this practice. In the end, the final product will be extremely expensive, and client companies will be forced to give up subcontracting as they tend to be hesitant to make minor improvements.

A long-term relationship cannot be established in this system in which compensation is demanded on every occasion of expenditure of labour. It is only a one-off, *ad hoc* renewal of a transaction. Consequently, subcontractors in France demanded compensation for each expenditure of labour. They did not expect to receive compensation when the final product is sold.

If the final products are good products with high quality and low prices, the sales volume will increase massively in the final consumer markets. Component suppliers will ultimately be able to make profits because by selling more components to their customers. However, in the one-off relation with gaps, suppliers cannot benefit from this type of advantage.

3-2 Causes of gaps due to job structure

What are the reasons for the creation and existence of gaps in organizations? A Japanese manager explained to me the sectionalism inherent in French society :

In Japan, sectionalism is used in a negative sense, but in France, it is the norm. When there is a company-wide project, they cut it into slices, like cutting ham. In the Japanese sense, even if you're working on a single slice of work, you cannot do it without relating it to the works in front of you, behind you, to the left and right, and the following process. But the French say, "This is my job. This is all I have to do, and the rest doesn't matter. As long as this is done properly, it doesn't matter how others use it". Thus they do not have a vision of the whole process in which their partial work is involved. (Interview held on December 23, 1993. Japanese scooter manufacturer in Saint-Quentin, France.)

The structures of jobs and their relationships are different and contrasted between Europe-US and Japan. As is shown in Figure 1, there are no gaps between jobs in Japan ; on the contrary, strangely enough for Westerners, there exist shared areas in common not only with colleagues but also with their superiors. In contrast, in Europe and the USA, jobs are independent and separated to have gaps between jobs.

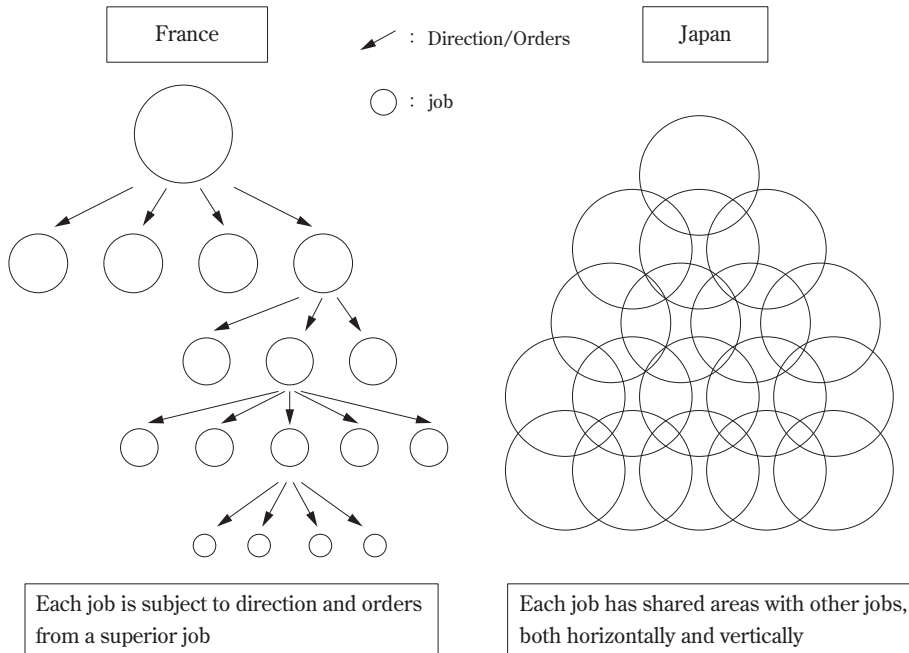
The reason why jobs are individualized to be separated in the Western organizations and shared in common in the Japanese organizations relies on the difference in the construction of organizations. As shown in Figure 2, organizing principles are reversed and opposite between Europe-US and Japan : attribution 'person ← job' for ties-based principle and 'job ← person' for function-oriented principle. I have discussed this issue as a principle for the construction of organizations (NAKAGAWA 2021c).

The Western structure of jobs is constructed by first defining each job, building the structure according to the function of jobs, and, then, allocating persons according to their qualifications. The system is rational and functional. Whereas in Japan, people are selected first, and jobs are assigned afterwards. Organizations built on such European-style function-oriented principles are quite efficient and highly competitive. However, because the functions are determined first, gaps inevitably occur between duties. In search of competitive advantage, the presence of gaps is considered as necessary defects or negligible small faults.

In Japanese-type organizations built on ties-based principle, gaps do not occur because people are selected first and duties are shared amongst each other. However, on the contrary, it does not have great competitiveness because it sacrifices efficiency and functionality. Competitiveness is not given top priority in such organizations.

