

Job Evolution through Polyvalence, Multitasking, and Internal Promotion

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Introduction

1. Human Resource Management for Japanese Transplants in France

2. Job Evolution Hypothesis

Conclusion

Introduction

Japanese-style organizations are known for their flexibility in task allocation. When the job structure is rigid, one approach to alleviate the situation is to introduce more flexibility into the organization. This task allocation method is unique to Japanese organizations. A key feature is that employees share tasks both horizontally and vertically.

In Western-style organizations, tasks are first defined, and then people are assigned to them. By contrast, Japanese-style organizations first select people and then assign tasks to them. The relationship between people and tasks is reversed between Western and Japanese organizations.

This assignment reversal requires certain practice. Education and training are indispensable to achieving these goals. Encouraging employees to improve their skills and motivation to evolve in their jobs is essential. Job evolution means that the human-task relationship develops from a simple setting to a complex and sophisticated one. In this paper, I present a hypothesis on job evolution as the development of human-task relations and discuss what Japanese companies attempted to do for job evolution in France in the 1990s. I will also discuss their approach at different levels: workers, middle managers, and executives.

1. Human Resource Management for Japanese Transplants in France

Japanese-affiliated companies in France in the 1990s attempted to apply Japanese-style labor management to France. However, they encountered several challenges at the workplaces. According to the local Japanese managers, individual assessment, dual-

tasking, and internal promotion were met with substantial resistance from French employees.

The personnel and labor policies of Japanese-affiliated companies aimed to alleviate the deficiencies arising from the rigidity of the job system in French corporate organizations. These policies addressed constraints on personnel and labor relations in France.

1-1 Individual Assessment

Individual assessments are considered essential in labor management in Japanese companies; therefore, this practice is conducted for almost every full-time employee, including onsite workers in Japan (ABO 1994). In the 1990s, Japanese companies operating in France attempted to conduct individual assessments; however, they were implemented imperfectly. First, it did not conform to French labor practices (LOMBA, POCHIC 2009: 3).

Employee salaries were based on their coefficient, which is defined in the collective agreement based on skills but mostly on education. Japanese-affiliated companies in France conducted individual evaluations within a larger framework of collective agreements.¹⁾ This evaluation was aimed at preventing absenteeism and encouraging skill improvement. A Japanese audio producer's manager explained the company's individual evaluations:

The minimum wage and the price increase are the basis for determining 40% of the operator wages, and the primary evaluator is the operator leader. The remaining 60% are scored based on skills and other items, and an overall evaluation is conducted using a five-point scale from A to E. The second evaluation is conducted by the section manager class, and the final evaluation is conducted by senior managers. We conducted various case studies and found that many Japanese companies in France struggled with absenteeism. In other companies, the absenteeism rate is over 10%; however, in our company, it is only 5-6%. Absenteeism is a major enemy of manufacturers because it stops the work flow. (Interview on April 2, 1993, in Saverne)

Because individual evaluations were not specified in the collective agreement, each company was granted some level of discretion regarding implementation. Their aim was to ensure the smooth functioning of the assembly workflow. Individual evaluations aimed to curb unintentional absenteeism, which could otherwise disrupt the work process rather

1) <https://www.service-public.fr/particuliers/vosdroits/F78>; <https://www.nortonrosefulbright.com/-/media/files/nrf/nrfweb/imported/ten-things-to-know-about-labour-and-employment-law-in-france.pdf?revision=717943b4-c43f-415b-a7d4-f9a8f1996926&revision=5247944722097387904>

than merely promote loyalty.

The method of individualizing operators and evaluating them on a five-point scale mentioned-above differs significantly from the wage assessment approach employed by the companies in Japan. Japanese workers are initially equalized regarding their status as employees within the company and subsequently positioned in a hierarchy of known disparities based on their demonstrated abilities (AOKI 1988; AOKI, JACKSON 2007).

French firms have a structured system for salary and personnel evaluation. Two main factors contributed to the limited wage disparity among operators.

The first is a distinct division in status. French firms have a clear division in job status, which results in each employee being assigned a specific salary. This likely means that predetermined salary ranges exist for different job positions, and employees within the same grade receive similar pay.²⁾

The second is limited financial resources. Companies face financial constraints, which restrict the portion of wages that can be personalized through assessments. This suggests that even if personnel evaluations use a five-point scale, budgetary limitations restrict the potential for significant salary increment based on performance evaluations.

Owing to these two factors, the wage disparity among operators remains minimal. The structured salary system and limited room for personalized assessments resulted in receiving similar compensation for employees of the same grade or position.

1-2 Dual-Tasking³⁾

Traditionally, French workers have not engaged in auxiliary tasks such as inspection and adjustment alongside their primary assembly work. Considerable resistance exists in the dual-task approach. In reality, the absence of dual-tasking results in increased middle management costs. Implementing dual-tasking is likely to intensify labor and could potentially lead to various constraints, as simultaneously performing multiple tasks can be physically and mentally demanding.

Although the French workforce showed some openness to job rotation, it was less receptive to dual-tasking. This is primarily due to their adherence to a strictly individualized and hierarchical job system where each person is assigned a specific role. Consequently, the concept of dual-tasking is considered a violation of this principle,

2) CAVENG Thomas (2012) Executive employees: what type of work organization in the future? *Soulier Avocats*, Published on 1 April 2012, <https://www.soulier-avocats.com/en/executive-employees-what-type-of-work-organization-in-the-future/>

3) “Dual-tasking is the ability to perform two tasks simultaneously.” (MACPHERSON 2018: 313) This can be performed either by switching back and forth between the two tasks or by performing them simultaneously. Dual-tasking has been reported to have negative effects in Western academic contexts, including labor intensification, damage to concentration, and productivity deterioration (STROBACH et al. 2018; POLJAC et al. 2018; ALMAJID, GOEL 2022).

raising concerns about extended working hours and increased responsibilities when one person is assigned multiple roles. Essentially, the idea of dual-tasking challenges the fundamental tenets of the individualized and mutually exclusive job system prioritized by the French.

