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#### BUSINESS PIONEERS OF MODERN JAPAN

--- Ishikawa Masatatsu and Oshima Takatō----

By Yasuzo HORIE\*

#### I Preface.

It is a widely recognized fact that, around the time of the Meiji Restoration, modern entrepreneurs and leaders in the promotion of enterprise arose from among the former samurai class. Some of them actually managed modern enterprises as ordinary citizens, or carried on activities as business promoters. Others took charge of the encouragement of modern industries as officials of the central or local governments, at times managing government enterprises. Though modern industries of Japan are often said to have been fostered by the government, we must consider the character of the men who organized this government, and question whether men such as the often quoted Okubo Toshimichi were great entrepreneurs of the modernization process in Japan in the same sense that "Stalin was a great entrepreneur."

This kind of modern entrepreneur and business leader appeared about the time of the Meiji Restoration in great numbers and it may be said that such men, whether joining the bureaucracy or remaining as ordinary citizens, when acting in cooperation with each other, were the active force motivating Japan's swift modernization. Of course, I am not attempting to put

<sup>\*</sup> Professor of Economic History at Kyoto University.

forth a historical theory based on the activities of great men only. Nor would I ignore the actual conditions which gave birth to such men. That period was one of revolutionary change from a feudalistic to a capitalistic economy, a period in which that change erupted primarily as a political revolution. Or, to look at it in another way, it was a period in which the feudalistic society had already lost its equilibrium and the capitalistic society had not yet taken shape. That is, it was a chaotic period of transition. Even in such countries as England, where the development from feudalistic to capitalistic ecomomy occurred in a natural, evolutionary manner, the transitional period was one which gave much scope for the activities of individual persons. Limiting discussion to the eighteenth century phase of the industrial revolution, we probably cannot speak of it without concerning ourselves with the technical innovators and the entrepreneurs who took part in it. In fact, activities of such people became the great generative power in the formation of a capitalistic society. In our country this was even more true.

In this sense, in the study of the Meiji Restoration as the starting point of the modernization of Japan, we cannot ignore the study of such leading figures. In the field of research in Japanese economic history, many men are working with a methodological study concerning the process of the division the middle-class producers—especially in the farming villages—into proletariat and "captains of industry". While hoping that entrepreneurial figures might be discovered by such a method of study, here I would rather choose concrete examples from among the entrepreneurial masters who appeared from among the traditional samurai class, choosing Ishikawa Masatatsu and Oshima Takatō, and by looking at their achievements and politicoeconomic ideas, to investigate the general character of such early entrepreneurs, and finally mention the background of their appearance.

#### II Ishikawa Masatatsu (1825–1895)

Ishikawa Masatatsu (石河正竜), a samurai of the Satsuma han, not only as a major contributor to the establishment of a cotton spinning mill of modern type in that han, but as a government official in the early Meiji period, devoted all his energies to the development of the cotton spinning industry of Japan.<sup>1)</sup>

Born in a family of Confucian learning in Takada, Yamato province (now Nara Prefecture), he went to Edo at the age of 20 and studied under Sugita Seikyō, a famous scholar of Dutch learning in those days, and soon appeared in Nagasaki, where Dutch learning was most flourishing in Japan.

<sup>1)</sup> A brief biography of Ishikawa and his documents appear in Kinugawa, U., Hompō Menshi Boseki Shi (A History of Cotton Spinning Industry of Japan), Vol. 1, 1937.

It is said that in Nagasaki he studied by stealth, but this probably means that he had not studied with such and such a teacher or at such and such a school. In 1854 he returned to his home, and as it was not so long after Commodore Perry's visit to Japan, a time when Bakufu and daimyo were seeking desperately for men with Western learning in artillery and military science, Ishikawa was given offers of employment by Tōdō, Ogasawara and other daimyo, but finally responding to the offer of Shimazu Nariakira, the lord of Satsuma, in 1856 he was duly ranked among the samurai of the han.

