

JAPANESE SMALL INDUSTRIES DURING
THE INDUSTRIAL REVOLUTION
A STUDY OF NATIONAL STRUCTURE
OF INDUSTRY

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I. *Introduction*

The fact of emergence of large scale industries is the key which explains the naissance of problems of small industries, because historically these called for the first time by the name of small industry have long existed without being given this name before the emergence of large industries. The industrial revolution or the first period of industrialization is the transition period when large capitalist industries become dominant form of national industrial structure. It is at the end of German Industrial Revolution that for the first time many economic studies called attention to the problem of "Klein Betrieb", while they understood these small industries, according to the industrial stage theory common to the historical school, as hand works or domestic industries destined to be eliminated by the competition of large capitalist industries or factory system. Without any change by themselves, they became "small industries" because they were small compared with the new factory industries and moreover became so sudden out-of-dated that their fate was only to fade out supplanted by these new comers. Why and to what extent are they to be eliminated? How should they be protected during this transition period? — These were the lines of issues pointed out as to the newly found problem of so-called small industries.

Japanese industrial revolution, which forced by her coerced entrance to capitalist world of economy, developed during about 1885-1919, introduced large scale capitalist industries to our industrial production, so that Japan had the basis to discern and take consciousness of problems of hand work or of domestic industry as small industries against factory industry. Nevertheless, it is worthwhile to note that the introduction of the large industries in Japan did not, in the same sense as in Western nations, give rise to the small industries problem and make the society in general aware of its existence. Though to-day Japan is worldly known as a country rich of small industries, which consist not only of traditional or native industries

of long history but also of these branches which have been born newly side by side with capitalist large industries, her industrial revolution passed without being conscious and troubled with problems of declining small scale industries. Here is one of marking characteristics of the structure and development of Japan's capitalist industry.

This is a point which not only explain the development of our small industries but also gives some light to the question how an asiatic backward country like Japan was able to come into the path of industrialization and how labour cost in Japan functionned to this course of progress.

II. *Existence of Small or "Native" Industries*

—*How it was seen by contemporary opinions?*—

A

Contemporary literatures exist a little concerning the competition between large and small industries during Japanese industrial revolution. Among them, the first group is these developed by several university professors. They discussed the competition between large and small industries and concluded in general the inevitable defeat destined to the small. But in this argument they did not refer at all to the Japanese industrial facts. As nearly all contemporary economists, they imported, or translated loyally into Japanese, what European teachers were preaching. Therefore in this case, they merely followed the teaching and conclusion developed by German historical school, without analysing Japanese economic facts anymore. Thus this first group gives no light upon the problem in Japan whether small industries existed and struggled for existence vis-à-vis large industries.¹

The second kind of literature is few but more interesting and important. The one is Gennosuke Yokoyama, *Lower Class of Japan* (in Japanese, Tokyo, 1889).² The author is a journalist and the book is a research report, chiefly deducted from his own survey among these lower classes of Japan at the

¹ Prof. Kumazo Kuwata, *Industrial Economy* (in Japanese, Tokyo, 1897), Chapt. 7, "Competition between Large and Small Industries"; Prof. Kinji Tajima, *Modern Economics* (in Japanese, Tokyo, 1897), especially its "Small and Large Enterprises" in the part of Production, 1901 edition, pp. 197-9; Prof. Iwasaburo Takano, "Competition between Large and Small Industries and Economic Effects of Small Motors" in the *Journal of the Academy of Political Science* Vol. 10, Nos. 113, 115 (in Japanese, 1896). These are the examples. It must be added that Schulze-Gavernitz, *Der Grossbetrieb, Studie auf dem Gebiet der Baumwollindustrie* (Leipzig, 1892), translated into Japanese by Kakujiro Yamazaki (Tokyo, 1903), discusses the large scale of British cotton mills from a standpoint of a German economist.

² Gennosuke Yokoyama, *The Lower Class of Japan* (in Japanese, Tokyo, 1899), discusses small industry in its reference to "Society of Artisan Labor". A major part of these small industries, while being invaded by industries operating with European machinery, remains in existence (p. 64). But its position, differing from the days of the Tokugawa Shogunate, was

merge of 20th century. His work is famed of the value that this is one of few literatures which tell the conditions of industrial poors during Japanese industrial revolution. He refers in this work to artisans in Tokyo as small industries of long history, surviving in general against the menace of newly imported large factories (p. 88). Another one is Matasaburo Shibakawa, *The Future of Japanese Small Industries* (in Japanese, Kyoto, 1904). This work is perhaps the only literature which treats specially the facts of small industries of Japan during her industrial revolution. The author died young in Russo-Japanese War and the work was published posthumous. What he indicates as small industries consists of price or hired work and handicraft. "Domestic industries" as well as "manufacturing industries" are both omitted. This is because, he says, these two are both large industries similarly except the difference of form of production, i.e. the one dispersed and the other centralized. In other words, he excludes evidently domestic industries from small industries (p. 9). By this definition examples of Japanese small industries in his book are not so numerous and some of them are of nature such as it is questionable whether they should be classified as small industries.

While Shibakawa stood under the theoretical influences of the German historical school as his contemporary Japanese economists, he remarked as follows utilizing chiefly data given in famous *A History of Japanese Industry* (in Japanese, Tokyo, 1897) by Tokifuyu Yokoi. After the restoration of Meiji, the rise of industries of European system influenced in some degree traditional Japanese small industries. Nevertheless, while large industries were in general these newly founded one, imitation of European factories, the opening of foreign trade happened not only to give stimulus for these industries hitherto shown slow progress but also to give rise these small industries which had never existed in Japan. Therefore the competition

relegated to that of labor in relation to the merchants or putters out. For the small industry, however, there arose a series of problems such as its old relations with the merchants and customers turning more relaxed, careless manufacturing, despotism by the merchants or putters out in distributing gains, the relations between boss and journeymen loosening up (pp. 69 ff.). But the book does not deal with what was being brought under pressure by foreign-style machinery industry. Instead, it points out the following new vocations that operated in the form of old artisan industry, namely, shoe-making, photography, laundry, hat-making, brick-making, painter, rikisha-man, cart-hauling, sewing, printing, umbrella-making, leather work, precious metal work, precious metal plating, electric apparatus making, glass making, leather dyeing, brief-case making, glass work, chair and table making and so forth (p. 66). Although it is considered that hats, hosiery, glass, soap and the like were made in factory organizations (p. 66), the author does not make clear their relations with what is called small industry nor does he specify whether such trades were carried on in the form of artisan industry as thereto. It must be said that the author's observations are not sufficient. But judging from what he takes up as problems, it may be seen that the author tries to treat the relations between the merchant employers and artisans rather than the small industry's competition with large industry. It may be pointed out that competition existed among artisans themselves and merchants were in a position to take advantage of it.

between large and small industries was not yet so keen that small industries were allowed to grow remarkably after the restoration of Meiji.