Small and medium-sized enterprises in France often adopt a management structure similar to that of large enterprises, relying on segmented and individualized job assignments. Consequently, these French companies encounter difficulties in adopting the concept of dual-tasking, which is a common practice in small and medium-sized enterprises in Japan. While Japanese companies, particularly the smaller ones, have effectively integrated dual-tasking into their work culture, this approach faces resistance in France. This cultural disparity in the acceptance of dual-tasking can result in distinct management styles between the two countries, influencing the organization and operations of businesses.

Some Japanese companies practice dual-tasking in France. According to the manager of the audio producer:

At our company, we follow a Japanese-style job system in which duties are not subdivided and individuals are directly assigned to handle quality control. This approach contrasts with European norms, in which it is uncommon for employees to hold multiple task roles. However, in our company, it is common for individuals, including section managers, to perform multiple duties. We reduced the number of positions by having the employees perform multiple roles. Despite some initial protests, we engaged in thorough discussions to address these concerns. This approach requires dedication and effort to comprehend; however, we found that employees who understood the concept adapted well to it. While the company has been operating for less than a decade, there has been practically no reluctance for the rotation of job positions. (Interview on March 18, 1992)

After listening to the manager's narration, I asked, 'Does this raise any concerns regarding compliance with nationwide legal regulations of duties?' To which he responded:

As long as employees willingly undertake dual-tasking, financial considerations play a significant role. Although they did not necessarily demand double pay to hold two positions, we typically provide a reasonable increase in compensation. Interestingly, the more responsibilities they assume, the more motivated they become. Although the allocation of responsibilities can sometimes lead to disagreements, open discussions play a vital role in addressing such concerns. The relatively small size of the company, comprising 90 people, including four Japanese managers, with 65 in

direct roles and 25 in indirect roles, contributes to the feasibility of such discussions. They manage subcontracting and quality control in addition to their dual roles. This approach extends to purchasing and parts management, which helps prevent unnecessary inflation in the company's total workforce. (Interview on March 18, 1992)

French companies have experienced significant resistance to the concept of dual-tasking. However, contrary to the belief that dual-tasking is entirely unacceptable in French companies, it is possible to leverage various skills simultaneously. For instance, in some cases, it is acceptable to assign an operator to inspections along with regular assembly work. This approach is generally well received as long as the operator's pay remains unchanged and they are provided sufficient time to perform these additional tasks without being overwhelmed by their existing workload.

I had the opportunity to discuss this matter with the Japanese president of an electronics manufacturer. I asked, 'Do operators express reluctance when you assign them responsibilities in quality control?' and he replied:

Nothing out of the ordinary. When I told them, "This is your job to do," they agreed with me. In the past, the French had a system in which they would say, "This is your job, and the next person will review and handle your work." However, this approach does not produce efficiency. The person working at the initial stage of the process would often think, "I will have it checked later," and not take their responsibilities seriously.

Several modifications were made to address this issue. I insisted that each individual check their work. Initially, there was some resistance; nevertheless, as I emphasized the importance of self-checking, they began to realize its significance. Consequently, the number of mistakes noticeably decreased. A simple rule was introduced for each task: complete the task in 55 s and spend 5 s checking it. Surprisingly, this approach yields positive results.

It was discovered that workers do not resist new responsibilities as long as they are given extra time to adapt. The key is to avoid demanding that they complete new tasks within the same amount of time. Providing sufficient time for learning and integration enables workers to embrace change more effectively. (Interview on March 24, 1992, in Rennes)

In France, rudimentary dual-tasking was possible, but fully fledged dual-tasking was not. This has resulted in several serious deficiencies.⁴⁾

4) In a series of papers, A. Lindbeck and D. J. Snower discuss, from a theoretical perspective, "the switch from occupational specialization at 'Tayloristic' organizations to multi-tasking at 'holistic'

1-3 Internal Promotion

In French organizations, managers are primarily hired based on their educational backgrounds rather than on internal promotions. Japanese managers have highlighted the negative effects of this approach, such as high overhead costs and a shortage of human resources.

In France, the overhead costs are high because a significant number of indirect positions are required. The new directors are quite different from those before the takeover, as they prioritize a people-oriented approach. These directors may not have become managers in a company located near Paris; however, in addition to their geographical location, they have overcome their modest educational background through hard work and dedication. Compared to other locations, salaries and positions tended to be relatively low.

In our business, we prioritize practical wisdom over educational credentials. We are involved in the moped and scooter business but not the airplane business. Therefore, theoretical knowledge is not a primary concern. We seek individuals who possess the wisdom and ability to take swift and decisive actions. Building theories on paper is less valuable than tangible results achieved through physical actions. The fundamental concept of our business does not require exceptional talent but rather focuses on practicality and efficiency. To create hobby products, all you need is a passion for the items you enjoy. (Interview on March 26, 1992, in Saint Quentin)

In French organizations, cadres are indispensable but expensive.

We do not hire engineers from the *Grandes Écoles* [that is, we do not have any engineers], as we are a small company and cannot afford them. However, we promote the machinists that we have hired. We might consider hiring people from the *Grandes Écoles* if we do all the engineering work here; nonetheless, the basic design is performed in Japan (70% of the total design man-hours), and we only handle applications (30%). However, this is not a developmental design. The main mission of this factory was similar to the transition from design engineering to production. To open the way, it would be better to begin with slightly witty operators, considering that motivation is a crucial factor in this process. Some people work diligently and hard. Not all of a company's work involves high technology. Numerous steady works must be conducted. Our policy is to increase the number of motivated people as much

organizations." (LINDBECK, SNOWER 1995: 2). In this paper, I discuss the same theme from the perspective of a pragmatic study by identifying the actual difficulties Japanese managers faced in France in the 1990s.

as possible. In France, *Grandes Écoles* graduates were immediately placed in higher positions and assisted by secretaries. We value the motivation of our employees, regardless of their academic backgrounds. We encourage them to advance to higher positions with more responsibilities. The company has been using this promotion system for many years, promoting people from the operator level after they underwent training. Some BAC [baccalauréat] holders were also promoted to technicians. (Interview on March 18, 1992)

