

## The Knit-Fabric Industry

The knit-fabric industry was introduced to Japan in the early part of the Edo period (the early seventeenth century to the 1860s). During Japan's two centuries of self-imposed isolation, the industry was a handicraft industry catering to connoisseur taste. The industry developed in Japan during the Meiji period, and large-scale production was started with machinery imported from western Europe. Most of the early factories became fragmented, however, and tiny producers, each engaged in only one stage or another of the whole production process, emerged together with merchants known as *seizo don'ya*. Much space will be spent in this chapter analysing the role of *seizo don'ya*. Since there is little available reference literature on the *seizo don'ya* during the Russo-Japanese War period, when they are supposed to have emerged, I will discuss the social functions of *seizo don'ya* and small producers through a clarification of their circumstances after World War I. I will not discuss the machinery that they used nor repeat the history of the imitation of imported machines and the creation of miniaturized substitutes.

## The Beginning of the Knit-Fabric Industry

### Transfer of Mechanized Production

Though knit fabrics had been introduced into Japan early in the Edo period, it was not until the late years of shogunate rule that importance began to be attached to their production. The switch to the Western military system aroused appreciation of their necessity for military purposes (for example, foot soldiers' socks and gunners' gloves).<sup>1</sup> Whereas knitting was done wholly by hand, what deserves note regarding the late Edo years is that, unlike in many other traditional urban small industries, merchant control of small producers was practically absent, partly because production was undertaken either by feudal fiefs or by samurai families as part-time jobs. Moreover, the

**Table 1.** Typical examples of early factories in the knit-fabric industry

Name	Location in Tokyo	Year of founding	Manager or investor(s)
Nishimura Factory	Tsukiji	1872	Nishimura Katsuzo
Kanko Sha	Matsusaka-cho, Honjo	1873	Iida family (councillor of defunct Tsugaru fief) and Hoshino family (superintendent of defunct Tsugaru fief)
Horai Sha	Gofuku Bashi	1873	Konoike family <sup>a</sup>
Kyodo Sha	Ryogoku	1874	Tamba family (lord of defunct Matsumoto fief)

Sources: Fujimoto Masayoshi, *Nihon meriyasu shi* (History of knit-fabrics in Japan) (Tokyo, Kuriyama Yasuhei Shoten, 1934), pp. 35, 76; idem, *Nihon meriyasu shi*, vol. 1 (Tokyo, Tokyo Knit-Fabric Trade Association, 1910), pp. 64, 65.

Note: Only factories in Tokyo are listed; there was an early factory in Osaka.

<sup>a</sup>Konoike was a famous merchant family and huge landowner in the Edo period.

products, except for military use, were merely intended for the luxury of a handful of well-off consumers. These circumstances were important for the subsequent development of production relations. There was no significant change in this respect even after the Meiji Restoration.<sup>2</sup>

The first mechanized production of knit fabrics was the factory of Nishimura Katsuzo.<sup>3</sup> Because he had supplied guns to the government, Nishimura became interested in the production of knit fabrics, a related area of industry. He purchased 50 Swedish-made knitting machines and began production in 1872.<sup>4</sup>

The factory was soon shifted to Mukojima and reportedly employed more than 200 workers. A few other knit-fabric factories soon emerged in Tokyo (see table 1). In Osaka, too, the prefectural governor, Watanabe Noboru, had a "model plant" established in 1872.<sup>5</sup> However, these factories, in spite of their technical advantages, all were disbanded by the end of the 1870s. Nishimura's was also forced to close down in this period due to excessive competition among suppliers to the war ministry.<sup>6</sup>

### Emergence of New Merchants

The rapid decline of these factories has been explained in various ways. One explanation is that they were not competitive because their establishment merely provided work for samurai families that had lost their privileges, or lacked any well-planned purpose.<sup>7</sup> Another explanation is that the knitting skills were too elaborate to pay off in the limited market.<sup>8</sup> These explanations certainly hold true with certain aspects of the situation. More important, however, is how to explain that more than 100 entrepreneurs had joined the industry, that demand for imported knitting machines was so brisk as

to invite speculation, and that the production of knit fabrics – relying on the mushrooming of small producers – continued to grow with relative steadiness.<sup>9</sup> The direct cause was that the production technology that was introduced was not the most up-to-date, making it impossible for the factories to benefit by co-operative work. It was no wonder that the mechanized factories were not competitive with household enterprises, which fully mobilized family labour and could extend working hours to the physical limits of family members. Nor should it be overlooked that craftsmen's skills had been sufficiently well established for craftsmen to adapt the means of production to the requirements of small-scale operations by imitating or partially improving imported machines.

Floating capital was more important than fixed capital to the knit-fabric industry of those days; therefore, the fixed capital did not have to be large.<sup>10</sup> Moreover, the production technology imported in this period was not highly sophisticated. Also, there was no constant, stable demand; however, large requirements temporarily arose during the Satsuma Rebellion of 1877, the final and largest revolt of the ex-samurai class, and the Kanghwa Island Incident of 1875, which triggered Japan's invasion of Korea. On account of these circumstances, the knit-fabric industry came under the control of wholesale merchants through advance payments to producers. Mainly influential wholesale merchants won large orders from the military. Western-style factories equipped with many imported machines not only lagged behind the merchants in the procurement of raw materials and the development of markets but were unable to stage a successful counter-offensive against the energetic merchants, who exploited all the human resources at their disposal to distribute machines and raw materials to tiny workshops and domestic workers and, if required, could move machines from one convenient household to another.

While the persistence of the traditional controlling power of merchants was thereby demonstrated, since few old and established merchants were active in this sector, new types known as *seizo-hambai* (manufacturer-distributors) or *seizo-oroshi* (manufacturer-wholesalers), which had the dual character of maker and dealer, were beginning to emerge.