“Chief branches of industries which have been founded newly or developed remarkably, are of flanellette, cotton rug, china, brick, earthen pipe, cement, cloisonne ware, glass ware, lacquer ware, copper ware, match, fancy straw mat, straw plait, type printing, paper, shipbuilding, machine engineering, cotton spinning, weaving, etc. It is not without some branches of traditional industries disappeared because of the decline of demand, while these cases are comparatively so few that the industry as a whole marks far more great progress and development” (p. 26).

Thus, in Japan public attention was not called by these who cry for social relief or resort desperately to violent actions, oppressed under the competitive power of new large industries, such as frequently seen in the European industrial revolution (p. 95).

It seems to me that the factual data cited by Shibakawa, i.e. flanellette etc., may be borrowed from Yokoi's book in which he shows them as kinds of industries after the restoration of Meiji. Shibakawa enumerates them without further selecting whether the industries in question are large or small. These data are not factual in literal sense but something of guess work or conjecture or, in a word, not enough as data. Moreover, the cited new branches of industry are not necessarily all small industries. Nevertheless his assertion cannot be overseen that it is not ascertainable that the competition of large industries was both sweeping out small industries and creating social troubles.

The third kind of literature is of rather early date and does not recognize itself as a study of small industries vis-à-vis large industries. This is Masana Maeda, *Observations on the Development of Industry*, 30 vols (in Japanese, Tokyo, 1884).³ This voluminous governmental report is one of the most important material for the study of industrial conditions in the early date of Japanese industrial revolution. The author, vice-minister for Agriculture and Commerce, travelled by himself greater parts of Japan and the report in question should be called as the compilation of his research. This report is noted as the first that called attention for the value of traditional industries against the general trend in favor of important European style industries. Maeda published another small book years later, *My View* (in Japanese, Tokyo, 1892), restated résumé of the above report. In this book, he divided industries into two kinds, i. e. “native industries” and “mechanical industries” or industries driven by machinery. The former takes, he says, the first place in our industries which Japan can be proud of in the world market, such as cloth, china, lacquer ware, copper ware,

³ *Observations on the Development of Industry*, vols. 30, is found now in *A Collection of Documents for the Fiscal History of Early Meiji*, Vols. 18, 19 of I which have been referred to in this article.

paper, etc. While the latter ranks as secondary one though they have to compete with imported goods on the one hand and to strive for export to countries such as Russia, China, Korea, Manchuria, etc. He argues that Japan's economic policy had worked in mistaken way since the restoration of Meiji as it had devoted itself to the secondary one, forgetting the due priority which should have been given to the first rank of industries (*My View*, pp. 115 ff.). He enumerates principal Japanese export goods according to the importance of value and points to push on policy based in these branches of industry. Principal Japanese products given in *Observations*, Vol. 12, are rice, cocoon, cotton, tobacco, rape-seed, sugar cane, linen, raw silk, tea, campher, wax, indigo, cloth, china, lacquer ware, paper, metal ware, spinning, "sake" or Japanese rice spirit. Except the last two, these are deemed as export goods (*Observations*, Vol. 18, pp. 465-490). In other words, Europeanization, an inevitable result of foreign trade, gives rise to naturally demands for western goods which are possible neither to suppress artificially, nor to supply wholly by home production. As Europeans have their special products, Japan has also her special products. These our specialities continue to be produced for supply by virtue of their strong points or superiority in the world composition. It is these branch of industries that Japan ought to encourage by her economic policy (*My View*, p. 116).

Thus the problem here pointed out is of native or traditional industries but not of small industries. However what the author means by native industries are nothing but handicraft and domestic industries both rural and urban. The report does not forget to indicate as object of encouragement such as modern cotton spinning. However general interest are shown for these native industries. For example in the parts where the report analyses difficulties in industry, attention is demanded to the fact that makers are poor in the capital, so that they are even forced to contract with foreign buyers on unequal and disadvantageous conditions (*op. cit.*, p. 645).

B.

To conclude, first, literatures available of Meiji period, which treat small industries more or less from Japanese economic data, seem to think small industries as handicraft or industries "not transplanted by imitating Western style production" while on the contrary to think large industries as these which in general do not belong to native or traditional industries. Shibakawa has also the same view on large industries (*op. cit.*, pp. 94-5). So, in this sense, he is of the same opinion as Maeda about "Western style industries" at least. Thus it is not too far off from the truth that, in the case of Japanese industrial revolution, the formula of small versus large industries is supplanted by the formula of native or

traditional versus European or imitated industries.

Secondly, small industries understood as above became also to be the subject of social interest. But it was not because they were on the verge of disappearance like in other countries but because they were neglected by public policy. They were said to be on the way of growth side by side with large industries imported. However, they were poorly organized and badly equipped. Public policy was called for to help them in order to cure these defects. Such an attitude was best represented by Maeda. In the case of Shibakawa, he pleaded for them less actively. He said, though publicly agony uttered by the small against the hard competition with the large was not heard as in Europe it did not go without saying that there existed no such troubles at all. For, in old industrial circles, men were so long accustomed with the feudal oppression that they were likely to tolerate their social sufferance silently. This was the reason why he analysed the small industries problem and suggested some remedies for them.