Ishikawa at first assumed office as an oniwa-yaku, which was a kind of special adviser to the lord. Shimazu Nariakira used to take men of talent, regardless of their status, and to appoint them to the post of oniwa-yaku for the purpose of consulting them on various matters. The famous Saigō Takamori was also at one time a member of this group. Ishikawa was taken into confidence by the lord and soon appointed to the position of oniwabugyo (by bugyo was meant director, or official in charge).

While employing him thus, the lord showed him a book. Because this was in English, he sent it to Nagasaki for translation into Dutch, and it turned out to be a book on the cotton spinning industry. The attention of the lord, who had been previously interested in machine spinning, was abruptly caught by the book, and the plan for building a cotton spinning mill was made. This plan, because of the death of Shimazu Nariakira in 1859, and for some other reasons, did not progress rapidly but, in 1865, on the occasion of the visit of Godai Tomoatsu and other Satsuma samurai to Europe, a set of cotton spinning machines, together with some weapons, was brought back to the han, and a spinning factory was built under the guidance of an English technician who was employed by the han.<sup>2)</sup> This was the Kagoshima Cotton Spinning Mill, the forerunner of the modern spinning industry in Japan, which began operation in 1867.

In the meantime, Ishikawa wrote in 1863 a memorial adressed to the lord: "Memorial for the Establishment of the Sakai Cotton Spinning Plant." As this proposal does not merely show his profound concern in

<sup>2)</sup> Godai, R., Godai Tomoatsu Den (A Biography of Godai Tomoatsu), 1933, p. 37.

<sup>3)</sup> The memorial was written while Ishikawa was in service at the Osaka Kokusan Kaisho of the Satsuma han. About the same time, he wrote another memorial to the following effect; (i) The Satsuma han should embark upon the profitable exchange of the rice of the Tohoku districts with the cotton cloth of Kawachi and Yamato provinces, (ii) should issue paper currency through the Yamato Koksan Kaisho of the han, (iii) should advance fish manure to the farmers of Kawachi and Yamato provinces, and let them redeem the advance with seed-cotton, from which the han should produce raw cotton and cotton-seed oil, (iv) should export raw cotton to England. [Manchester was in a condition of cotton famine caused by the Civil War of the United States.] Among the above items the issue of the paper currency was realized.

the building of such a plant, but also demonstrates his character as an entrepreneur, I would like to introduce its contents here. At the beginning of the memorial, the current condition of demand and supply for cotton cloth was stated as follows:

Cotton cloth is indispensable for the daily life of all people regardless of rank. Owing to the rise of the price of silk cloth and to the wider use of cotton cloth all over Japan, the price of cotton cloth also has risen rapidly. As the result of this the output of cotton cloth has increased two or three fold. Nevertheless, the supply does not wholly cover the demand, it is said. While the cotton cloth woven by one weaver per day is about 2 tan, only 40 momme of cotton thread is spun by a spinner per day; that is, spinning cannot keep pace with weaving. Because of this, the price of cotton thread has risen higher than that of cotton cloth, and peasants in the vicinity of Osaka have begun to turn to the job of cotton spinning, giving up their field work. Under such a condition, in my opinion, it is now the most urgent, as well as the most profitable, job for the [Satsuma] han to produce a great quantity of cotton thread.

The rise in the price of silk in those days was broughtabout by the new demand for export of raw silk, which occurred accompanying the opening of ports, and it was just as stated by Ishikawa: the price of cotton cloth, side by side with that of silk, showed a tremendous tendency to rise, day after day. Reviewing the conditions which prevailed in the production of cotton cloth, we see that in circumstances in which it required eight persons to spin enough thread for one weaver, the unbalance of the amount of work involved in spinning and weaving was similar to that condition which pertained in England about the middle of the eighteenth century. Observing this condition, Ishikawa thought that the increased production of cotton thread was indeed an urgent business and the essential feature of an economic policy, and he appealed for the introduction of Western machines and technique as the means to achieve this increase. On this point he stated;