### Immediate Producers in the Early Stage

Information is particularly scarce on the characteristic features of the organization of production and labour during early Meiji, because reference materials compiled by trade associations or the like are most inadequate. What is interesting, however, is the way in which the exhibitors of knit products are presented in "Meiji jūnen naikoku kangyō hakurankai shuppin kaisetsu" (Commentaries on exhibits at the domestic exposition for the promotion of industry in Meiji 10 [1877]).<sup>11</sup> A total of 23 knit-fabric manufacturers are mentioned.<sup>12</sup> The names of six "exhibitors" (factory operators, including Nishimura Katsuzo) were accompanied by those of "workers" (i.e. immediate producers of the articles on exhibit). For instance, Nakajima Tei-

jiro of Osaka Prefecture and Yamaguchi Ryo of Shimane Prefecture were cited as having Konishi Tobe and Isozaki Yodaro (assisted by two others), respectively, as the makers of their exhibited articles. Reference to immediate producers in this manner is rare in subsequent reports. This listing can be regarded as proof of the relatively high evaluation that immediate producers enjoyed during this time, partly because the industry was still in its beginning phase and partly because the traditional order binding the craftsman-merchant relationship was shaken in the early Meiji years. The other 17 exhibitors presumably were small producers.

The following information is known about Nishimura Katsuzo's knitting factory. Apart from spinning, the production process of knit fabrics consisted mainly of the knitting, sewing, bleaching, and napping stages, which were integrated in Nishimura's factory. Knitting and sewing were done with hand-driven machines and bleaching depended on the use of chemicals instead of exposure to the sun, which was the usual practice. The names of 32 workers are mentioned and included both ex-samurai and commoners. Several of the workers later rose in social status to become operators of knitting factories.

Whereas many factories other than Nishimura's integrated plant presumably also turned out finished products knitted and sewn by hand, two points deserve particular note in connection with other factors to be taken up later.

First, there is a reference to a Hori Daikichi of Nishinari County, Osaka Prefecture, as a "knit-fabric bleacher." Of course, bleaching did exist as a line of trade in those days, and it is easily conceivable that those who had already been engaged in the bleaching of something else either began handling knit fabrics concurrently or switched to the bleaching of such products solely. The production process was divided into individual steps, and the formation of small enterprises specializing in only one step or another in isolation from others made quick progress during late Meiji, not only in the knit-fabric sector but also in many other smaller urban-based industries. Such a phenomenon, however, seems to have been developing in this industry ahead of others, under the constraints of the productivity levels in related fields already in existence.

Second, producers were already beginning in this period to exercise external control over subcontracted workers. It is on record that the Nishimura factory had exclusive relations with a few small producers engaged in sewing and knitting.<sup>13</sup> There also is a statement that a woman doing needlework at home arranged for nearby housewives to do preliminary jobs for knitting at their homes.<sup>14</sup>

## The Knit-Fabric Industry in Middle and Late Meiji

### Increase of Production Capacity

The monetary reform undertaken by Matsukata Masayoshi, who was appointed finance minister in 1881, invited a severe deflation in Japan. The

**Table 2.** Annual output of Japan's knit-fabric industry in the Meiji period

Year	Volume (1,000 dozen)	Value (¥1,000)
1881	64	38
1884	99	52
1887	139	113
1890	258	196
1892	600	639
1894	777	777
1896	1,229	1,449
1898	1,078	1,254
1900	1,127	1,418
1902	1,054	1,357
1904	2,136	2,688
1906	2,654	4,509
1908	3,495	5,374
1910	7,555	8,915

*Source:* Osaka Meriyasu Taoru Dogyo Kumiai, *Osaka Meriyasu Taoru Dōgyō Kumiai enkaku shi* (History of the Osaka Knit-Fabric and Towel Trade Association) (Osaka, 1923).

*Note:* The figures here are smaller than the corresponding figures in a survey by the Ministry of Agriculture and Commerce, presumably owing to the omission of statistics on some localities.

knit-fabric industry stagnated like many others, but the market began to gradually pick up in or around 1885. Although Japan experienced its first real financial panic in 1890, the industry was not so hard hit and claimed to have "established a foundation that could no longer be shaken" as its exports to continental China rapidly increased from 1892.<sup>15</sup> The annual output of the Japanese knit-fabric industry from the middle toward the end of the Meiji period is listed in table 2.

The Sino-Japanese War of 1894–1895 and the Russo-Japanese War of 1904–1905 gave impetus to the production of knit fabrics. A man in the trade later recalled that the production made a big leap every time there was a war because military needs constituted the bulk of the domestic market.<sup>16</sup> Characteristically, the level of production capacity raised to meet war needs was somehow maintained after the war until the next opportunity for a jump. What seems to have made rising production levels possible was the production for export, which took on full dimensions in the 1890s (see table 3). In early Meiji, Japan was an importer of knit products. In 1878 the nation exported only ¥2,152 worth of such goods, while it imported as much as ¥56,147 worth. In 1892 the exports, totalling ¥59,164, came close to the imports, ¥64,559, and in 1893 the former, reaching ¥151,361, far surpassed the latter, ¥44,482.<sup>17</sup> Takahashi Kamekichi, citing 27 major export industries during and after the Meiji period, referred to 14 of them as "stagnant

**Table 3.** Annual total of knit product exports, 1877–1897 (in ¥1,000)

Year	Total	Year	Total
1877	—	1898	206.4
1878	2.2	1899	352.1
1879	0.9	1900	369.8
1880	12.7	1901	449.7
1881	8.9	1902	497.7
1882	9.1	1903	987.1
1883	7.9	1904	1,758.0
1884	18.2	1905	2,069.2
1885	18.6	1906	3,207.6
1886	13.5	1907	4,332.7
1887	10.0	1908	3,794.7
1888	35.3	1909	4,520.8
1889	40.1	1910	7,022.9
1890	54.3	1911	6,792.8
1891	55.6	1912	8,984.7
1892	74.4	1913	10,861.7
1893	192.3	1914	10,309.7
1894	188.2	1915	12,363.1
1895	166.8	1916	33,945.4
1896	184.6	1917	27,265.5
1897	126.2	1918	32,298.2