Thirdly, the problem thus thought was not of crucial one. Unlike the situation in Europe, the problem was not put as of smalls' death or life. Therefore remedies shown by above studies consists chiefly of trade association system, industrial education and information institute, etc. For example, Maeda's *Observations*, pointing out smalls' defects such as uncontrolled competition, insufficient organization, poor preparedness to new market, etc., proposed following policies. Organisation of permanent bazaars or show rooms in order to promote workers' knowledge on commodities, establishment of industrial laboratory in order to furnish due technical advice, encouragement of machine engineering industries in order to supply machines for small industries, to save labour as well as to produce goods uniform and cheap, and circulation of consulting engineers in order to give aid to small shops who lost themselves in erroneous way.⁴ Shibakawa's proposal was more simple than Maeda's, but in principle he did not differ so much from Maeda. Moreover such view was not limited to these two at early or middle days of Meiji. In fact this view on the nature and problems of small industries continued through until later days of our industrial revolution. We can cite here an example shown by an government official at the end of Meiji era. In 1911, Minoru Oka, chief of Department of Industry, Ministry of Agriculture and Commerce, wrote as follows. There exist in Japan, side by side, these industries imported from advanced countries and these traditional industries, such as silk, oil, tea, lacquer ware, straw plait, china, paper, etc. The later lack of capital, stick to out-of-dated custom and suffer of cut-threat competition at the

⁴ *Ibid.*, pp. 442-3, while it points out in other parts the ways and means of improving liquor brewing, natural indigo raising, linen cloth weaving, porcelain making, lacquer ware making, metal ware making, paper making, leather, glass, sulphuric acid, soda making, cotton spinning.

mercy of merchants' control. It is necessary to open the way for them such as utilization of mutual credit association, technical guidance by public industrial laboratory, machine lending to trade associations organized by them, etc. Evidently he does not share the optimistic view of Maeda concerning the strongness of small industries. However, main line of his concept as to the problem is of the same nature in substance as Maeda's.⁵ Especially it is so as Oka's point of view conceives the problem from the importance of traditional industries as export industries.

III. *Economic Policy for Small Industries*
— *How it was poor compared with the*
policy provided for Large Industries? —

The structural position of small industries in the national economy during the period of industrial revolution in Japan as has been discussed and problems arising therefrom made measures taken to tackle them assume a special place in the economic policies in general of the Meiji Era.

As has been often pointed out, a striking feature of Meiji industrial policy lay in the introduction of an industrial revolution by the state called as "mercantilism" or "economic control". But the basic quality of consistent economic policy in the Meiji era was found in industrialization primarily designed to maintain and secure the independence of the national economy. All efforts under such policy were aimed at overcoming Japan's economic backwardness or developing basic industries of European style alone. Furthermore, such industrialization was not directed at the development or supplanting of the existing productive power but at the creation or "importation" of new productive power not because it was objectively deemed easy but because it was vitally necessary.

On the other hand, all the productive departments such as those existed to meet the popular demand in the country, or the existing industrial branches that could be turned for export purposes and the type of new demand that could be taken care of by the form of native industry then in existence were to function as important levers for developing the structure of the national economy in the Meiji era, as will be explained later. To speed up the industrialization of these fields, however, no such qualitative and quantitative efforts were made as comparable to those bent for "imported" large-scale industrial departments. State leadership in the former was far less positive than in the latter.

Thus, all policy for the industries hitherto in existence may be compared to the doldrums or policyless belt in the area of active and positive economic policies in the Meiji era and what is to be stressed is that it could

⁵ M. Maeda, *The Meiji History of Commerce and Industry* (in Japanese, Tokyo, 1911), pp. 311 ff.

remain so under the existing circumstances. The reason is that the structure of the national economy in the Meiji era was founded on such a basis of reproduction as will be explained later, and also is that there were few problems socially felt concerning small-scale industries and the latter, especially as weaving was the case, could expand within its own sphere. In other words, all such industries, though small in productive power, were developing for popular home demand and for export purposes without special protection or aid from outside. Furthermore, even if the state had wished to give special attention to small industries, it could not afford it with the limited economic power in an industrial revolution that had been devoted to the quick equipment of large basic industries. There is no denying, besides, that the organization of demand and supply in those days made it possible for small industries to remain what it had been.

In short, economic policy in the Meiji era was primarily concerned with the development of large-scale industries. This in fact brought results contradicting plans by above cited *Observations* by Maeda. In other words, Meiji economic policy had to be dominated consistently by pre-*Observations* consciousness.

All this does not mean, however, that there was no initiative on the part of the state to take up the issue of traditional industries or to formulate policies therefor.

As in the case of large industries, it was noted in some instances that the state exerted efforts to develop productive skills in such industries, as seen in the introduction from Europe of Jacquard and other weaving looms on the occasion of the Austrian Fair in 1874 or improvement in dyeing techniques in the early part of the Meiji era. Since the middle of the Meiji era, the state set up industrial laboratories, as urged by theorists such as in *Observations* etc., which made considerable contributions. A typical example is the cotton weaving industry in Hamamatsu, Shizuoka Prefecture, which is a model in the development of Japan's small industries and which falls under the category of the so-called localized industry. Although it was after the latter part of the Meiji era, the industrial laboratories in Hamamatsu made remarkable contributions toward the growth of the local industry including productive know-how.⁶ But it was in Tokyo in 1900 that the Ministry of Agriculture and Commerce established the first industrial laboratory in Japan. Subsequently, the Government set up various types of laboratories in various sectors of the country but their contributions began to vindicate themselves after the later part of the Meiji era. Compared with the efforts made by the Government to develop large industries, his activities shown in these state-operated laboratories were almost negligible.

If anything important in the Government's policy for the native or

⁶ *Speaking of the Enshu Textile Industry* by Hamamatsu City (in Japanese, Hamamatsu, 1945) references to the contributions of the industrial laboratory in Hamamatsu City.

small industries to be pointed out, it is found not in promotional efforts accompanied by state expenditure but in the control of market organization.

The institution of trade association was considered an important part of industrial policy for small industries in the Meiji era. But it was considered important chiefly in checking the evils of competition among small-scale manufacturers.

Competition and confusion in the old routine of transactions resulted from the collapse in the Restoration of the Meiji era of feudal trade associations that had operated under the Tokugawa Shogunate. Such Restoration confusion, however, served to stimulate small-scale manufacturers to reestablish their autonomous trade associations after 1871-72.