In the West, spinning, weaving, and sewing as well, are done by machines. Leaving aside sewing, the amount of manual labor saved, owing to the development of spinning and weaving machines, can be understood from the statement that a child's labor is sufficient for the operation of fifteen sets of weaving machine; and the quantity of the production of cotton goods can be inferred from the one fact that two million farm families in the United States are able to live only by supplying raw cotton to the spinning factories in England. In this connection, I dare solicit your order to import, in course of time,

cotton spinning machines with the profit of the koekikata (an office in charge of foreign trade of the han). For the present, I would like to ask you for the importation, as a trial, of a set of machines which can spin one hundred kin of cotton thread per day, by defraying the cost from a special reserve fund. Such a cost (estimated at about one thousand five hundred ryo without freight charge) could easily be recovered by sending the cotton thread thus made to the Ryukyus, for example, and having it woven into shima (a type of patterned cloth) which could then be sold in the Osaka market.

The above statements show that Ishikawa had a sense of market opportunity and intended to make investments in order to exploit it, and therefore we can find in him an entrepreneur of modern type. It should be added, however, that his spirit of enterprise was concerned with the so-called "national wealth" (that is, the lord's finance) of the Satsuma han. This is shown by his following words: "And, it would be not a small gain for the han, if, on the arrival of the machines, raw cotton would be bought up at its place of production directly (not through cotton dealers) by the koekikata, and if the machine-made cotton thread, except that for domestic use, would be sold directly in the cotton weaving districts outside Satsuma. Moreover, it could be hoped that raw cotton all over Japan would be imported to the han, when it is sufficiently equipped with cotton spinning machines."

The memorial of Ishikawa closes with the following words: "Though there is no attempt among Osaka merchants to import machinery and start a cotton spinning industry, because they are not familiar with machinery, there may probably appear in five or six years some people among them who intend to undertake the industry. The Satsuma han, in the meantime, should promote to a large extent the wealth of the domain by taking the lead in the building of a modern spinning factory."

In the year after the Kagoshima Spinning Plant began operation, that is, in 1868 (the first year of Meiji), the Satsuma han resolved to build another spinning plant in Sakai, a port town south of Osaka, and it was natural that they should put Ishikawa in charge. Receiving informal instructions, he laid down three conditions, all of which were granted, and was formally appointed to the position. The first of these conditions was that spinning machines must be given priority over weaving machines, concerning which he wrote in the preface as follows:

'Wealth and Power of the State' is a common slogan through the whole world. It is widely known that the Western people put more importance on measures calculated to enrich and strengthen a nation than the Asian people do. Though I, owing to my narrow knowledge,

have not yet read the actual word in Western books, the intention is found in full in many. The Western people seem to consider machines as the basis of national prosperity, so that every kind of machine has become more and more elaborate and production by machines more and more profitable. It is not a false opinion, I trust, that it is owing to machinery that England is now exercising its authority all over the world. It is a basic principle of political economy to supply people with more goods through ministering to their wants, and the sphere of goods exchange is, of course, due to become ever wider. Are we able to hope to enrich and strengthen our country, if we depend as ever only on production inside national boundaries? The least developed thing in Japan is machinery, and there is nothing which is not hand-made. While the society has become civilized day after day, the demand for goods has become greater and diversified and, at last, farmers too, forfeiting their own job of farming, have turned to handicrafts. Looking at Japanese trade with foreign countries, eighty to ninety per cent of foreign commodities imported to Japan are machine-made, while the same percentage of Japanese export goods is composed of products from the earth, and even hand-made goods are very rare. This is very far from striking a balance, and it is not without reason that the profit from trade always falls into foreigners' hands. -- - Now, to substantiate my opinion upon the advantages of machinery using the example of spinning, spinning by a steam-power-driven machine is 20 times faster than spinning by a hand-driven spinning wheel. Though the size of the machine is not fixed, a machine of normal size has 500 spindles and a child can oversee two sets of them.

The meaning of this, in short, is that the basis of the prosperity and power of a state is mechanized production, and once again we must note that Ishikawa's attention focused not merely on the wealth and strength of the Satsuma han, but on that of the whole of Japan in relation to the Western nations.