Japanese companies want to train their employees and internally promote them to managerial positions.⁵⁾ Therefore, Japanese manufacturers' personnel policy in the 1990s was to select and appoint non-cadres and middle cadres with moderate academic backgrounds to senior positions. These employees were given higher positions and responsibilities than they would have obtained from French companies. French organizations do not improve frontline workers' management skills through training by their superiors. Therefore, if a Japanese company conducts in-house training and hires employees for managerial positions through internal promotions, it will have a large cost reduction effect. Some companies have systematically implemented internal promotions. For example, a Japanese manager of a CD player manufacturer said:

Our policy is to hire and train young adults; thus, we did not recruit people with experience, because this would disrupt the personnel system. We tell our employees that there are no limits on promotions at our company. You will be promoted on the basis of your motivation and hard work. We opened up all company information. (Interview on November 29, 1991, in Villier-la-Montagne)

One possible personnel policy for Japanese manufacturers is to adopt the Japanese system throughout the company, with many Japanese managers occupying key positions during the plant startup period. This is indispensable for establishing a greenfield factory. However, in the case of an existing company's acquisition, the organization is left in principle and necessary repairs are made. The total cost of labor per Japanese expatriate was much higher than that per French cadre (approximately three times higher, including overhead). Therefore, reducing the number of Japanese expatriates is an

5) As AOKI Masahiko also mentioned, Japanese companies are using internal promotion to enhance their governance: "The internal selection of management through promotional ranking may serve as an effective mechanism by which such knowledge sharing and interest identification are nurtured on the basis of the sharing of experiences. Further, rank hierarchy as an incentive device becomes fully operative only if the internal promotion ladder for employees extends to as high as the top executive position." (AOKI 1990: 17)

effective way of reducing overhead costs. During the recession of 1990, the number of Japanese expatriates in France decreased significantly.

However, the internal promotions that Japanese companies were attempting to implement were generally unsuccessful.⁶⁾ A manager from a copy machine manufacturer told me:

Internal promotions are common in Japan. Our company has more internal promotions than other companies. These cadre-class members are motivated by internal promotions. The cadres are paid annually (*forfait*). Nonetheless, the more educated cadres have the opposite reaction: they are not amused: "I was qualified as an engineer and recruited as such in this company; however, the BTS [Brevet de Technicien Supérieur] guys are ranked higher than me; what does that mean?" There were two assistant managers who were competing with each other, but when one of them became manager, the other quit. (Interview on August 31, 1989, in Liffré)

At this stage, personnel evaluations have not been systematically conducted for Japanese transplants. Dual-tasking was accepted to some extent. Internal promotions were implemented, albeit imperfectly, but remained in the way. However, dissatisfaction arose regarding the fairness of the evaluation owing to implementation imperfections. The main reason for dissatisfaction was that Japanese managers did not manage employees with respect to the diplomas which should have received in French society; instead, they put much more weight on individual hard work and dedication to teamwork.

2. Job Evolution Hypothesis

Based on the empirical studies conducted in France, I propose a job evolution hypothesis that explores the relationship between humans and tasks. Stage I is characterized by a single task assigned to a single individual. In Taylorist organizations, tasks are typically segmented and fixed to specific roles. However, Japanese companies demonstrate a different approach, in which the relationship between people and tasks evolves from task segmentation to task rotation and eventually to task sharing. This job evolution hypothesis indicates that the goal of the organization is shared through the

6) In 1981, Malaysian Prime Minister Mahathir proposed the *Look East Policy* to emulate Japan's achievements. Hooi Lai Wan analyzes how Malaysian industry followed Japan's example over the next two decades. The country's companies attempted to adopt internal promotion; nonetheless, they faced some challenges (HOOI 2002). Internal promotion requires the education and training of subordinates and a willingness to share tasks between superiors and subordinates. Without these elements, internal promotion cannot succeed.

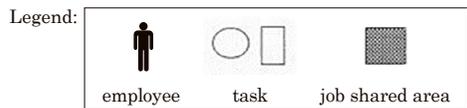
development of human-task relationships and that individuals participating in the organization will be able to actively demonstrate their abilities due to job evolution. The Figure illustrates the developmental stages of job evolution.

2-1 Stage I: Specialization

Stage I of job evolution is defined as assigning a task to a fixed position (post); we refer to this as task specialization. This aligns with the principles of the Taylor system, which relies on a fragmented hierarchical job structure.⁷⁾

Figure Job Evolution Hypothesis

STAGES	LEVELS	TYPES		Notes
STAGE III : Fusion	III	Vertical sharing		Multiple persons share tasks vertically.
	II	Upward expansion of subordinate's job		Subordinates are trained and nurtured by superiors.
	I	Horizontal sharing		Multiple persons share tasks horizontally.
STAGE II : Polyvalence	III	Multitasking		A single person handles multiple tasks.
	II	Spiraling and progressive rotation		Rotation of tasks of different levels and categories.
	I	Post rotation		Rotation of tasks of the same category.
STAGE I : Specialization		Basic assignment		A segmented task assigned to a single person.



Source: Author.

7) The principle of the Taylor system is briefly summarized and criticized by Bartlett and Ghoshal as follows: “The problems that many companies are experiencing today are inherent in the philosophy underlying that model, which originated with the teachings of Frederick Winslow Taylor. Early in this century, Taylor wrote that management’s role was to ensure that workers’ tasks well defined, measured, and controlled. With the objective of making people as consistent, reliable, and efficient

2-2 Stage II: Polyvalence

Stage II, the polyvalence stage, is characterized by multiple tasks assigned to a single person. Levels I and II refer to the rotation of tasks in which two or more tasks of the same or different categories are assigned and performed individually by a single person.⁸⁾ The supreme level is described as dual and multitasking, in which a single person, trained as a polyvalent worker, performs different tasks alternately and/or successively.