But measures to tackle extreme competition and careless manufacturing among numerous small business could not be simple. These problems sprang up among small-scale manufacturers since they are small and it was easy for them to compete. But there were other reasons such as lack of organizational unity in demand and supply conditions and the relegation of home manufacturers by merchants or putters out to the position of dependency in the economic scheme of society at that time as seen in the "putting-out" system. Although the elimination of putting-out system and the unity of makers with reference to market and production should have been considered vitally important under such circumstances, the Government did not frame small-industry policy in the light of this analysis.

First official attempts to legalize the institution of trade association were found in the "rules of the trade association" promulgated by the Ministry of Agriculture and Commerce in 1887. But the local trade associations failed to do away with extreme competition and careless manufacturing. As a result, the Government promulgated "the Law for the Trade Association of Important Export Goods" in 1897 to check careless manufacturing after recognizing, first of all, the need for the unified regulation of the export industry on a nation-wide scale. Official efforts along this line were extended from export to general industry in the form of "the Law for the Trade Association of Important Goods" in 1900. Under this law, not only the producer, but the dealers or marchants as well were made members of the association. Although the type of business that was carried on by such association was not uniform in nature, it mainly concentrated efforts not on its industrial function but on the inspection of products. The number of such associations rose to 770 at the end of 1909.⁷ Fukui Prefecture Authority set an example of combating careless manufacturing by enforcing inspections on local products with outlay of ¥ 1,000 in 1892.⁸

⁷ M. Maeda, *The Meiji History of Commerce and Industry*, pp. 594-5.

⁸ *Investigation Reports of Weaving in Fukui and Ishikawa Prefectures* (in Japanese) is a report by students during the summer vacation trip in 1900 and published by the Higher Commercial School, Tokyo, p. 32.

What matters basically is not productive conditions of the traditional industries. The credit association is also considered important as a financial measure for small industries depending on the putters out or merchants,⁹ but anything that was to be accommodated by the association should be regarded basically as funds for the process commercial rather than productive. The law did not seek to serve the small industries as a leading middle class agency or wage-earners because they were to face financial difficulty more often than large industries by fluctuation of economic conditions.¹⁰ The law considered traditional industries a productive power, but it merely sought to prevent at the gate open to the market from the producer the unequal quality caused because of the smallness of the process of production from giving bad influence on the value of goods manufactured. In short, the law sought to attain the equality in quality of products through inspection¹¹ in order to adapt such products to large markets rather than by expanding the scale of production itself. In this instance, the "large market" does not imply the market such as opened to the big Japanese cotton mills, but it was a relatively large market for the traditional industries existing in the Meiji era.

To repeat, since the trade associations were organized and operated without dividing merchants and producers, the influence of the merchant playing a leading rôle in the social economic system remained stabilized within the association vis-à-vis small manufacturers and hence the problems of small manufacturers, such as competition among themselves and dependency on the merchants, for instance, remained unsolved. Thus problems of small-scale manufacturing in Japan which was then regarded as traditional industry were left during the Meiji era to be taken care of by such lukewarm measures or no policy, quite contrary to the case of large industry. Underlying this situation might be the feudality of small-scale manufacturers which could silently stand suppression and difficulty¹² and which might not have aroused the social attention toward the social importance of their problems. But, what is more important, the relations already mentioned as a distinctive feature of the structure of Japan's economy in the industrial revolution, should be considered the basis for the negativity that characterized the Government's industrial policy to the traditional or small industry.

⁹ M. Oka, *op. cit.*, pp. 132 ff.

¹⁰ The work by G. Yokoyama, *op. cit.* (p. 64 and p. 69) develops discussions from a standpoint of labor.

¹¹ Tokifuyu Yokoi, *An Industrial History of Japan* (Kaizo Library, in Japanese, 1898, Tokyo), pp. 155-6.

¹² M. Arakawa, *op. cit.*, pp. 94-5.

IV. *Changes happened in the Position of Small Industries*

A

People in those days viewed small industries then in existence and mapped out policies as has been explained. But when one views actualities in industrial revolutions widely, he finds that changes took place in small industry silently. First, it was not that small industries could be maintained in the rather stable conditions as before, for it had to be recognized that the process of weeding out operated in small industries too. But this process of weeding out proceed mainly because of inner competitive pressure, not from large industries. The reason is that competition took place intently within small industries. For instance, weaving operated in various localities of the country in a manner of self-supplying economy, handicraft or domestic industry until the latter part of the Tokugawa Shogunate. But all weaving did not survive or develop as a small industry in such forms. Of all these local industries, only those capable of adapting themselves to new market conditions at home and abroad, or those in weaving circles, for instance, that resorted to the use of cotton yarn produced in the factory system ahead of others, developed and became the core of small industry in the Meiji era. Included in the latter were those who adopted the Jacquard weaving looms imported from Europe in the early part of the Meiji era after modifying it to meet Japanese requirements. The structure of the national economy in the Meiji era, therefore, did not mean solid stability for small industries in general. Far from it, keen competition existed within small industries.

A glance at the weaving industry reveals, for instance, that localities known by specialities covered with the name of place such as "Yuki" striped cloth, "Maoka" cotton cloth, "Nara" bleached cloth went downhill in sharp contrast to Aichi and Gifu Prefectures producing striped cotton cloth made of gassed yarn, Saitama Prefecture turning out "Futako" striped cloth and the Kishu district (centering around the city of Wakayama) manufacturing cotton flannel which began to prosper with the rise of European style cotton spinning mills. In silk weaving, grew Ashikaga of Gumma Prefecture turning out silk and cotton blended fabric and Tango of Kyoto Prefecture and Kiri of Gumma Prefecture producing "Kanko" crêpe.¹³ Such rising weaving districts include not only Nishijin of Kyoto, Jomo of Gumma and many others which had maintained their status since the Tokugawa era but also such places as Ashikaga, Nishiwaki, Fukui etc.

¹³ T. Yokoi, *op. cit.*, pp. 172, 192, 194.