The second condition was that the profits from the spinning plant should go to the building of defense batteries and to the expenses of a Western Sciences Center, and particularly, concerning the latter, he stated: "Because Western science is different from traditional studies, without proper facilities effective study is not possible." Ishikawa was not only concerned in the spinning industry, but also in the building of steam ships, undertakings involving the use of electricity, and other new enterprises, and as a teacher at the Kaisei School, he participated in the promotion of Western sciences. It is clear that he must have been thinking of the promotion of Western learning from the point of view of enriching and strengthening the nation, and at the same time, thinking of the necessity of directing part of the

profits of the Sakai Spinning Plant to part of the expenses of a center of Western sciences, which modes of thought may be seen to have great significance as regards what may be called reinvestment of profits. These points, along with the third condition, a demand that he not be made to change office for seven years, show something of his modern entrepreneurial spirit.

The Sakai Spinning Plant, using machines made in Manchester, began operation in 1870. In July of the following year, the han (feudal domains) were abolished and the ken (modern prefectures) established. The factory was purchased by the new Meiji government in July, 1872, becoming a so-called government model factory. At the same time Ishikawa joined the government, and until his retirement in 1887 at the age of 63, serving as a consultant on spinning, he devoted all his energies to the promotion of the Japanese cotton spinning industry.

#### III Oshima Takato (1826-1901)

Oshima Takato (大島高任)<sup>4)</sup>, pioneer in the modernization of Japan's steel manufacturing industry, was born the eldest son of Oshima Shūi, doctor to the lord of Nambu(now Morioka Prefecture). The father once studied Dutch medicine. In the year 1842, at the age of 17, accompanying his father to Edo (Tokyo), Oshima joined the school of Mizukuri Gempo and Tsuboi Shindō and studied Dutch learning. In 1846 he was directed to go to Nagasaki for further study, and spending two years there, he learned the techniques of warfare, artillery, mining and metallurgy from Dutch writings. In 1861, joining the musketry of the Nambu han, he instructed the samurai of the han in the techniques of Western gunnery. The next year, to do further research in Western artillery techniques, he was ordered to go again to Edo. It was soon after that, thanks to an introduction by Fujita Tōko, that he came to be known to Tokugawa Nariakira, the lord of the Mito han.

In 1853, Commodore Perry landed. Nariakira had already entertained a plan for an iron canon, and inheriting his intention, Fujita, a scholarly adviser to the lord, learned about Oshima, and entrusted him with the making of a model of a reverberatory furnace for the casting of such a canon. Oshima, working with a friend, Takeshita Seiemon from the Satsuma han, completed the model in three days and nights, and showed it to Fujita. Seeing the model, Nariakira determined to construct a reverberatory furnace and, employing Kumada Kamon from the Akita han, along with Oshima and Takeshita in their status as samurai of their respective han, sought a loan from the Bakufu to cover the cost and, on receiving it, commenced the en-

<sup>4)</sup> About Oshima, I have written depending solely upon, Oshima S. (ed.), Oshima Tokato Kojitsu (Documents and Performances of Oshima Takato), 1938.

terprise. Oshima, naturally being the central figure, took charge of the whole project, from the search for a clay to be used in the fireproof bricks to the mining and examination of the quality of the coal and the preparation of design and manufacture of a boring machine. Then, in November of 1855 the furnace was completed in Naka, near Mito (the capital town of the Mito han), and in April of the next year, the first canon, a mortar, using more than 1,200 kilograms of pig iron from Izumo (now Shimane Prefecture), was successfully cast.

But, because the pig iron produced from the iron sands was not suited as material for the casting of guns, Oshima sought iron ore from the Nambu domain, and planned the building of a Western type blast furnace for the smelting. In the name of Kandō Sezaemon, a landed samurai of the Nambu han, such an iron mine was already excavated at Ohashi (now Kamaishi), and with the completion of the first blast furnace in March of 1857, the first pig iron was successfully produced at the end of the same year. This may be said to be the beginning of the modern steel industry in Japan. After this, blast furnaces were built one after another in the area of Kamaishi, and at the time of the Meiji Restoration ten could be counted, each capable of producing about 3,750 kilograms (about 4 tons) of pig iron in one day. But in the meantime, in 1858, Nariakira, stubbornly opposing the conclusion of a treaty for commercial relations with foreign countries, was ordered into confinement by the Bakufu, and consequently the production of the reverberatory furnace automatically ended, causing Oshima to be released in the following year and hence to return to the Nambu han. It is his ideas in this period after his return to the han that clearly show Oshima to be one of the pioneer entrepreneurs.