Source: Ministry of Finance, *Dai Nippon gaikoku bōeki nempyō* (Annual tables of foreign trade) (Tokyo; see tables for years 1882–1919).

industries,” whose export values had already hit their ceilings during the Meiji years, and to the 13 others as “growth industries,” which remained major exporting sectors and continued to grow in the Taisho period. He counted knit products as a growth item along with woven cotton cloth and coal.<sup>18</sup>

Though exports of knit fabrics increased so remarkably, they mainly comprised low-priced goods of poor quality and often earned a bad reputation. The proportion of exports to the total output of knit products nevertheless was 70 per cent or even more before World War I.<sup>19</sup>

Meanwhile the domestic market expanded, though only gradually. The low standard of living of the populace and the limited domestic market were severe constraints on the industrialization of Japan, but domestic demand nevertheless steadily increased toward late Meiji, reflecting the rapid growth of the urban population and the change of people's life-style. The need for knit fabrics increased not only as Western dress spread among urban civil servants and students but also as trackmen and other workers began to wear uniforms made of knit fabric.<sup>20</sup>

**Table 4.** Number of entrepreneurs engaged in knit-fabric industry in Osaka Prefecture

Year	Entrepreneurs
1877	96
1882	46
1888	167
1892	275
1897	371
1902	597
1907	1,035
1912	1,457
1916	1,743
1921	2,357

Source: Takeuchi Johzen, "Toshi-gata chūshō kōgyō no toiyasei-teki saihei ni tsuite" (On the reorganization of urban SMIs under the putting-out system), I, in *Seikei Ronso* (Hiroshima University, Faculty of Political Science and Economics), 25, no. 1 (1975), p. 65.

**Table 5.** Membership of the Tokyo Knit-Fabric Trade Association

Year	No. of members
1905	250
1906	338
1907	411
1908	Unknown
1909	529
1910	536
1911	554
1912	571
1913	585
1914	608
1915	624
1916	680

Source: Fujimoto, *Nihon meriyasu shi*, pp. 202, 203.

### Diminution of Operational Scale

An increase in the number of entrepreneurs and the emergence of large-scale factories supported this increase in production capacity. The increase in number of knit-fabric entrepreneurs in Osaka Prefecture between 1877 and 1921 is shown in table 4. Membership in the Tokyo Knit-Fabric Trade Association, organized in 1905, is shown in table 5.

As the number of enterprises increased, so did the relative scale of business of some of the enterprises. Osaka Knit Blanket Co., Ltd., the first joint-stock company in the industry, was founded in 1895.<sup>21</sup> The company

**Table 6.** Knit-fabric factories classified by year of founding, 1930

Year of founding	Factories still existing in 1930
1884-1889	4
1890-1893	7
1894-1898	7
1899-1903	14
1904-1908	56
1909-1913	108
1914-1918	199
1919-1923	308
1924-1927	321
1928	172
1929	44
Unknown	13
Total	1,153

Source: Industrial Bank of Japan, Research Section, *Wagakuni meriyasu seizō gyō no genkyō* (Current situation of the knit-fabric manufacturing industry in Japan) (Tokyo, 1931), p. 4.

Note: Only those factories having at least five employees each are included.

equipped its factory with steam engines, sent one of its engineers abroad to learn the Western method of bleaching, and also attempted its own technical improvements in other respects. In 1904 Marumatsu, Ltd., which later rose to the top position in the industry, began producing knit fabrics,<sup>22</sup> and Yamahatsu Shoten, founded in 1894, is believed to have set up its own knit-fabric factory in 1907.<sup>23</sup>

The emergence of these factories, however, was not endogenous in the industry. Many of them resulted from the investment of accumulated assets by merchants who saw bright prospects for the industry. Some developed from tiny enterprises that had survived competition and selection and grown, but they were the exceptions.

Though the overall output did not markedly decline, there were successive bankruptcies. Table 6 lists the year of founding and numbers of factories existing in 1930. Though accurate assessment is impossible because the data cover only factories having at least five employees, it was difficult to maintain a scale of operation with a work-force of five or more consistently. Most of the enterprises covered by these statistics had no more than 30 employees.

The results of a late-Meiji survey by the Ministry of Agriculture and Commerce reveal a queer phenomenon: a diminution in the average scale of operation proceeded side by side with an increase in total output (see table 7). This suggests that the output of knit fabrics represented a composite of a number of production models. A more specific analysis will be made in the next section.



**Table 7.** Knit-fabric production in the late Meiji period

Year	No. of houses	Index	No. of workers	Index	Output (¥)	Index
1905	712	100	5,148	100	4,314.404	100
1906	798	112	4,782	92	6,799.134	157
1907	863	121	5,150	100	6,599.518	153
1908	978	137	6,181	120	6,815.541	157
1909	940	132	6,352	133	4,469.900	103
1910	851	119	7,096	137	8,416.838	195

*Source:* Secretariat to the Minister of Agriculture and Commerce, Statistical Division, *Sangyō shōchō gairan* (Outline of rise and fall of industries) (Tokyo, Ministry of Agriculture and Commerce, 1912), p. 59.

### Merchants and the Reorganization of the Production Process

New moves to reorganize production in this industrial sector began where the diminution of the scale of operation and the expansion of production capacity took place simultaneously.