Ashikaga, which had been a rather minor place in Jomo district established itself as a weaving center around 1880 as a result of its producers consciously competing under the group name of Ashikaga commercially and industrially with their rivals in other districts.¹⁴ Nishiwaki in the Banshu district distinguished itself after the middle of the Meiji era although it had been little known before the Restoration of Meiji and the Fukui district which has become the center of famed "Habutae" silk manufacturing in Japan caused in the course of its growth the fading out of near-by districts producing "Ishida" striped cloth.¹⁵ All these weaving centers grew newly as small industries.

Such relations of competition existed throughout the period of our industrial revolution and even at the end of it in many instances. For instance, Bishu (west parts of Aichi Prefecture) which had an upper hand over Enshu as far as cotton weaving was concerned, until the middle of the Meiji era, was surpassed by Enshu's narrow breadth weaving at the early stage of World War I; consequently, it had to turn newly to the manufacture of woolen cloth, now becoming nearly sole producing center in Japan.¹⁶ Of the export industry districts that have flourished are those which have demonstrated far-sightedness in weaving enterprise. For instance, Enshu, for one, started exporting products to Manchuria in 1894 and established itself firmly as an export weaving center in the middle of the Taisho era by switching to introduction of power looms of narrow breadth weaving ahead of other districts and then to that of broad breadth weaving. Such technical progress contributed toward the rise of Enshu as a cotton weaving center together with the development of so-called external economics in the locality.¹⁷

B

In the second place, it must be added that competition between small and large industries was not also non-existent. One instance is competition between products of purely indigenous water driven manufacture that sprang up somewhat as a spontaneous development from traditional handicraft in the country and products either imported from European factories or supplied from "imported" Japanese capitalist factories. Characteristics of the technical conditions of Japan's industrial revolution were that they were

¹⁴ *Investigation Reports on the Weaving Industry in the Ryomo Districts* (in Japanese) is a report by students during the summer vacation trip in 1900 and published by the Higher Commercial School, Tokyo, pp. 56-7.

¹⁵ The production of "Ishida" striped cloth dwindled after a series of ups and downs because of its competition with rayon production as well as poor exports of cotton cloth. Refer to *The History of 50 Years* (in Japanese) by the Weaving Industry Association in Fukui Prefecture, 1936, pp. 322-3.

¹⁶ *Speaking of the Enshu Textile Industry*, pp. 21, 48. This is a record of round table discussions by men of Hamamatsu textile world.

¹⁷ *Ditto*, pp. 35, 46, 50, 53-4.

technique "imported" but not indigenous. But this does not mean that there were some exceptional cases wherein indigenous technical progress grew from Japanese industrial soil. Of a few such cases can be mentioned the "Gara" (noisy) spinning machine invented by a native, named Shinchi Gaun (1842-1900). Exhibited at the Domestic Industrial Fair in 1877, it drew considerable attention from the visitors. "Inasmuch as it could be operated with a small amount of capital, imitation machines were manufactured in various parts of the country to be adopted by farmers for their own use. Called the "Gara" spinning machine, it produced yarn which together with hand-spun yarn competed with yarn made by imported machines until 1887. Even now (about 1901) some 100,000 spindles are in operation in Nukada County, Mikawa, and some in Hekikai, Higashikamo and other counties to turn out yarn for "Dantsu rug".¹⁸ That the "Gara" spinning machine held a significant position in the history as a purely home-made cotton spinning machine driven by water mills is a well-known fact. The "Gara" spinning machine which went into full use in districts centering on the bank of Mikawa river as a "manufacture" system between domestic industry and factory system after the Restoration of Meiji (1868) reached its zenith of development in 1887 (some 130,000 of them were in operation in Mikawa alone in 1887). But as indigenous raw cotton began to disappear as a result of the basic policy of textile capital in the country, the "Gara" spinning machine which competed with textile capital, depending on indigenous cotton, went downhill together with farmers' hand-spinning (only 70,000 "Gara" machines in operation in 1892 in Mikawa). It revived somehow in the latter part of the Meiji era as a dependent, so to speak, on textile capital chiefly operating on such raw materials as waste fabric.¹⁹

Accordingly, it may be said that the circumstances under which the "Gara" spinning machine went up and down in popularity at the early stage of its use show how large and small industries competed, and the former drove the latter, phenomenon generally seen in the industrial revolution stage.

A second instance is the small industry then in existence which was weeded out by imported capital turning out goods of better quality. Under this category fell candle and seed-oil which were oppressed by petroleum as lighting fuel and beet-sugar which was replaced by imported sugar. Another example is nails. Formerly, Japanese iron nails were gimlet-shaped, and edged. In the latter part of the Tokugawa era, blacksmiths

¹⁸ An outline of the Spinning Industry by the Ministry of Agriculture and Commerce is cited by Taichiro Kinukawa, *The History of Cotton Spinning in Japan* (in Japanese, Tokyo, 1937), Vol. 2, pp. 2-3.

¹⁹ The number of "Gara" spinning machines is found in *Mikawa Spinning Yarn* (in Japanese), by the Mikawa Spinning Association, 1921. Data on "Gara" machine spinning are found in *A Historical Sketch of "Gara" Spinning* by Sei Nakamura (in Japanese, Tokyo, 1942).

made nails of used small sickles, one cutting them into pieces and other forging them, being usual form of division of labor. Blacksmiths specializing in nail-making were found in Sanjo and Tsubame (near Niigata), Matsuzaka (in Mie Prefecture) and Sakai (south of Osaka). It is said, however, that in general they let their apprentices make nails as first lessons of their training. Nails in western style made from metal rod, now being used exclusively, were first imported in about 1877. But they did not cut into the consumption of indigenous nails because of rust and round shape until 1880 when there was a big fire in Tokyo which gave rise to a sudden need for foreign-style nails. During the period of 1887 and 1897, indigenous nails were supplanted by foreign-style nails. By 1894-5, indigenous nails remained in use only in local districts of the country. Accordingly, imports of nail jumped from ¥ 870,000 in 1888 to ¥ 1,150,000 in 1898 and ¥ 3,120,000 in 1908. Their imports slightly decreased at the beginning of World War I.²⁰

The decrease in use of Japanese nails is regarded as a natural process of selection under the pressure of productive power inherent in the capital system that suppressed indigenous products, namely, higher productive power by machinery than that by Japanese handicraft, or western capitalistic power of competition capable of suppressing the rise of foreign-style nail manufacture by Japanese native capital, which ought to be considered as production of such consumer goods that is linked with the departments of industry of producers goods which was hard to be had in Japan. The production of foreign style nails started in 1897 in Japan, was suspended under pressure from imported nails and again revived in the last years of Meiji after raw materials and customs protection were secured.²¹ Effects of the weeding out of the traditional industries, however, were not so serious, for blacksmiths merely lost work for their green apprentices and in such nails-producing districts as Sanjo individual nail makers lost their main line of work, but the district itself developed in other lines of the traditional metal industry. Accordingly, the loss of nail production did not mean a serious social problem for small blacksmiths as a whole.