After his return to the han, Oshima first joined the inspection staff of the Ohashi mine in 1859, but in the following year, while working part time as an assistant instructor of the Bakufu's Institute for the Study of Western Writings (Bansho Shirabesho 蕃書調所), he was appointed to the financial management and, at the same time, head of the production staff of the han in Edo. Thus he came in charge of the plan for the promotion of local production, and subsequently presented a report to the lord of the han, which, for the first time, reveals his way of thinking. The first statement of the preface is:

For the purpose of enriching the han, there is no other way than to expand local production, by which the prevention of outflow of specie and facilitation of inflow of specie can be achieved. To expand production, a supervisory board and a big testing laboratory should be established, with an influential man as president and an experienced man as

manager entrusted with all the work, which should be undertaken in an exhaustive manner.

In seeking the intensification of industrial production as the basis of a stronger and richer state, Oshima independently proposes the same theory put forth by Ishikawa Masatatsu.

As practical phases of the plan for the encouragement of industry he proposed: first, as a means of stimulating inventions by the people, a scheme resembling the patent system, and second, direct supervision by a Production Inspection Board of enterprises such as the steel, salt, and copper manufacturing industries. The building of blast furnaces, one after the other, by the Nambu han, even after the cease of the development of the reverberatory furnace of the Mito han, is thought to have resulted from this report. But as well as the revelation of his way of thinking, an interesting peculiarity of the report is its reference to the salt industry. According to it, at that time the consumption of salt in the Nambu han amounted to 50,000 koku, of which 20,000 koku was produced in the domain, leaving 30,000 koku which had to be imported at a price of 9,373 ryo. Accordingly, Oshima advocated the use of the natural evaporation process used by Western nations, by which about 100,000 koku of salt could be obtained in one year from ten sets of equipment. Of this amount 50,000 koku could be used in the domain and the rest, if shipped to other areas, could be used to earn as much as 12, 000 ryo, deducting all expenses. Moreover, he argued that:

The demand for salt in the domain would be satisfied by indigenous production, and its value of 9,373 ryo would be kept in the domain. Moreover, 50,000 koku which would be sold abroad would bring in more than 11,000 ryo in the form of money or goods. The result would be a gain, in all, of more than 20,000 ryo, not including the profit to the lord, and this gain would further stimulate economic activities in the domain.

That is, the adoption of a modern method of salt production would not only result in the replenishment of the revenues of the han but would have a good influence in stimulating economic activities within the domain.

In 1862, appointed by the *Bakufu* to the post of adviser to the Administrator of Hakodate, Hokkaido, Oshima crossed to Hakodate. His mission was to oversee the defenses as well as the opening of coal mines and assaying of coal in that area. He returned to the Nambu *han* for a short time in the following year and at that time, when advocacy of "reverence for the Emperor and the expulsion of foreigners" had already become a political reality, he saw clearly the danger to the nation of such extremism

and presented a very long recommendation concerning the reform of the administrative system of the han to his lord. Its four main points concern the "building of schools," the "reform of the military system," the "encouragement of commerce and development of industrial production," and, as an expedient for raising the necessary funds for these reforms, "temporary financing." As a whole, these proposals were nothing but the advocacy of a policy for enriching and strengthening the han and looking at the third point, we find it expressed in the opening statement as follows:

'Agriculture supports a country and thrift makes it wealthy'; this is the common opinion. But, depending only on thrift and agriculture, the country will never be wealthy unless it contrives its economic prosperity by encouraging commerce and developing manufacturing production. For example: the lord whose domain produces 100,000 koku of rice will derive 40,000 koku as agricultural tax, at the official rate of 40 per cent, of which only 20,000 koku will remain in the hands of the lord, while another 20,000 koku will be given to the retainers as their stipends. If the lord would sell all the rice remaining in his hands, he could gain a price of only 40,000 ryo, with which sum he would never be able to sustain the financial position befitting a lord of 100,000 koku. At the same time, if it is estimated that 10,000 farm families cultivate the paddies of the domain, the total net proceeds to the farmers would be only 60,000 koku and the average net proceed per family would be only 6 koku in a year. It is no wonder that, on such a small sum of rice, farm families cannot make both ends meet. Thus, all the people of the domain, from the lord to the peasants, always find it hard to make a living and cannot anticipate a more prosperous life in the future.