It was possible to break the task segmentation principle of Stage I in France. In Japanese-affiliated companies, operators accepted the rotation of the work position (post) as long as the wage coefficient was not lowered and the tasks were identical to the same assembly operations. Work flexibility is increased by the ability to frequently change tasks in the case of fluctuations in production or changes in the model. French workers accepted task rotation, and this labor practice has been widely implemented. However, this is not task rotation in the strict sense, but nothing more than a change in the workplace (post) within the same workplace in assembly because of the repetition of the same tasks. French organizations can also implement this type of task rotation.

Level II involves a spiraling and progressive rotation, in which a person takes several posts by rotating tasks of different categories and levels that vary in complexity and responsibility. For instance, operators who complete the assembly work may be assigned to tasks in another department, such as stamping, painting, or packaging the product. In Japanese manufacturers, it is common for ambitious employees hired as operators who have just graduated from high school to be promoted to the Foremen level through this spiraling upgrading of tasks.⁹⁾ The ability to proficiently handle diverse tasks plays a

as the machines they supported, managers came to regard their subordinates as little more than another factor of production. In that context, managers designed systems, procedures, and policies that would ensure that all employees conformed to the company way. The goal was to make the middle managers' and workers' activities more predictable and thus more controllable. [...] Leaders such as Barnevik are beginning to articulate management's challenge in terms of engaging the unique knowledge, skills, and capabilities of each member in the organization. They are questioning the assumptions of Taylorism that encouraged the use of systems and policies to force individuals into a corporate mold and are instead developing a management philosophy based on a more personalized approach that encourages a diversity of views and empowers employees to develop their own ideas. By building organizations that reflect the abilities of their members, managers are attempting to exchange the organization man for what we call "the individualized corporation." (BARTLETT, GHOSHAL 1995: 134-135)

8) "Dans l'un des textes les plus précis et nuancés qui soit sur ce sujet, M. Dadoy (1990, p. 125) définit la polyvalence comme 'la possibilité d'affecter alternativement et/ou successivement un homme à deux tâches différentes, à deux postes différents, à deux fonctions différentes.'" (EVERAERE 2008: 90) Therefore, levels I and II in this figure are what Christophe Everaere calls *polyvalence par nomadisme*.

9) In the 1990s a trend emerged in France to abolish the *Agents de Maîtrise* (foremen) who

crucial role in career advancement.¹⁰⁾

In the French automobile industry, polyvalence has been a topic of conversation since the late 1970s, just after the first oil crisis. This was triggered by labor disputes among monoskilled workers who were tired of monotonous and repetitive work. At that time, people were already becoming aware of competition with Japan, and although they were inspired by Japanese labor practices, the skill itself, expressed in French as polyvalent, was not necessarily unique to Japan. The French did not demonstrate much resistance to accepting polyvalence (FREYSSINET 1993: 7). A Japanese manager from a steering system manufacturer told me:

We consider the versatility of wages when workers can perform a variety of tasks. We provide them with an incentive because it means that they will become multi-skilled. We train them to move on from one post to another. There is a significant difference [in education and skills] between those who become *Agents de Maîtrise* [foremen] and general operators; therefore, we have not reached the stage where we train operators to become *Agents de Maîtrise*.¹¹⁾ However, increasingly it makes a difference between those who know how to handle other machines and those who do not. The main workers on the line were taken to Japan for training, and as long as they were convinced that their wages would increase, they were willing to accept multi-skilled labor. (Interview on March 26, 1992, in Irigny)

unilaterally order and direct the operators on the shop floor and to install shop floor leaders who were more concerned with energizing the operators as a group (LABIT 1993). The *chefs de l'unité* (unit heads) in Renault's plants were also becoming more important in activating the operators rather than simply instructing them. However, at that stage, their recruitment was in principle based on their educational background rather than internal promotion from operators based on skills and experience through the job cycle.

- 10) "These fulltime workers are not expected to obtain specific skills or knowledge of the jobs prior to employment but are expected to have a flexible workforce with basic ability which fulfils job requirements through in-firm education/training system." (HAYASHI 2008: 22)
- 11) Eckert and Monchatre conclude their survey of two French companies by stating that they have identified a clear and high barrier between simple and skilled workers in terms of promotions and other forms of treatment: "En se gardant de toute généralisation hâtive, il n'en apparaît pas moins que la hiérarchisation de la main d'œuvre dans l'entreprise industrielle enregistre et confirme les hiérarchies produites par le système scolaire. Du moins pour ce qui concerne la main d'œuvre ouvrière. Dès lors, la polyvalence seule paraît ne plus suffire pour franchir certains seuils. Il en résulte, d'un côté, l'isolement des opérateurs peu ou pas qualifiés, séparés des ouvriers qualifiés par une barrière quasi-infranchissable pour qui ne dispose pas d'un titre professionnel et, de l'autre, les cloisonnements de l'espace de mobilité des ouvriers qualifiés, enfermés dans des « métiers » où ils peuvent affirmer leur expertise mais dont ils ne peuvent s'extraire qu'au prix d'une formation." (ECKERT, MONCHATRE 2009: 119)

The meaning of polyvalence in French firms differs from that in Japanese firms. First, polyvalence in France means the possession of multiple skills but not the simultaneous use of multiple skills. In French firms, having (that is, being able to use) a variety of skills is not the same as using a variety of skills simultaneously; thus, dual-tasking. Because having several skills and exercising them simultaneously (dual-tasking) is not encouraged, job rotation in French firms has a strong characteristic of qualification acquisition and should be regarded as a self-objective. In this sense, the act of job rotation in France is often nothing more than post-rotation in reality because only the position (post) is changed without changing the content of the duties (job) itself. This is particularly true for assembly lines.

Second, the polyvalence of French firms is strongly linked to wage incentives. As expressed in labor disputes symbolized by the “*malaise des OS*,” there is an underlying resentment toward simple and repetitive labor. Therefore, the wage coefficient must increase when a worker becomes polyvalent, and wage increases are concrete incentives. It is unacceptable to require specific skills, such as maintenance and pay the same wages as assembly workers.