Finally, it is no easy task to get complete proof of the replacement of the dwindling small industry by a rising large industry or of the relations of governing the former by the latter since data on the former, especially on old ones defeated and disappeared, are more lacking than those on the latter. But it may be said that they expanded in their each sphere of influence while competition and selection continued more extensively within small industries themselves and we see less case of large and small industries competing in the same market.

²⁰ Zenzaburo Yasuda, *Nails* (in Japanese, Tokyo, 1916), pp. 76-87, 117-123, 194.

²¹ *Ibid.*, p. 186.

C

Since the domestic market, though narrow and limited, expanded through an increase in the population during the industrial revolution, it stimulated a natural development in the organization of production through the relations of competition, although not so conspicuously as in the case of the export market. First, manufacture was carried on by handicraft, then by domestic industry and later by machine driven small works as in the case of power looms in textile industry after the latter part of the Meiji era. A glance at the weaving industry in the Jomo district in 1900 reveals the following :

Economic changes in the world at large have been brought about by (1) freedom of enterprise, (2) mechanization, (3) merger of capital, and (4) labor issues. But in Japan these factors excepting freedom of enterprise were not mature yet especially in the case of the textile industry. As a result, evils of large industry were not yet visible. By and large, the period was marked by the abnormal domestic industry in the case of production for domestic consumption and by a transition to the factory system from the abnormal domestic industry in the case of export goods production.²²

In this case, the idea of "factory" is determined mainly with the number of employers, as seen in other official statistics on the textile industry from the end of Meiji to the beginning of Taisho era.²³ Accordingly, many enumerated as factories held an industrial position same as small producers under the putting-out system, if seen from a standpoint of the economic scheme of society. Handicraft and domestic industry cannot be explained from a European point of view since it was possible for small industries to be mechanized like a capitalist factory due to the backwardness of Japan's industrialization.

In the absence of keen competition in the market, there took place such parallel phenomena as the advent, of the large industry, of the

²² Higher Commercial School Report of Ryomo Districts, *op. cit.*, pp. 35-6, 311-2.

²³ Data on the productive organization of weaving in Aichi Prefecture (cotton) and in Fukui (silk) in the latter part of Meiji and the early part of Taisho are obtained in the statistics of the Ministry of the Agriculture and Commerce, and in the factory statistics and yarn statistics of the Ministry of Commerce and Industry. But they give figures under categories of factories, domestic industry and wage-earning weaving. The factory as referred to there employs more than 10 hands, domestic industry less than 10 persons and wage-earning weaving means home labor designed to supplement the household budget. Keizo Fujita, Professor of Osaka Commercial University, cautions in his article, "Problems and Concepts of Small Industry" (in Japanese), in *the Annual of the Japan Economic Policy Association*, Tokyo, 1941, "Whether the usage of these terms is right or wrong is beyond our criticism today". For this reason, easily to be imagined that many of the references in the statistics to "factories" are factories under the putting-out system rather than independent factories.

mechanized but traditional industries developed for export market, and of a domestic industries grown gradually out of old traditional industries. The views that the weaving industry in Japan developed on a large scale because of its weaving done by the large capitalist cotton mills, or that there was no change in Japan's small textile industry because of the remarkable existence of small producers for domestic consumption are either one-sided and unacceptable.

V. *What Constitutes the Peculiarities of Small Industry Problem in Japan's Industrial Revolution*

In short, it is in general the industrial revolution when the advent of capitalistic large industry accompanies the weeding out of small industry, but in Japan such weeding out of small by large did not so happened that men at the time were not driven to give serious attention to the fate of small.

Hence the Government enforced in abundance measures for large industry, it failed to do small industry anything worthy of attention, while such industry was regarded at the traditional but not small industry. Then how could such peculiarities appear ?

A

Bases of such peculiarities spring from the characteristics of the process of Japan's industrialization. The first factor is found in the conditions leading to the birth of large-scale business in the process of Japan's industrial revolution. Japan's industrial revolution resulted from foreign factors regulating the position of Japan's national economy in the world economy as indicated in the Restoration of Meiji rather than from a natural and inner development of her national economy itself. It was a change brought in from abroad to develop and maintain the independence of the national economy. Accordingly it was not the course in Japan that economic development in pursuit of profits for large-scale management resulted in the birth of large-scale industry. Superficially, the European methods of production were introduced. But that the meaning of the European way of management was not fully grasped is clearly seen in the failure of the imported industry in the early part of the Meiji era ; it did not realize the importance of management although it imitated technical skills only under the guidance of the Government.

Accordingly, even the cotton spinning industry which had developed itself ahead of others did not realize well what an important role management played in modern industry. It was not until 1882 that the Osaka Spinning Company just as established introduced skills from Europe after

such realization. The company realized that Japanese spinning mills had failed to make good because they operated on such a small scale of some 2,000 spindles in sharp contrast with the minimum of 10,000 spindles in British cotton mills. It started out with 10,000 spindles and made a success of it.²⁴ After a lapse of time following the first import of spinning machines in the early part of the Meiji era, Japan's spinning industry began around 1887 to initiate full-fledged enterprise plans after the Osaka Spinning Company's example.²⁵ It must be pointed out, however, that many joint-stock corporations failed in their business as they had adopted the system (e. g. the system of large-scale management) irrespective of the scale of their production.²⁶ For this reason, such business considered themselves "European style" manufacturing plants operating with machinery rather than manufacturing of "large" scale system. Hence, it was not always easy to become conscious of conflicts between large and small industries in those days.