One such move was an enormous strengthening of the external control over subcontract workers and sideline workers at home. For instance Konishi Tobe, who had started his business on advance money received from a wholesaler merchant, came to employ 50 home workers in addition to 17 employees working in his factory.<sup>24</sup> There is also on record a Tokyo real estate broker who developed housing sites, built thousands of houses, and had paupers live there and make Japanese-style socks, pencils, knit goods, and other things.<sup>25</sup>

It was the tendency for producers involved in the manufacture of knit fabrics to separate and take charge of only single stages of the production process. Though reference materials are scarce on how this separation specifically took place, let me cite some indirect evidence and consider it again when I analyse in the next section the form of production in the Taisho period, on which relatively ample information is available concerning specific examples.

The progress of the split of the production process into individual subsectors is evident in *Osaka-fu tōkei sho* (Statistical report of Osaka Prefecture), published yearly from 1887. Its 1894 edition was the first to include statistics on knit-fabric manufacturers (table 8 shows the situation in 1904). The basic process of knit-fabric production was divided into five processes: spinning, knitting, bleaching and dyeing, napping and readjustment, and sewing. Spinning was already a subsector in which a monopoly was being established. For the bleaching and dyeing stage, dyeing was not common before the Taisho period. One would presume that the remaining four stages – knitting, bleaching, napping, and sewing – became independent from one another. Had this differentiation progressed along with a rise in productivity and an expansion in the scale of production, the result would have been consistent with the classic thesis of the “intensification of the social division of labour.”

**Table 8.** Number of houses engaged in knit-fabric manufacture in Osaka Prefecture, in 1904, classified by function

Function	Osaka City	Nishinari County	Higashinari County
Knitting	73	8	3
Bleaching	5	—	—
Napping	9	—	—
Sewing	71	—	—
Total	158	8	3

Source: Osaka Prefectural Office, *Osaka-fu tōkeisho* (Statistical report of Osaka Prefecture) (Osaka, 1904), p. 330.

However, the progress of this development was accompanied by a diminution in the scale of business operations. This circumstance may explain why: wholesale merchants' control over producers was very strong even in this period, the productive organization was dominated by them, semi-finished products, having gone through one partial process or another, were successively passed on to the processor in charge of the next step, and the finished products finally were returned to the wholesaler. As a matter of fact, this is a common view in the history of research in this area. It nevertheless is susceptible to the pitfall of explaining the intervention of the merchants in the production process merely as a matter of linear inevitability, overlooking the existence of the process in which the wholesaler merchants' functions became disintegrated and the formation of an organic hierarchy among those having heterogeneous wholesaler-like functions.

## The Production System between the Two World Wars

### Formation of a Dual Structure

World War I was a "big providential help in the Taisho period" to Japanese industry, beset with a severe recession.<sup>26</sup> The knit-fabric sector was by no means an exception in this respect, and its output grew tremendously. The annual average of national output during four years after the outbreak of the war is compared in table 9 with that during three pre-war years. The data reveal not only the unprecedented boom of the industry during World War I but also some of its characteristic features. First, the production of knit fabrics still relied primarily on exports, which would eventually be directly hit by the post-war recession. Second, this boom was supported by an unusual growth in domestic demand. Domestic demand was cultivated mainly by the increase of population and partly by a change of life-style. The rate of population growth was stable and high from the Meiji Restoration. People's consumptive requirements, once expanded, would not easily shrink. There is

**Table 9.** Growth of knit-fabric production during World War I (¥)

	(A) Total output	Index	(B) Export total	Index
Average of three pre-war years	12,214,286	100	8,936,762	100
Average of four years after the outbreak of war	49,860,462	408	20,774,897	232

*Sources:* (A) Arithmetic average of 1911–1913 and 1915–1918, taken from Iwasaki Kin'ichi, *Chūbaku shi* (History of the Central Knit-Fabric Control Association) (Tokyo, Nihon Meriyasu Tonsei Co., 1944), p. 10; (B) Ministry of Agriculture and Commerce, Commerce and Industry Bureau, *Bōseki kōgyō narabini zatsu kōgyō ni oyoboshitaru jikyoku no eikyō* (Influences of the state of affairs on the spinning industry and miscellaneous industries) (Tokyo, 1920), p. 183.

no doubt that the domestic market had grown in depth or that market conditions had been developed with relative stability. This rapid growth of the industry necessitated new responses by many entrepreneurs. These points have to be kept in mind when analysing the knit-fabric industry during the chronic recession after the war.

The production of knit fabrics in Japan centred in Osaka from late Meiji. Knit fabrics produced in Osaka were mainly intended for export (see table 10). However, the proportion of Osaka-produced knit fabrics to the national total gradually declined. These circumstances served to stimulate the reorganization of the industry, which was further accelerated by the chronic recession following World War I.

The production of knit fabrics was also undertaken on a substantial scale in Tokyo and Aichi and spread to Hyogo, Nara, and Kagawa, where the productive organizations do not seem to have significantly differed from what was common in Osaka. In this section, my account will focus on production in Osaka, which was predominant in output, number of houses engaged in the production, and the number of workers employed (see table 11).

The most notable feature of the knit-fabric industry in Osaka after World War I was that the operation of large factories was well under way. According to a survey by the municipal government of Osaka in 1919, of a total of 188 factories with 100 or more workers in and around Osaka City, there were 10 enterprises engaged in the production of knit goods. Despite the chronic recession the Japanese economy was suffering, the knit-fabric industry made further progress. From 1926 to 1932, the number of knit-fabric factories with 100 or more employees soared to 23.