In Level II of Stage II, operators acquire multiple skills worthy of being called polyvalents. However, to be truly polyvalent, it is not sufficient to merely be competent; one should use them generously when needed. Therefore, they could be used simultaneously. This relates to multitasking, as the simultaneous use of multiple skills is made possible by polyvalence. Polyvalence is effective when dual- or multitasking is implemented.

In the early 1980s, French companies, particularly those in the automobile industry, began incorporating functions, such as inspection, adjustment, and other tasks along with assembly work. This expansion of functions, known as “work after the Taylor system” (LSCI 1988: 47), represents a basic form of dual-tasking. However, the concept of multi-processing, as seen in the Toyota Production System, in which a single operator oversees several machines for one-off production, has not been widely adopted by French companies. Similarly, the implementation of a dual-tasking system at the operator level remains in its early stages. Dual-tasking is a complex cognitive skill that requires the ability to divide attention, manage resources, and efficiently switch between tasks. Dual-tasking has been regarded as a difficult act in the first place and has become a research target in cognitive theory and psychology.¹²⁾

12) “For more than 100 years, psychologists have been interested in people’s ability (or inability) to perform two or more activities concurrently. One reason these limitations provoke curiosity is simply that people wonder what is humanly possible. This question has obvious significance for practical problems such as designing interfaces to prevent operators from becoming overloaded or predicting what a pilot can do in an emergency. There is also an important scientific reason to try to

However, Japanese companies have attempted to introduce a Japanese-style dual-tasking system to the French work environment. A Japanese manager from a wire harness manufacturer told me:

In our organization, responsible individuals are not categorized as cadres or non-cadres. Currently, there are ten group leaders, each overseeing a team of approximately seven or eight members. Prior to the takeover, the company was owner-operated without directors because the owner handled all operations independently. Following the acquisition, we restructured job roles and responsibilities. The overhead costs are quite substantial for a production plant. In comparison with similar factories in Japan, our staff numbers would need to be reduced by less than half to achieve similar efficiency. If a factory was located in Japan, we adopted the concept of dual-tasking, in which one individual hold multiple positions. Currently, the number of positions must be reduced significantly. (Interview on March 31, 1992, in Yvetot)

It is challenging to reduce the number of direct positions while maintaining efficiency. In France, it is more acceptable for employees to rotate between departments; for example, by transitioning from manufacturing to sales. By properly explaining this approach, employees were more likely to accept it. Nevertheless, the idea of dual-tasking was met with strong resistance, as they expected higher compensation for simultaneously taking on additional responsibilities. While Japanese employees are accustomed to the concept of dual-tasking and find it less uncomfortable, the French workforce is reluctant.¹³⁾

understand dual-task performance limitations: Overloading a system is often one of the best ways to figure out what the parts of the system are and how these parts function together. For this reason, studying dual-task interference provides an important window on basic questions about the functional architecture of the brain. For certain of these questions—such as whether human cognitive architecture includes a central processor—dual-task studies may provide the only avenue of study.” (PASHLER 1994: 220)

- 13) According to the observations of Japanese transplant managers, French firms generally have high overhead costs, particularly labor costs. To reduce these costs in indirect departments, it is necessary to reduce the number of positions. A way to do this is to have one person hold several positions concurrently, as is performed in Japan. As we saw earlier, the first stage of dual-tasking at the worker level is acceptable if separate time is taken for the additional task, such as inspection. For example, complex work, such as having an inspection immediately after assembly work, is acceptable. However, it was unacceptable for a worker to perform a different task, such as maintenance, in addition to their usual assembly task and still keep the same wage level. At the middle management level, whether or not dual-tasking is possible is imperative, particularly in

Despite these challenges, we have managed to create dual-tasking positions that combine two different functions: for example, “purchasing and stock management” or “accounting and human resources.” This step represents progress in adapting the management approach to local norms and expectations. (Interview on March 31, 1992, in Yvetot)

Employees who have gone through a spiraling upgrade of tasks have become truly polyvalent. In the subsequent stage, they simultaneously manage these different tasks and advance to the multitasking stage.

2-3 Stage III: Fusion

In Stage III, each employee participates in the execution of tasks by grasping the overall implications from the perspective of the entire company. At this stage, employees and tasks were flexibly combined. Task sharing begins with horizontal sharing, passes through the upward expansion of subordinates’ jobs owing to nurturing by superiors, and reaches vertical sharing.¹⁴⁾ The notion of dual-tasking is significant because it brings elasticity to the job scope and allows us to overcome the limitations of the conventional one-job-per-person model.

This highlights the importance of understanding and exploring the potential benefits and challenges associated with task sharing, which could lead to more efficient and flexible work arrangements. However, introducing the concept of task sharing requires careful consideration and effective communication to address concerns and facilitate a smooth transition toward task-sharing practices in a work culture that values the traditional one-job-per-person model.

Multitasking by a single person has limited significance, whereas multitasking by multiple people is significant. Task sharing becomes possible when relationships between people and tasks can be freely established. In addition to current tasks, other employees’ tasks can be temporarily shared as secondary tasks.

Level III of Stage III involves vertical sharing, in which multiple people share tasks vertically and superiors and subordinates share tasks to achieve the objectives of the

small and medium-sized firms.

14) AOKI Masahiko raised and elucidated comprehensively the issue of sharing in Japanese companies: “I will discuss below how the developing Japanese system may perform well in coordinating intra-firm operations in response to evolving market circumstances of certain characteristics. I will also argue that the problem-solving capability of workers enables them to participate in the sharing of rents accruable to the efficient operation of the intra-firm coordination mechanism, but this sharing opportunities entail the hierarchical layering of workers’ benefits depending on the size of employing firms: the phenomena which I will refer to as the ‘dilemma of industrial democracy.’” (AOKI 1988: 4)

section or department. Under Japanese-style management, higher-ranking employees are expected to train their subordinates. Superiors also play a role in nurturing subordinates. Notably, the duty of on-site supervisors/group leaders in Japan is to train and educate workers.