Thus criticizing simple agriculturalism, and explaining, with the help of figures, how commerce, particularly external commerce, is a factor contributing to a country's wealth and power, Oshima once again censures the system of feudal monopolies in commerce—the so-calld "monopolies by han governments of domestic products"—and, emphasizing that commercial rights must be entrusted to the merchants, he states: "A ruler has no other duty than to protect the ruled. Accordingly, there should never be a situation in which a lord feels it pleasant to see the merchants getting into difficulties because deprived of their rightful job by the lord."

This way of thinking is none other than the fundamental Confucianist approach, but in this case it is probable that Oshima was influenced by Western liberal thinking also. Regarding this point, we may look at his subsequent reference to a policy for the encouragement of production as well as commerce: "There are many important things for the encouragement

of commerce and development of industry, among which the most important is facilitation of transportation by land and sea, not to mention the improvement of the road system." The advocacy of the establishment of transportation systems and the modernization of transportation facilities should probably be labelled a truly enlightened approach. Concerning the development of industry, he also elaborated on the modernization of iron, copper, gold, and silver mines, but there is no need to dwell on this aspect.

In his report, we must finally notice the insertion of the first article of reform, the "building of schools." He writes:

The aim of government is to educate the people, to defend the country, and to raise money by an effective economic policy for the above purposes. The ruler of a country, therefore, must certainly build schools in order to enlighten the people and to foster talents in every field.—
—In Western countries, elementary schools are built even in outlying areas and in small villages, not to mention in big cities and large villages, and the children are taught the fundamentals of morals, mathematics, geography, physics, and so on.

Outlining further the educational system, extending from elementary schools to universities and specialized high schools in Western countries, he advocates the adoption of a similar system by the Nambu han. With special regard to elementary schools, he writes:

Throughout the Nambu domain, all the children from every status, without discrimination between samurai and commoners, should be sent to school from the ages of seven to fifteen, and should be made to learn, under a fixed schedule and curriculum, to read Japanese, Chinese, and Western writings, to do mathematical calculations, and to write sentences; the result would be the appearance of talents among children and the elimination of illiteracy among the people.

It is also very interesting that he recommends the adoption of a system of sending people to study abroad as one method of training the educators in each type of school.

I wonder whether this wasn't the first proposal for the modernization of Japan's educational system, but at any rate, the preaching of the need for the talents of many people as a premise for the modernization of the military, economic, and political systems ranks Oshima's ideas as those of a very enlightened man. In fact, before writing this report, Oshima had aleady joined with some colleagues in 1861 to propose the setting up of a school for training and research in Western arts and sciences, and being permitted, the "Nisshindo" was built by the han and he was appointed one of the

directors. While doing research of his own in chemistry, physics, the science of production and English language, he taught these subjects to the students. It may be noticed that he had progressed from Dutch to English learning, and his knowledge and understanding gained from all these subjects was vast. The report concerning the reform of the han's administrative system, which followed these studies, was written with the benefit of this insight. Accordingly, in its opening pages, the geography, population, military system, economic conditions, etc., of Russia, England, France, and the United States are very well summarized, and his opinion that it was unwise and dangerous for Japan to start a conflict with those countries is well expounded. This is probably another important point for the understanding of his position as an enlightened leader.