What is noticeable is the increase of small enterprises at the same time. The increase of producers, according to a survey by Osaka City, seems to endorse the simultaneous increase of small workshops (see table 12). These small enterprises were propped up by domestic labour, which had proliferated too.<sup>27</sup> As far as one can learn of the situation in 1940, knit underclothing

Table 10. Annual knit-fabric production in Osaka Prefecture, 1912-1923

Year	(A) Domestic market		(B) Export market		(C) Total		B/C (%)	
	Qty. (1,000 dz.)	Total (¥1,000)	Qty. (1,000 dz.)	Total (¥1,000)	Qty. (1,000 dz.)	Total (¥1,000)	Qty.	Total
1912	874	2,606	5,892	8,685	6,786	11,292	87.1	76.9
1913	921	2,883	7,188	10,012	8,109	12,895	88.6	77.6
1914	1,242	2,994	7,129	9,605	8,373	12,598	85.1	76.2
1915	1,382	3,064	7,512	12,394	8,893	15,459	84.5	80.2
1916	1,807	4,414	12,941	27,693	14,748	32,016	87.7	86.5
1917	1,747	5,905	7,855	22,022	9,603	27,926	81.8	78.8
1918	1,790	9,710	6,609	25,861	8,399	35,571	78.7	72.7
1919	1,721	12,195	5,933	30,835	7,646	43,030	77.6	71.7
1920	1,426	9,384	4,564	25,790	5,990	35,174	76.2	73.3
1921	1,654	9,595	4,923	11,785	6,218	21,380	79.2	55.1
1922	1,730	10,287	4,297	17,750	6,027	28,037	71.3	63.3
1923	1,975	12,413	5,324	19,485	7,299	31,868	72.9	61.0
1924	2,014	13,385	5,722	22,296	7,735	35,681	74.0	62.5
1925	2,015	11,970	7,347	30,126	9,362	42,096	78.5	71.6
1926	1,982	10,560	7,545	26,061	9,527	36,620	79.2	71.2
1927	2,240	11,796	10,214	29,744	12,454	41,539	52.0	71.6
1928	3,365	12,028	9,232	28,283	11,598	40,311	79.6	70.2
1929	3,396	11,954	10,098	31,653	12,497	43,607	80.8	72.6

Source: Osaka Municipal Office, Industrial Affairs Department, Research Section, *Osaka no meriyasu kōgyō* (The knit-fabric industry in Osaka) (Osaka, 1931), p. 24.

**Table 11.** Knit-fabric production in major producing prefectures, 1920

Prefecture	Producing houses	Workers			Output (¥)
		Male	Female	Total	
Osaka	505	2,688	4,508	7,196	27,649,828
Tokyo	220	1,412	1,287	2,659	1,036,790
Aichi	233	1,236	836	2,072	4,770,213
Wakayama	23	131	194	325	2,065,557
Hyogo	110	247	888	1,135	1,707,132
Others	446			3,537	
National total	1,537	—	—	16,924	35,173,961

Sources: Ministry of Agriculture and Commerce, *Kōgyō chōsa ihō* (Bulletin of industrial surveys), vol. 1 (Tokyo, 1923); Osaka City, *Osaka no meriyasu kōgyō*, p. 24.

Note: The prefectures are listed in the order of output.

**Table 12.** Number of houses and workers engaged in knit-fabric production in Osaka Prefecture, 1920–1929

Year	(A) Houses	(B) Workers	B/A (%)	B/A of national average
1920	505	7,169	14.19	11.01
1923	1,108	9,848	8.88	11.33
1925	1,264	10,089	7.98	7.43
1929	1,970	12,864	6.52	6.84

Source: Osaka Municipal Office, *Osaka no meriyasu kōgyō*, p. 17.

was listed top among sideline job items in Osaka, followed by such related activities as attaching decorative buttons or other miscellaneous pieces to suits, etc.<sup>28</sup> Although the number of households having sideline work is unknown, the “estimated number of piece-workers” is stated to be between 4,000 and 5,000, in contrast to 733 sewers who were members of the Osaka Knit-Fabric and Towel Trade Association in 1931.<sup>29</sup> In 1938, counting only members of the Osaka Association of Knit-Fabric Sewing Industry for Domestic Consumption, there were 1,050 houses engaged in the sewing of knit products for the domestic market. Adding to them the sewers of products for export and piece-workers engaged in non-sewing functions, the total would run up to a considerably large number.

### Seven Groups of Producers

Information on the production system in the knit-fabric industry after World War I is very limited. However, the earliest and most detailed analysis was by

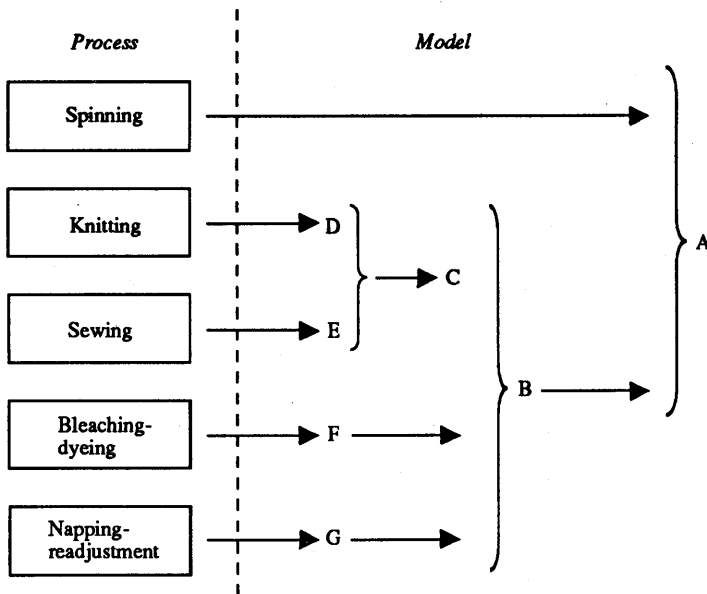


Fig. 1. Classification of enterprises involved in knit-fabric industry

Source: Hochi Shimibun, Economic Department, *Chūshō sangyō no katsuro* (The way of survival for SMIs) (Tokyo, Chikura Shobo, 1930), p. 128.