It should be noted that Japanese-type OJT not only involves the new employee repeating the experienced employee's actions as mentioned above, but can be defined as follows: The activity by which a senior employee or supervisor trains his or her subordinates systematically and continuously through demonstrating improved working techniques, with the expectation that the subordinates will also improve their ability through their own efforts and through mutual encouragement with co-workers, in order to attain and maintain the planned level of job performance. This process includes demonstrating or elucidating the required levels of job knowledge, skills, and attitude (Hayashi, 1994, p.72). (HAYASHI 2008: 22)

By nurturing their subordinates, the supervisor gradually develops them to learn the supervisor's job and enables them to assume the role of replacement. Considering that the task of training subordinates is an important part of the supervisor's duties, success is a major accomplishment for the supervisor, and consequently, he/she is promoted to other higher positions to assume more important decision making. This internal promotion allows the company as a whole to have a larger pool of highly qualified managers who are familiar with the inner workings of the company and its unique clientele and to establish a corporate philosophy among employees (NAKAGAWA 2023b).

The progressive upgrading of tasks is particularly effective in the case of overseas expansion, where manufacturing sites are established overseas and separated from the main headquarters. This is where the unique skill-training methods of Japanese companies emerge. Japanese managers dispatched from headquarters have been promoted because of the spiraling upgrading of tasks and are currently in their actual positions. Owing to the spiraling upgrading of tasks, they possess extensive manufacturing knowledge. The greatest advantage of Japanese managers is that they experienced several workplaces before being assigned to France as local factory managers. Thus, individuals can play multiple roles.

Regarding the relationship between superiors and subordinates, Japanese managers who were transferred to transplants in France in the 1990s felt that French superiors managed subordinates but did not educate or nurture them. Even if a local Japanese manager attempts to nurture a high-ranking executive from one of the *Grandes Écoles* as his successor, it will not succeed. Although he was educated in management skills as a senior executive, he had no practical experience with the spiraling upgrading of tasks, nor did he see any need for it. Furthermore, he was unable to mentor his subordinates due to

his failure to acknowledge the importance of grooming successors within the organization.

Japanese managers sent by the headquarters are expensive. It is estimated that they cost three times more than the local executives. French executives have not experienced Japanese-type spiraling upgrades of tasks before arriving at executive status. They often have little knowledge of the reality of shop floors. Senior French executives specialize in management, so they have a high level of expertise but do not know much about the actual production process and often make decisions based on statistics. Therefore, many executives are hired based on their specialties. Replacing Japanese managers with French ones did not lead to a significant cost reduction. The implications of polyvalence in the task-sharing framework should also be considered.¹⁵⁾

Conclusion

Most researchers and practitioners are likely to be uncomfortable with the job evolution hypothesis proposed in this paper. This reluctance is derived from the nature of the hypothesis, which is based on Japanese working practices. Therefore, this hypothesis faces several challenges that disqualify it as valid. The first is Japan's poor economic performance, which has been in a long-term slump since the early 1990s and does not appear to be a suitable example of the current economic situation.¹⁶⁾ The second challenge is the slow decision-making in the Japanese-style organizational structure, which makes it difficult to adapt to rapid changes in the business environment (SAGI 2015). The third challenge is the unusual definition of the human-task relationship in this hypothesis,

15) A manager of an audio producer told me: "The expatriate costs are three times higher than those of regular French cadres. It is challenging to retain many Japanese expatriates from a financial perspective. The competitiveness of local factories will not increase unless the cost to Japanese expatriates is reduced. Even small companies such as ours [approximately 80 employees] have as many as three or four expatriates. In the case of size growth, it would be beneficial to retain only three or four Japanese expatriates. This would make a significant difference because the burden would be reduced. However, the duties of the Japanese must be transferred to the local cadres. The duties performed by the Japanese are extensive and not segmented; therefore, it is difficult for the locals to perform them with the same number of people." (Interview on March 18, 1992).

16) Some possible causes of the slump include the absence of innovations, the insufficiency of investment, and reduced consumption (<https://www.weforum.org/agenda/2016/02/why-is-japan-economy-shrinking/>; KAMBAYASHI, KATO 2010). Some factors, among others, are the following: first, the over-evaluated yen that the United States imposed on Japan, which caused many Japanese manufacturers to relocate their factories overseas. Second, the intrusion of China's economy into the global market, which gradually replaced Japan's expensive labor force with China's cheap one. This led to continuous downward pressure on wages for Japanese workers. Consequently, domestic consumption decreased, and the Japanese economy stagnated for a long time.

which may raise criticism that the nature of the task is unclear and the functionality of the organization is skeptical. Compared to Western organizations viewed as models, the human-task relationship shown in the job evolution hypothesis diagram in this paper appears to be illogical.

The optimal solution to the market demand for organizational adaptation is a matter of debate. These views can be divided into two categories. The division of labor approach argues that the best way to meet market demand is to have each worker specialize in a single task. This can lead to efficiency and productivity as workers become highly skilled at their tasks. By contrast, the flexible approach argues that it is better to have workers able to move between tasks as needed. This allows organizations to be more agile and responsive to changing market demands.¹⁷⁾ This is precisely what the organizing principle is concerned with.

Taylorism, or scientific management, is a management philosophy that emphasizes efficiency and productivity. It was developed in the early 20th century and became popular in the latter half of the century as it supported the mass production of consumer goods. Division of labor is the process of breaking down a job into smaller, more specialized tasks. This can lead to increased productivity, but it can also have negative consequences such as boredom, repetitive stress injuries, and a lack of creativity.¹⁸⁾ Adam Smith was one of the first economists to argue in favor of the division of labor. He believed that this could lead to increased productivity and economic growth. However, he also acknowledged that there were potential downsides, such as the deskilling of workers

17) Jean-Louis Peaucelle holds an interesting discussion on organization. "Let us also suppose that there are two possible ways of organizing the job. In the first, work is divided up. Three people involved successively process each file (each taking on average five minutes per file). In the second, work is considered as a single entity. All employees are polyvalent. They work on each file from beginning to end (they spent 15 minutes on average per file). In each of the two methods of organizing the work, the time spent on human work was 15 minutes per file, on average. Work arrives at random and in an irregular manner and the working time is also irregular. Queuing theory compares delivery times for these two methods of organization at the same cost." (PEAUCELLE 2000: 460–461)

18) "If sociology is to understand the changes in the forms of work organization from the late nineteenth century to the present, then it is necessary to penetrate the clichés about Taylorism. In particular it is necessary to avoid construing Taylorism as an abstracted ideas-system, and to avoid the 'Ambrist fallacy'. Thus we have analysed Taylorism in terms of the division of labour, the structure of control over task-performance, and the implicit minimum interaction employment relationship.