In 1869, soon after the return of their domains and people to the nation by the daimyo, Oshima was appointed by the central government an assistant professor at Tokyo University. Then, being moved to the Bureau of Mines of the Finance Ministry, he became deputy manager and supervised the modernization of the Kosaka Silver Mine. But in November, 1870, with the establishment of the Ministry of Works, he joined it and became assistant secretary. In 1871, appointed to the Iwakura Mission, he toured America and Europe, mainly observing the mines in each country, and after his return in 1873, in the following year he made an inspection tour of all the mines in the Kyushu area with foreign engineers employed by the government. In that year, the nationalization of the Kamaishi Iron Mine was decided upon, and going there, Oshima was once again employed at the mine. After that, in 1889 he was appointed Technical Inspector of the Finance Ministry and, until his retirement, working exclucively on the modernization of mining, as director he took charge of the administration of the Kosaka Silver Mine and the Sado Gold Mine. In this period he also devoted energy to the promotion of education concerning mining, and the technical school (Kogakuryo), later the Tokyo School of Engineering (Kobu Daigakko), which was established in 1871, is said to be a result of his proposal for the building of a mining school.

In the year after his retirement from the government at the age of 63, he was elected president of the newly-born Japan Mining Association (Nihon Kogyokai). It may be said that Oshima's life had almost entirely been dedicated to the modernization of Japan's mining industry.

#### IV. The Character and the Background of Business Pioneers.

So far I have indicated the ideas of Ishikawa Masatatsu and Oshima

Takato, in relation to their performance. To summurize, they were founders, respectively, of cotton spinning and steel industries of modern type in Japan and they had the character of entrepreneurs in the modern sense. There may be some objections to the point that they were entrepreneurs, because both spinning and iron manufacturing plants were not private enterprises. However, it may be proper to treat them as entrepreneurs because those plants, though they were owned by the han governments, were built not as model factories or as curiosities, but mainly for the purpose of gaining profits. A person of similar character can be found, for example, in Hayami Kenso of the Maebashi han, who started a filature of modern type in 1870. Since, led by these persons, there soon appeared many entrepreneurs in Japan, we should attach great importance to them in their rôle in the modernization of the Japanese economy, and we should realize that the special feature of the modern business history of Japan is the appearance of these persons as business pioneers.

Ishikawa and Oshima had not belonged from the first to the samurai class. Ishikawa in particular was a samurai newly employed from a family of civil scholars. In spite of this, both were given very important positions in their respective han. This promotion resulted from the fact that they had, through Dutch learning, an excellent knowledge of Western technique and political economy. It was in the field of medical science that Dutch learning was first introduced into Japan. But after the closing days of the Tempo era, when the information came to Japan that China had been defeated in the Opium War, the eyes of some awakened people were turned to the field of military science, that is, strategy and artillery. Study in the military field was not strictly limited but included study in the fields of economic foundations und political organization on which strong military defenses could be based.

Seeing that almost all the leaders in the modernization movements in every field at the time of the Meiji Restoration had, directly or indirectly, knowledge of Western countries and wanted to introduce Western thought and ideas, we can never permit ourselves to make light of the influences of the West upon the modernization of Japan. We must evaluate highly the position of Ishikawa and Oshima as business pioneers because they were forerunners in accepting Western techniques and ideas.

Now, it was in the *han* enterprises that their entrepreneurial talents were displayed. Business undertakings by the *han* were, in one way, a continuation of the policies of encouragement and monopoly of indigenous products, which had become especially active since the Kyoho era (1716–1734). Connected with those policies we can find not a small number of entrepre-

neurs, Kawai Sunno of the Himeji han being a typical one. On the other hand, however, the han enterprises in the closing days of the Shogunate were not exactly a continuation of those policies. First, while those policies were adopted mainly in order to rescue the han from financial straits or to strengthen the financial position, the object of later han enterprises was to enrich and strengthen positively the power of the han; second, while the earlier policies were based on commercial capital, though they had not a little concern with production, the later policies were based on the investment of capital in industry.

As the reasons why the han changed their policies from those based on commercial capital to those based on industrial capital, I would like to enumerate the following two; (1) it became necessary for the han, confronted by the emergency in international relations, to renew their determination to achieve prosperity and power, (2) Western techniques were quite new to Japanese people and required a large sum of capital for their initiation. Concerning the second reason, it should be considered that only the Bakufu and the han were able to undertake such modern enterprises. As a result, such talents as those of Ishikawa and Oshima were displayed for the first time in the han enterprises. In other words, the positive policy of "national wealth and stength" in the closing days of the Shogunate had fostered business pioneers in Japan, and this is clearly shown in the connection between the ideas and performances of both persons.