Note: Each arrow indicates that an enterprise belonging to the model represented by a letter on the right-hand side of the diagram performs the pertinent process in its own factory.

the *Hochi Shimibun*, in which the production of knit fabrics was divided into seven groups.<sup>30</sup> As the illustration in the original literature is somewhat difficult to understand, I have modified it as in figure 1. Whereas the classification was made by the stage of the whole production process managed by a given entrepreneur, I would like to try to put the question in more specific terms by taking the account of the *Hochi Shimibun* reference material and incorporating facts learned from other sources as well. First, Model A is described in this way: "Though it is ideal to operate the whole process in an integrated manner in a single factory . . . [in practice it] is impossible, except that Settsu Meriyasu, the Yamashina Factory of Kanegafuchi Spinning and the Akashi Factory of Nippon Keori are operating a wholly integrated process, from the reeling of silken or woolen threads to napping. . . ."<sup>31</sup>

Judging from documentation of enterprises belonging to this category, they resulted from either the participation of huge corporations not directly involved in the production of knit fabrics, by virtue of their financial resources or control over related sectors, or the merger of influential companies in the knit-fabric industry itself. These developments can be attributed

to the assurance of a stable market, including military demand, in the future. An especially important contributing factor was the expansion of the domestic market. The entry of huge corporations into the knit-fabric industry in some form or other characterized the period from then on. One of the major factories of Nippon Meriyasu Co., Ltd., the biggest knit-fabric manufacturer in the Osaka area, had a work-force of nearly 500 men and women in 1919. It was acquired by Kurashiki Spinning Company, one of the main divisions of the Ohara *zaibatsu*, in April 1924. Toyo Spinning Company, one of the biggest companies in Japan's spinning industry, started the construction of its Tomita Plant in 1934 with a view to participate in the "high-quality knit-fabric sector"; it sent its staff members abroad to gain expertise, invited a German engineer to Japan, and in 1937 launched full-scale production of knit fabrics.<sup>32</sup>

Model B applies to enterprises having the knitting, sewing, bleaching and dyeing, and napping and readjusting processes in their own factories. There were only a few such companies in Tokyo and Osaka. It is not known specifically what companies were being referred to in this description, but the enterprises that were able to rise to this level were those of merchants who, having nothing directly to do with the production process of knit fabrics, had built up capital by parasitizing the producers and found good opportunities to launch factories of their own. Direct and sudden inroads also were made by monopolizing capitalists. One example was the establishment of Toyo Knitting and Weaving Co., Ltd., in 1934 in Moriyama City, Aichi Prefecture, with Mitsui & Co. as a major shareholder.<sup>33</sup>

Both models A and B, however, were "exceptions to the common form of production in knit-fabric factories."<sup>34</sup> Entrepreneurs belonging to categories C through G, which will be described in some detail below, constituted the core of the knit-fabric industry.

In Model C, stated briefly, "the two processes of knitting and sewing were accomplished in a single factory," representing "the most moderate form of knit-fabric manufacturing." Those blessed with unusual talent and luck among direct participants in the production process, such as knit-fabric craftsmen or mechanics, could rise at most to the level of Model C.

Models D through G represent, though they were seemingly independent, very small entrepreneurs in reality. Those belonging to categories F and G increasingly specialized in operations related to knit fabrics. Category E included many piece-workers, and the function of G was reportedly sometimes performed concurrently by those primarily falling under Model F.

The detailed survey by the *Hochi Shimbun* presented little more than a classification by the form of management. Especially with respect to models C through G, the important aspect of how they were organized integrally is overlooked. This point deserves further discussion.

## The Production Process of the Knit-Fabric Industry

To clarify the realities of the organization of knit-fabric production in this period, I would like to consider two aspects of it in this section: the produc-

tion process and lines of business. Knit products consist of a wide variety of items such as underwear, gloves, socks, and sweaters, and the organization of production considerably differs with the type of goods manufactured. For this reason, I would like to limit my account to cotton underwear, which accounted for a dominant part of the total output before World War II.<sup>35</sup> The following stages of the total production process were fully integrated in some instances. However, as discussed in the preceding section, they were taken charge of in most cases individually by "independent" entrepreneurs. I would like to present my findings mainly relying on previous research, while keeping in mind the presence of these "independent" entrepreneurs.<sup>36</sup> Incidentally, I will explain the role of *seizo don'ya*, who will be frequently referred to in the following account.

### Spinning

The production of knit cotton goods in Japan ordinarily used the same kind of thread as that for common woven products. A monopolistic system had already been established in the spinning industry before World War I, and its management class had constituted an influential part of business circles in Japan. Other than Osaka Meriyasu Boseki and Kanegafuchi Spinning, few companies, if any, spun raw threads for specialized use in the knit-fabric industry. Whereas threads intended specifically for this purpose were used in the knitting of high-quality goods, both companies spun them for the production of knit fabrics by their own factories. Raw threads in general were supplied to knitting factories through merchants who specialized in common threads. After World War II huge spinning companies began to intervene, through the supply of raw threads, in the management of smaller factories of knit fabrics; before this time, however, their supply was almost wholly left to thread merchants.

### Knitting

Knitting enterprises had established themselves in the Meiji period, and by the end of World War I, some of them had solid operations. A far greater number of them, however, were subordinate to *seizo don'ya* or *kiji don'ya* (raw-material wholesalers) and knitted raw threads supplied to them on a subcontract basis. The process involved a treatment known as *henshi* (uneven parts pre-treated so as not to snap during the knitting process) that followed the unbagging and weighing of raw threads and the purpose of which was to produce items of middle-class or better. This treatment was to be done in preparation for napping the inner side, but it was often skipped. The knitting process began with winding on a winding machine to make the threads more readily knittable. Winding was either jobbed out for part-time work at home or done by members of the knitter's family in his factory. Usually, simple hand-driven machines were used, and the knitting was done with one of several kinds of knitting machines, selected according to the type of product. Some kinds were already built in Japan to original Japanese designs. Though there were power-driven machines available, two units of which could be simultaneously operated by a single worker, few enterprises used the latest



imported machines. In most instances, from 10 to 15 units were operated by around 20 workers. After knitting the products were weighed, and any incomplete parts were corrected by hand. This process depended mainly on female labour, sometimes jobbed out to domestic workers.