Further, Taylorism represents a form of organization devoid of any notion of a career-structure for the majority, unlike other forms of organizational model available at the turn of the century, such as the railways and post office. Therefore Taylorism can be defined as the bureaucratization of the structure of control, but not the employment relationship." (LITTLER 1978: 199)

and alienation from labor.

Many criticisms have been made against the division of labor over the years.¹⁹⁾ For example, in the late 1960s, French workers staged a series of strikes known as the *Malaise des OS* (Workers' Revolts) in protest against the Taylorist practices of their employers. In France, flexibility in labor organizations was pursued with a particular emphasis on polyvalence. Polyvalence is characterized by individuals possessing and solidifying certain skills and techniques in France. By contrast, polyvalence in Japanese organizations is characterized by simultaneous or overlapping use as needed. Supervisors train and educate subordinates and guide them to perform new tasks one after another.

However, a better way to understand the difference between French- and Japanese-style organizations is not merely by comparing their nature of polyvalence, but by recognizing the fundamental divergence between their organizational principles. For human organizations, it is appropriate to discern two types of principles for their construction: tie-based and function-based. Humans have lived the majority of their existence in organizations such as families, bands, clans, and tribes, which are based on kinship or geographical combinations that we would like to qualify as tie-based. Instead, artificial organizations are created and sustained for purposes or intentions that qualify as function-based organizations. Under the function-based principle, functions are determined first while human resources are assigned based on these functions (NAKAGAWA 2022a).

The history of organizing principles shows that the function-based principle, which emerged from nomadic pastoralism around 6,000 years ago, was refined and perfected by Taylorism with the help of modern technology and industrialization. However, Taylorism faced a challenge from Japanese-style organizations, which reversed the human-task relationship.²⁰⁾ This indicates that the Japanese-style organizational principle still

19) By radically redesigning the entire process, BPR (Business Process Re-engineering) proposed by Michael Hammer and James Champy challenged the existing organizing principles: "However, in terms of the classical debate on work processes, i.e. the debate which focuses on the division of labor and on skill and control, BPR is a loose concept. On the one hand, BPR seems to be an attack on Taylorism. Purportedly "reengineering rejects the assumptions inherent in Adam Smith's industrial paradigm — the division of labor, economies of scale" (Hammer and Champy, 1994, p. 49). Hammer and Champy (1994, p. 53) claim that: "Instead of separating decision making from real work, decision making becomes part of the work. Workers themselves now do that portion of a job that, formerly, managers produced." They say that work becomes "more rewarding since people's jobs have a greater component of growth and learning" (Hammer and Champy, 1994, p. 69). Amplifying this point, we are told that "Companies that have reengineered don't want employees who can follow rules; they want people who will make up their own rules" (Hammer and Champy, 1994, p. 70)." (PRULIT 1998: 261)

follows the tie-based one, and that its emergence represents a return to the original organizational principle.

Bibliography

- ABO Tetsuo (ed.) (1994) *Hybrid factory: The Japanese production system in the United States*. Oxford University Press, 1994.
- ALMAJID Rania, GOEL Rahul (2022) Assessment of dual-tasking during a dynamic balance task using a smartphone app: a pilot study. *Journal of Physical Therapy Science*, 34(2): 115–121.
- AOKI Masahiko (1988) *A New Paradigm of Work Organization: The Japanese Experience (No. 36)*. Helsinki, Finland: World Institute for Development Economics Research, 68.
- (1990) Toward an economic model of the Japanese firm. *Journal of economic literature*, 28(1): 1–27.
- AOKI Masahiko, JACKSON Gregory (2007) *Understanding an Emergent Diversity of Corporate Governance and Organizational Architecture: Essentiality-Based Analysis*. Rock Center for Corporate Governance Working Paper No. 38, 29.
- BARTLETT C. A., GHOSHAL S. (1995) Changing the role of top management: beyond systems to people. *Harvard business review*, 73(3): 132–142.
- BHASKARAN P. Bala (2006) Book Summary: Sumantra Ghoshal and Christopher A Bartlett, *The Individualized Corporation*. In: P. Bala BHASKARAN (ed.) *Strategic Leadership* published by ICFAI University Press in 2006. ISBN:81-314-0097-2
- ECKERT Henri, MONCHATRE Sylvie (2009) Les carrières ouvrières à l'épreuve de la polyvalence, analyse de deux cas français. *Revue multidisciplinaire sur l'emploi, le syndicalisme et le travail (REMEST)*, 4(2): 104–123.
- EVERAERE Christophe (2008) La polyvalence et ses contradictions. *Revue Française de Gestion Industrielle*, 27(4), 89–105.
- FREYSSINET Michel (1993) La trajectoire de Renault de 1974 à 1989. *Première Rencontre Internationale:*

20) *The Individualized Corporation* advocated by S. Ghoshal and C.A. Bartlett is particularly interesting in light of this paper's hypothesis that Japanese-style organizations have overturned the human-task relationship: "The authors, based on their extensive research and consulting experience, have attempted to create a new perspective of the 21st century organization, in this book. With Taylor's prescription of job analysis and redefinition, management emerged as a tool in motivating and controlling workmen in their well-defined jobs. Capital was the most critical and scarcest of resources in the industrial era; as a result management implied resource allocation and capital budgeting, etc. The focus was on capital productivity, not on human aspects. Taylorism led to the concept of divisionalized structures; William Whyte's book *Organization Man* represented the thinking of the time. This paradigm got entrenched, became robust and resistant to change, over a period. Towards the end of the 20th century some dynamic managers, like Jack Welch of GE and Percy Barnevik of ABB, felt that managers too much time on capital productivity ignoring the human aspects. They explored and eventually succeeded: Instead of fitting people into the strategy-structure-systems paradigm organisations be created to fit people? This is the genesis of the concept of *Individualized Corporation*." (BHASKARAN 2006: 1)