Though sufficient data are not available, it may be said that a more important fact is that small industry did not face so much difficulty, as seen in Europe as a result of the advent of large industry. As will be explained later, small industry was recognized distinctly from large industry in a form peculiar to Japan's industrial revolution, but such recognition is not given in realization of competition between large and small industries or as a trend of the weeding out of the small industry, quite distinct from the phenomena of industrial revolutions in Europe. Accordingly, labor problems in Japan's industrial revolution were created by labor under capitalistic enterprise, as seen in the labor movement in 1897 onward. Artisan or small master producers' movements as seen in England and France found similar counterparts only among the workers engaged in metal manufacturing, leather dyeing and wall-plastering.²⁷ Namely, large industry

²⁴ T. Kinukawa, *op. cit.*, Vol. 2, p. 371.

²⁵ *Ditto*, p. 369.

²⁶ M. Maeda, *Observations on the Development of Industry*, vol. 4, points out as a factor of industrial difficulty the organization of a corporation irrespective of its size which proves to a cause for failure (p. 86). According to *The Investigation Report on the Weaving Industry in the Ryomo District* the Japan Weaving Company established in 1894 in Kiriu City with ¥ 250,000 capital increased its capital to ¥ 750,000 in 1900 operated 148 iron-made machines with 150 horse-power water wheels and employed 550 woman workers. Although the company was reported planning export production in 1898 and set a few of the examples in the district for founding a large industry, it did not progress smoothly. The reason was that in addition to the difficulty with the skills of domestic labor and with the market, the company was plagued by weak-willed share-holders who sold out their stocks freely and permitted dividend-seeking brokers to control a major portion of the company stocks. The company depended on the management who found no room for demonstrating their enterprising ability. The report says, "The company failed on its own score but not on account of machinery weaving." (pp. 48-9, 230)

²⁷ A trade union formed by iron workers of the Ishikawajima Shipyard and other Tokyo iron work "sought to establish factories with joint capital or accumulated reserve funds"

did not break out in the process of its development handicraft and domestic industry in general. This is something which analysts of Japan's capitalism have neither understood nor taken up for study and which is a special trait of the organization of the national economy during the industrial revolution.

B

The process of industrialization in Japan is double-faced. To begin with, it was transplanted from abroad by the Government as part of its policy to maintain the independence of the national economy without waiting for a natural development of domestic capital, especially because Japan's industry had been compelled to compete with the productive power of capitalistic America and Europe. Such industrialization affected even the productive power of such consumer goods as cotton spinning as well as the productive power of national defenses or munitions, as seen, for instance, in the remarks of Seihin Shimazu or Seiryu Ishikawa, founders of the western cotton spinning industry in Japan, who had been conscious that its products would serve national defenses.²⁸

Secondly, there were some departments of traditional industry which were not endangered by competition with American and European productive powers. Among them were silk, textiles, porcelain, lacquered wares, tea and fancy mats though produced under the economy of isolation, they turned into export industries with the opening of Japan to foreign trade. To this group must be added such branches of industry as producing consumer goods for domestic consumption without making any notable changes since the Tokugawa Shogunate. Although imported cotton, dye-stuff and petroleum did away with the production of indigenous cotton, indigo and vegetable oil, the import of asiatic rice, not regarded as rice in Japan, did not affect the production of indigenous rice as staple

said Sen Katayama and Mitsujiro Nishikawa, *The Labor Movement in Japan* pp. 68, 218-220, *Documents on Meiji Civilisation*, Vol. 11. But problems taken up by leather-dyeing workers and plasters were different. In this case, the relations with the putters out or the contractors were the major issue. In 1897, 180 craftsmen in Tokyo Prefecture organized the Tokyo Japanese and Foreign Style Leather-dyeing Industrial Association. But its main objective was to promote amicable relations among members as well as to protect itself against the monopoly of 12 or 13 clothing putters out. It was said that there were more than 65 associations of plasters and other craftsmen in Tokyo alone. A majority of them existed in name only. But the plaster association branched off into eight local units with three categories of membership, one getting contracts of more than ¥ 2,000, another, more than ¥ 800 and still another, less than ¥ 800. With 869 active members, the association held officers meetings, routine business meetings and special meetings and engaged in such activities as making regulations against careless manufacturing and unscrupulous competition for markets. (G. Yokoyama, *op. cit.*, pp. 72, 76-80.)

²⁸ T. Kinugawa, *op. cit.*, vol. 1, p. 50.

food.²⁹ Japanese rice which is a specie improved by Japanese agricultural technique and different from foreign rice began to be cultivated in place of the native rice in Korea and Formosa only, in the middle of the Taisho era. Hence, foreign rice, if imported, competed not with Japanese rice but with wheat or barley in the Japanese market.

In such phases of communal consumption as transportation and lighting-heating, however, tangible changes had taken place. On the other hand, the structure of personal consumption remained intact on a considerably wide scale until after the end of World War I, although foreign materials and foreign productive organization were imported as examples were shown by cotton and nails. Accordingly, in these phases of industry, the relationship between production and consumption peculiar to the isolated national economy had long remained in existence without undergoing such a radical economic shake up as seen in large imported industries.

Japan's economic structure is thus roughly divided into two sections, economic circulations, one international, other isolated, but what is important about this division is the fact that both were interdependent and neither could exist without the other from a standpoint of the national economy. The introduction of the European capitalist productive power for basic industries effected by a supreme order to the national economy of the Meiji era meant establishment, maintenance and expansion of industry by the import, in a perfect sense of the word, of capital goods and equipments, technique and sometimes even labor power to tackle the shortage of the market, resources, skills and capital in the country. These imports brought in with them two problems: first, how to pay for them and second, what sort of domestic economic power will make up for international disadvantages that these imports create in the establishment and expansion of productive power at home.