### Bleaching and Dyeing

Knit textiles were then handed over, via a *seizo don'ya* or wholesale merchant, to a bleacher or a dyer. The bleaching process began with turning the textiles inside out; next they were weighed and marked, and then they went through a process to remove impurities. After washing with water, they were bleached with chlorine, treated with acid, and washed with liquid soap. They were repeatedly washed in water between each stage, and the process ended with dehydration and drying. In early Showa, exceptional bleaching shops employed 100 or more workers, but ordinary shops had work-forces of at most 40 to 50. They were increasingly engaged in dyeing and napping concurrently. Most of the specialized dyers were small entrepreneurs who employed at most 10 workers. Bleaching shops handled only vegetable or animal fibres. Some of them, not joining the trade association, operated entirely out of their own homes.

### Napping and Readjustment

Napping was done with a napping machine, and the napped product was turned "outside out." Then it was extended with a roller to a prescribed length. This process was known as "readjustment." Most of the napping and readjusting shops were equipped with two or three napping machines and a roller or two and employed 20 to 30 workers. An increasing number of bleachers began to concurrently operate such shops in the 1920s.

### Cutting

Cutting varied widely with the type of product, but in the rough-cutting stage, generally several sheets were cut at one time with a knife specially designed for the purpose. Each sheet was then cut with scissors individually into the desired shape. This step was known as "fine cutting." Next, the neck part of the front piece was scooped – this step was known as "crescent cutting" – followed by "front dividing" to open the breast part. These functions were carried out by entrepreneurs called *hosai-ya* (cutters), though rough cutting was often done at a *seizo don'ya*'s. The tools used were nothing more than knives and scissors, and their simplicity widened the difference in productive efficiency between the skilled and the unskilled. The entrepreneurs engaged in cutting were more like master craftsmen, deftly processing the fabrics supplied from the *seizo don'ya* and passing them on to sewers.<sup>37</sup>

### Sewing

Sewing was an extremely complex process – the problem being the presence of specialized entrepreneurs separately in charge of each of its multiple segments – varying widely from one type of product to another. Even the simplest products intended for export to the rest of Asia had to go through 25

different subprocesses, mainly including crescent attaching, sewing the crescent-shaped piece from crescent cutting on to the neck of the back piece; crescent decorating of the crescent with stitches; round-the-neck sewing to attach pieces of woven cloth or tapes to the breast where buttons were to be sewn on afterwards; side sewing; hem sewing; and sleeve attaching. These subprocesses were collectively referred to as basic sewing, presumably because they could be accomplished with the same sewing machine and by the same operator. Other subprocesses were buttonholing and button sewing, the latter done mostly by hand.

The sewing process was taken charge of mainly by subcontract sewers known as *tokushu-ya*. On the average, a subcontractor had four to six sewing machines of two kinds and employed 10 or 12 workers. Besides *tokushu-ya* there were *eri-ya*, responsible for crescent attaching and round-the-neck sewing; *honnui-ya*, who oversaw the final sewing; and *ana kagari-ya*, who supervised buttonholing. Each was equipped with two or three special sewing machines varying by function and usually employed 10 or so workers. There were also *botan tsuke-ya*, who sewed buttons on by hand.

This complex sewing process was extensively based on subcontracted labour. According to a survey by the municipal government of Osaka in 1940, of the sideline jobs in the city, by far most were in the knit-fabric sector and those in this sector predominantly belonged to the sewing process.<sup>38</sup> Some of its complicated subprocesses were further subdivided and accomplished independently of one another. Some of the piece-workers had their own special sewing machines, but many processed the supplied materials solely by hand and thereby earned wages. In the slack season of knit-fabric production, they would seek orders from tailors, dressmakers, or haberdashers. Their jobs came mostly from the *tokushu-ya*, *eri-ya*, or *botan tsuke-ya*, but some jobs also were offered by "intermediaries engaged in no industrial operation."

### Finishing and Packaging

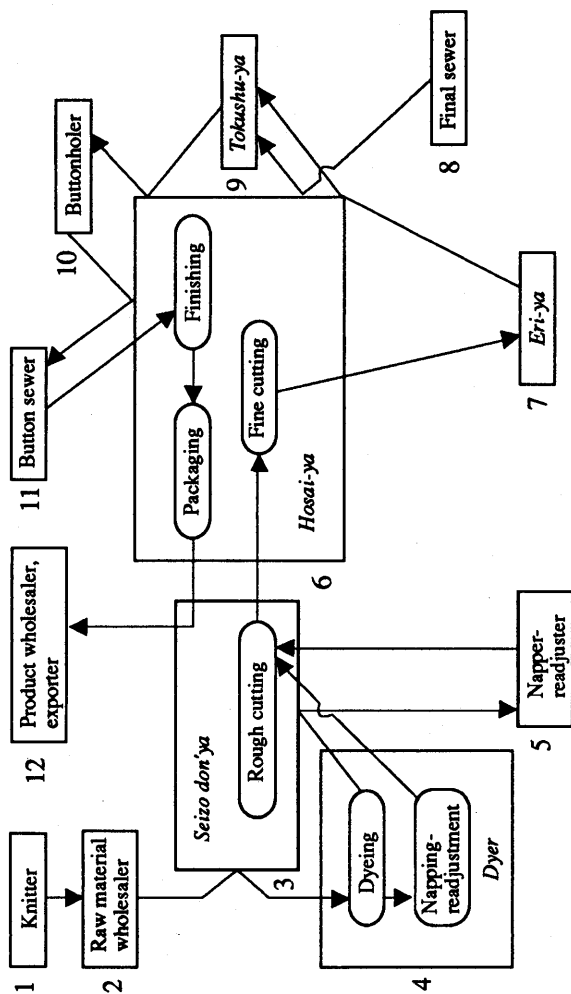
Products circulated from one sewer to another would eventually come back to the *hosai-ya*'s, where they would be cleared of odd threads (*hige tori*), labelled as to size (*inchi zuke*), ironed, and packaged. The finished products would then go into the market through the hands of entrepreneurs (*seizoka*, *seizo gyosha*, or *seizo don'ya*).