- “*Les trajectoires des firmes automobiles*”, GERPISA, juin 17–18–19 1993.
- (1994) VOLVO-UDDEVALLA, analyseur du fordisme et du toyotisme. *Actes du GERPISA*, 9: 161–187.
- GHOSHAL Sumantra, BARTLETT Christopher A., KOVNER Peter C. (1998) *The individualized corporation*. Groningen: Harper Audio, 372.
- HAYASHI Etsuko (2008) Skill Formation in the Japanese Manufacturing Industry: An Empirical Analysis of Diversified Regular Workers. *Kanagawa University International Management Review*, 36: 15–41.
- HOOI Lai Wan (2002) The impact of Japanese promotion practices on Malaysian enterprises. *Asia Pacific business review*, 9(1): 21–38.
- KAMBAYASHI Ryo, KATO Takao (2010) The Japanese Employment System after the Bubble Burst: New Evidence. In: HAMADA Koichi, KASHYAP Anil K., WEINSTEIN David E. (eds.), *Japan’s Bubble, Deflation, and Long-term Stagnation* (Cambridge, MA, 2010; online edn, MIT Press Scholarship Online, 22 Aug. 2013), 217–262.
- (2017) Long-term employment and job security over the past 25 years: A comparative study of Japan and the United States. *ILR Review*, 70(2): 359–394.
- LABIT Anne (1993) Groupe de travail à la suédoise ou à la japonaise? La maîtrise de Volkswagen au cœur des paradoxes. *Première Rencontre Internationale: “Les trajectoires des firmes automobiles”*, GERPISA, 17–18–19 juin 1993.
- LANCIANO Caroline, MAURICE Marc, NOHARA Hiroatsu, SILVESTRE Jean-Jacques (1992) *Innovation: acteurs et organisations. Les ingénieurs et la dynamique de l’entreprise. Comparaison France-Japon. Résumé de la recherche*. Laboratoire d’Economie et de Sociologie du Travail, 42.
- LINDBECK A., SNOWER D. J. (1995) Restructuring production and work (No. 1323). *CEPR Discussion Paper Series*, Centre for Economic Policy Research (CEPR), London, 37.
- (2000) Multitask learning and the reorganization of work: From tayloristic to holistic organization. *Journal of Labor Economics*, 18(3): 353–376.
- LITTLER Craig R. (1978) Understanding Taylorism. *The British Journal of Sociology*, 29 (2): 185–202.
- LOMBA Cédric, POCHIC Sophie (2009) L’évaluation des travailleurs dans les entreprises: un “modèle” à évaluer. In: *Colloque international «La valeur de la science. Pourquoi évaluer la recherche?»*. 2009.
- LSCI (Laboratoire de Sociologie du Changement des Institutions) (1988) *Le Taylorisme ... et après: les effets de la modernisation dans un établissement industriel*. Paris, 149.
- MACPHERSON S. E. (2018) Definition: Dual-tasking and multitasking. *Cortex: A Journal Devoted to the Study of the Nervous System and Behavior*, 106, 313–314.
- NAKAGAWA Yoichiro (2021) National Endorsement of the Three-tiered Structure within French Companies by Publication of the Parodi-Croizat Ordinances (1945): Different Types of Labor Management Theories in the United States and France. *Keizaigaku Ronsan (The Journal of Economics)*: Chuo University, 62(1·2·3): 127–151. doi/10.24789/00013652
- (2022a) Evolution from Basic Communities to Developed Societies Brought about by Reversal of the Organizing Principles. *Keizaigaku Ronsan (The Journal of Economics)*: Chuo University, 62(4·5·6): 117–132.
- (2022b) Confrontation of Full-Cost and Marginal Principles in the Automobile Supply Chain: Implications of Durable Consumer Goods in the Market Turmoil after WWII. *Keizaigaku Ronsan*

- (*The Journal of Economics*): Chuo University, 63(1·2): 57–75.
- (2022c) Implications and Setbacks of the Japanization of the European Automobile Industry: Organizational Gaps Observed by Japanese Transplant Managers in the 1990s. *The Annual of the Institute of Economic Research*: Chuo University, 54: 17–32.
- (2023a) Well-defined Tasks for Individualized Jobs: Tayloristic Organizations Observed in France in the 1990s. *Keizaigaku Ronsan (The Journal of Economics)*: Chuo University, 64 (1·2): 59–79.
- (2023b) Vertical Task Sharing Sustained by Internal Promotion. *Keizaigaku Ronsan (The Journal of Economics)*: Chuo University, 64 (3·4) : 83–100.
- PASHLER H. (1994) Dual-task interference in simple tasks: data and theory. *Psychological bulletin*, 116 (2), 220–244.
- PEAUCELLE Jean-Louis (2000) From Taylorism to post-Taylorism. *Journal of Organizational Change Management*, 13(5): 452–467.
- POLJAC Edita, KIESEL Andrea, KOCH Iring, MÜLLER Hermann (2018) New perspectives on human multitasking. *Psychological Research*, 82: 1–3.
- PRUIJT Hans (1998) Multiple personalities: the case of business process reengineering. *Journal of Organizational Change Management*, 11(3): 260–268.
- SAGI Srilalitha (2015) “Ringi System” The Decision Making Process in Japanese Management Systems: An Overview. *International Journal of Management and Humanities*, 1(7): 10–11.
- STROBACH Tilo, WENDT Mike, JANCZYK Markus (2018) Multitasking: Executive functioning in dual-task and task switching situations. *Frontiers in psychology*, 2018, 9: 108.

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