Figure 1

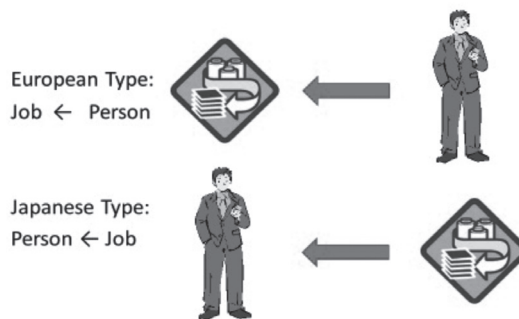
Clear-cut Dissimilarity in the Job Structure between France and Japan



Source : Author

Figure 2

Opposite directions of the attribution in the construction of the division of labor



Source : NAKAGAWA 2021c : 148

Conclusion : Japanization as a measure to narrow gaps

Based on the historical background, let us assume the progressive stages of Japanization as follows :

1. Introduction of production methods on shop floors ;
2. Introduction of management innovation in organizations ;
3. Introduction of new industrial relations on a national scale.

To overcome the lack of competitiveness, European manufacturers have adopted the Japanese production system, that is, Japanization. As an attempt to overcome the defects caused by gaps, we can mention, for example, *polyvalence* and labour groups in the production sites, open-book costing in subcontracting, simultaneous engineering in development, and Total Preventive Management (TPM) activities in the production activities and quality management activities in terms of production and quality. These measures were quite effective to enhance productivity and quality.

The difficulty of Japanization is gradually increasing from stages 1 to 3 due to the problem in approaching the fundamental aspect : the relationship between humans and work. I discussed it in terms of attribution 'person-work' (NAKAGAWA 2021c). In this instance, the attribution is diametrically opposite : 'function ← people' in Europe, and 'people ← function' in Japan. As long as attribution is 'function ← people', gaps will exist. In European organizations, jobs are decided and defined first to be individualized, which inevitably leads to gaps. The reason why gaps do not come about (or are small) in Japanese organizations is simply because the attribution is 'human ← function'.

Such an attribution in Europe-US is based on the function-oriented principle. If fundamental European values and virtues such as freedom, individualism, and equality are inseparable from the function-oriented principle, Japanization will never come about. It seems, for Westerners, more important to protect these values and virtues inherent in their civilization than to eliminate gaps. Thus, in my opinion, we can presume the fourth stage of Japanization by the reversal of attribution ; however, it seems very unlikely that this fourth stage will come about.

Although I accept the criticism of cultural determinism, I have to point out the decisive difference in the construction of organizations between Europe-US and Japan from a historical perspective. When pastoral nomadism emerged about six thousand years ago in the dry area surrounding Mesopotamia, the function-oriented principle was generated to construct artificial organizations called societies and spread worldwide thereafter. This is

because this organizational principle was excellent in terms of efficiency, competitiveness, and aggression when compared with the traditional ties-based principle of basic communities (NAKAGAWA 2022). Surrounded by the sea, Japan has rarely been attacked by nomadic peoples, and, on those rare occasions, it has been able to successfully fight back. As a result, it is a rare case of a ties-based civilization not being conquered by nomadic civilizations.

As the Japanese system is a survivor of the ties-based principle, it is neither efficient nor competitive. Japanese systems do not place top priority on efficiency. Built on a ties-based principle, its top priority is, instead, the survival of the organization and the preservation of the environments surrounding the organization. Survival is prioritized over efficiency, competitiveness, and aggressiveness.⁷⁾

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7) In a review of Nonaka and Takeuchi's book, G. Bonacci referred to the 'risk of reintroducing cultural determinism'.

"Finally, mention should be made of the fact that by resorting to an epistemological explanation of Japanese competitive advantage, the authors [Nonaka and Takeuchi] run the risk of reintroducing cultural determinism to the debate : if the success of Japanese firms is ultimately based on cognitive processes that differ from western ones, how can western firms ever overcome this disadvantage? Nonaka and Takeuchi seek to evade cultural determinism by acknowledging that the western cognitive structure, too, offers advantages – such as systematic rationalization and the appreciation of the value of the individual – which are unknown to its Japanese counterparts ; they conclude that the optimal solution would be a synthesis of the best aspects of both civilizations. This is the most fanciful and least documented aspect of their analysis, and it is at odds with the arguments set out in previous chapters. The practical outcome of this analytical short-coming is that the reader is prompted to return to the more verifiable terrain of hybridization between the two models and to the task of conducting comparative middle-range analysis of the concrete conditions that help or hamper success." (BONAZZI 1996 : 309-310)

I have very probably introduced cultural determinism to the Japanization debate again. However, Europeans and Americans have nothing to worry about. The Japanese do not want to compete by kicking others down the road. As the Japanese system has been established on the ties-based principle, we do not put competitiveness as the top priority by nature ; our top priority is the sustainability and continuation of our organizations as well as co-prosperity with others.

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