Under the circumstances mentioned above, the business pioneers of modern Japan appeared in undertakings by the han. It was characteristic of those pioneers that they wanted to realize business profits not for private concerns but for the han. The idea of the wealth of the han was soon elevated to the national level. This extension of the concept can be seen already in the ideas of Ishikawa and Oshima, and in their considerations of the whole of Japan, found here and there in their memorials. This is a matter that demands our attention when we study modern private enterprises which appeared after the Meiji Restoration. Though, on one hand, private profits were justified in terms of the national interest, the fact should not be neglected that actually the prior consideration of national profits made possible the establishment of private enterprises one after another. To such an extent, the national consciousness, fostered by Confucian learning, was strong in Japan.

The most interesting opinion relative to this point is a passage which criticizes the attitude of the Osaka merchants at the time of the Meiji Restoration, from a book by Kato Sukeichi. He stated as follows:50

<sup>5)</sup> Kato, Sukeichi Kōeki, Kokoroe Gusa (A Guidebook on Foreign Trade), Vol. 1, 1868.

There is no place in Japan comparable with Osaka where assemble many big and wealthy merchants. The climate of Osaka, however, is hostile to foreign trade. This climate is a result of the fact that many of the merchants do not take a hand in foreign trade, being satisfied with the traditional family business and thinking that it is out of harmony with the family tradition to embark upon new business. Their way of thinking is wrong. Let us consider the case of samurai. When a war occurs they go to battle for the sake of the Emperor and fight, resolving to die if necessary. There would be no samurai who, thinking it unnecessary to obtain a larger fief because he already had enough for his livelihood, remained indifferent to the battle. For the merchants, the beginning of foreign trade was like the beginning of a battle. If so, the merchants should embark upon foreign trade for the sake of the Emperor and should devise a scheme to profit the nation. It is disloyal to the nation not to think of profits for the nation, and only to take advantage of an easy living.

The statement above points out that the passive attitudes of the Osaka merchants toward foreign trade came from the weakness of the national consciousness.

Two reasons why the national consciouness of the Osaka merchants was weak can be enumerated here. First: in the Tokugawa period, the policy of the encouragement of indigenous products was advocated by the Bakufu and taken up as a matter of vital importance by the han, but the Osaka merchants did not find it necessary to take up the policy as their own because their business would prosper as a matter of course when goods came into Osaka as a result of flourishing regional production. Secondly: Osaka was a part of the Shogun's domain, and this domain had none of the conditions which favour statehood, because it was broken up into divisions all over Japan. In other words, Osaka was quite different in nature from the castle towns of the han; it was a kind of cosmopolitan trade center for the whole of Japan. Anyway, the statement of Kato will support my opinion that entrepreneurial spirit at the time of the Meiji Restoration appeared concomitantly with national consciousness and the idea of the national wealth.

As above stated, this national consciousness had been fostered by Confucianism. Confucianism, especially that of the Shushi school, was in one sense a study of reason and was very ideological. It reduces all things in the universe to "reason and energy" (理気) or to the "positive and negative" (陰陽) and five factors (五行) (wood, fire, earth, metal, and water), devotes itself to explain the logic of the universe, and does not recognize historical actuality. But it fostered the national conscoiusness on the one hand, and taught the importance of learning and education on the other.

As a result of emphasis on education, there appeared at the time of the Meiji Restoration many students of Dutch learning, and also of English learning. Western learning in general not only explained the logic of nature but also taught how to use nature for the benefit of human life. Moreover, since the substance of Western learning was military science, modern technology, and political economy, it was quite natural that there appeared many samurai who made efforts to study Western learning and they were given important duties in the han. Thus, many pioneers of modern enterprise in Japan appeared in connection with han enterprises. Ishikawa Masatatsu and Oshima Takato were exemplary figures among these pioneers.

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