The former may be made possible by loan from foreign countries. Except for two foreign debts in the early years of the Meiji era, no loan issue arose in Japan because of the conflicting factors until the Government could run into debt abroad after 1900. The first factor was domestic demand for maintaining the independence of the national economy arising from the fear that the national economy might be made colonial in nature by introducing foreign capital. The second was the misgivings felt by foreign nations over their investments in Japan. In short, what had paid for the imports of capitalist industry since the beginning of the Meiji era was the export industry and for the latter some branch of native industry was of service as such did not feel the necessity of importing much foreign like

²⁹ Tosaku Azuma, *The History of Industrial Structure in the Agricultural Community* (in Japanese, Tokyo, 1937) tells of the changes in agricultural produce in the Meiji era. As for the latter part of the Meiji era, "Japan, Korea and Formosa" in *The Agricultural Production Indexnumber in East Asia* by Isamu Yamada, (in Japanese, Tokyo, 1946), gives explanations.

or capital equipment. In the textile branch, for example, that had depended on the native weaving industry, cotton-yarn spinning imported raw materials and productive equipment while silk-reeling and weaving did the same lagging far behind in these attempts. With these exceptions, the export industry in Japan had been fed at first by raw materials and equipped with facilities, both produced under the isolated economy. In the later part of Meiji, save for the cotton industry, any branch of manufacturing, though raw materials and equipment were imported, had turned out goods through such native production for export purposes.

That the structure of personal consumption had been maintained in much the same as in the Tokugawa era of isolation divorced individual consumption economy in Japan from the process of international economy; so the latter influenced only mildly the popular consumption. The organization of personal consumption led to the maintenance of a simple but "satisfied" native life as recognized by E. Lederer³⁰ as well as to a comparatively cheap life in an international sense. This fact has been explained hitherto by theories on low wages and a over-population, especially in the agrarian community. But as a factor creating these phenomena that gave rise to these theories, mention must be made here to the maintenance in principle of the economic form of personal consumption just mentioned. Low wages are not the issue in point. According to an International Labor Office report,³¹ there are four requirements for maintaining the lowest standards of an American home in New York, namely, a flush toilet, a bath or a shower and two others. If compared with these home requirements, wages and the standards of living in Japan are low. But the structure of consumption of personal life same as under the Tokugawa economy of isolation had been maintained in principle and this fact made it possible for Japan to keep such an "internationally" low wage level, make up for the internationally high cost of the large imported industry and maintain the export industry in operation.³²

But it cannot be said that the maintenance of such seclusionistic conditions was necessarily "economic". For instance, Japanese rice

³⁰ E. Lederer, "Japan in World Economics", in *Social Research*, Vol. 4, No. 1 (1937), explains the traits of the structure of consumption life in Japan from a cultural point of view (pp. 27-9). Although this writer does not agree with him in full, he regards Lederer's point of view as interesting.

³¹ I. L. O., *The Worker's Standard of Living* (Studies and Reports, Series B. No. 30, Geneva, 1938) Chap. III, pp. 71-2.

³² This relationship governing the structure of national life was often ignored or slighted in studies on the economic structure of national life in Japan since the Restoration of Meiji. For instance, "Effects of the Various Changes of the Meiji Restoration on the National Modes of life" by Hajime Tamaki, in *Lecture on the History of the Development of Capitalism in Japan* (Tokyo, 1932). There was a change in the structure of the economy as seen in the replacement of self-supplying production by merchandise production in domestic industry, for instance. But attention should be paid to the peculiarities and seclusionistic nature of the structure of consumption in relation to the international economy.

produced and consumed only in Japan, which was once exported to Europe in 1888-98 but proved to be a complete failure is a most special and non-international commodity. Hence, there was no development in the production of Japanese rice arising from foreign competition. The result was that Japan was unable to reduce costs of living by importing foreign cereals cheapest as shown by English anti-corn law movement.

In other words, the native industry which was able to operate as under old conditions of the economy of isolation turned for export purposes in one way and maintained itself through the continuance of the structure of personal consumption in the other. The receipt account of the industry and national living expenses which had both no foreign payment account paid for all the costs necessary for introduction of the basic industries, such as national defense industry and production of production goods and semi-finished consumption goods, that were necessitated for outside reasons to secure the independence of the national economy following the opening of the country to foreign intercourse. It also paid for the imports of raw materials for manufacture of export goods which increased following the pace of industrialization. The former, Japan's native industry, was a condition to the latter, transplanted industry from abroad. Simultaneously, the maintenance of the independence of the national economy secured through the latter became a protective condition for a slow development of the former. Both were able to operate depending cohesively on each other.

C

In short, during her industrial revolution, Japan tried to establish a structure of capitalistic productive power and a resultant organization of management and others in response to an inevitable demand for adapting herself quickly to the pressure from the productive power of world economics. This resulted partially in the development of capitalistic production or modernized large-scale management. Necessary costs for all this were outwardly born by state capital but basically by agriculture at the beginning and by a major portion of the native industry subsequently, for the latter were the type of productive branch that could stay away from the pressure of the international productive level. Furthermore, they shouldered the cost for labor's reproduction, turned into export industry, and paid heavily for a major portion of such large costs or "imports of the industry itself" and for the maintenance of productive elements necessary after such "imports".

For this reason, some of the self-supporting household work, handicrafts or domestic industries both rural and urban collapsed or retrogressed, but a horde of small industries centering on the native industry could make slow manufacturing developments within themselves. In such a sense,

there were changes in the fate of small industry and the contradictions arising from its low productive power did exist in small industry. But there was no consciousness among the public of the existence of contradiction over small industry in a classical sense, in other words, of small industry as a contradiction in the process of weeding out by large industry through competition. To repeat, herein lies a special trait of Japan's industrial revolution, leaving in which small industry existed "in fact" but not so "on the social recognition".

It was not until after the end of World War I that Japan began to face publicly problems arising in small industry. In the fluctuations of its boom, capitalism which had barely stood on its own feet began to encounter small industry issues. But this small industry no longer represented classical handicraft or domestic industry as before. Instead, it was inclusive of productive branches equipped with motive power and machinery like capitalist ordinary plants. Accordingly, problems arising therein were concerned with troubles in important industrial parts of Japan capitalist as a backward nation. But the problem was no more deemed as of small industry but as of "medium-small" industry. In this new phraseology one found another peculiarity of Japanese economic structure. An analysis of this situation, however, requires a knowledge on the economic structure of capitalist Japan which differs from that during her industrial revolution.