The production system is diagrammed in figure 2. For the rest of this chapter, the specific stratum – *seizoka*, *seizo gyosha*, *seizo don'ya*, or *seizo oroshi* – will collectively be referred to as *seizo don'ya*.

## Historical Functions of *Seizo Don'ya*

### The Relation between *Seizo Don'ya* and Small Producers

After World War I there was a significant growth of integrated factories producing knit fabrics. Yet the core of the industry was production organized



**Fig. 2.** General organization of knit-cotton underwear production

*Sources:* Osaka Municipal Office, Industrial Affairs Department, Research Section, *Osaka no meriyasu kôgyô* (The knit-fabric industry in Osaka) (Osaka, 1931); Osaka Municipal Office, *Osaka-shi naishoku chûsa* (Survey on sideline work in Osaka City) (Osaka, 1932); Osaka Municipal Office, Economic Affairs Bureau, Commerce and Industry Section, *Osaka no meriyasu kôgyô* (The knit-fabric industry in Osaka), Reference Materials on Export Industries, part 3 (Osaka, 1948).

*Notes:* Seizo don'ya were also referred to in many other ways, and rough cutting was often done by hosai-ya as well.

**Table 13.** Number of entrepreneurs engaged in different subsectors of the knit-fabric industry in Osaka

Subsector	Houses
Raw material wholesalers	20
Knitters	155
Raw material knitters	70
Rib stitchers	85
Bleachers	21
Members of Osaka Knit-Fabric Bleachers Association	18
Non-members	3
Dyers <sup>a</sup>	81
Members of Osaka Knit-Fabric Bleachers Association	41
Member of Osaka Dyers Association	45
Non-members	15
Napper-readjusters	35-36
Sewers <sup>b</sup>	1,000-1,100
Members of Osaka Knit-Fabric Sewers Association	628
Non-members	400-500

Source: Osaka Municipal Office, *Osaka no meriyasu kōgyō*.

<sup>a</sup>Some entrepreneurs seem to have been members of two associations at the same time.

<sup>b</sup>*Hosai-ya*, *tokushu-ya*, and others are also included; the ratio among *hosai-ya*, *tachi-ya* (cutters), and *tokushu-ya* is estimated at 3:4:3.

under the leadership of *seizo don'ya*. According to a survey by Osaka Prefecture in 1933, production by large factories accounted for only one-third of the total output of knit fabrics, and small enterprises and piece-workers at home were responsible for all the rest.<sup>39</sup>

Another 1933 survey by Osaka City gave far more interesting findings.<sup>40</sup> According to this survey, more than 90 per cent of the total output of knitting and more than 70 per cent of the combined output of all kinds of knit products came from subcontractors.<sup>41</sup>

Nevertheless, large-scale factory production was by no means absent in this period. In my own survey, I was able to confirm active capital investments by large enterprises from the 1920s to the 1930s.<sup>42</sup> These findings clearly reveal a polarization in knit-fabric production. To explain this polarization, I will concentrate on the diverse circumstances of small enterprises and analyse the relationships between *seizo don'ya* and small producers.

First, to find out if the transactions between *seizo don'ya* and small producers were exclusive and unitary, I will begin by looking at the respective numbers of houses engaged in the different stages of the knit-fabric production process in Osaka in or around 1930 (see table 13). As regards *seizo don'ya*, Professor Horie Hideichi's survey completed toward the end of the 1930s notes the following: "There are some 230 *seizo don'ya*. Thus a major part of

the membership of the Osaka Association of Producers of Knit Fabrics for Export consists of *seizo don'ya*."<sup>43</sup>

If this figure is correct for an association that had a membership of over 300 in early Showa, it would mean that there were nearly as many *seizo don'ya* in the middle of the 1930s. There also must have been some *seizo don'ya* who were members of the Osaka Knit-Fabric and Towel Trade Association.

As for small producers, there were 155 knitters, 21 bleachers, 81 dyers, and 35 or 36 napper and readjusters. Each entrepreneur taking charge of a specific subprocess took orders from more than one *seizo don'ya*. It would have been impossible for the wholesale merchants to secure exclusive control over the small producers.

Second, regarding the inability of *seizo don'ya* to dominate the market on their own, since they had small producers process raw materials or semi-finished goods on commission, it may look as if they ruled the whole production process. In reality, the activities of *seizo don'ya* were merely based on orders by other parties. Moreover, in most cases, the products had to bear the brand of those outside clients, who indeed were traditional wholesale merchants.

Third, their financial resources have to be assessed. The ties of "friendship" between wholesale merchants and immediate producers weakened from late Meiji on, resulting in a rapid decline of the advance payment system and in straitened financial circumstances on the part of producers.<sup>44</sup> For a small producer, his bank was the first source of finance to rely on; for the wholesaler merchant, it was the second. This situation remained the same in later years.<sup>45</sup> However, a *seizo don'ya* was not able to have his bills discounted by his bank since he lacked a solid credit base. Sometimes he had to rely on finance from a wholesale merchant or an export trader.<sup>46</sup>

It is at this stage no longer appropriate to regard *seizo don'ya* as similar to the wholesale merchants, who were directly involved parties in the earlier putting-out system. In 1925 the membership of the Tokyo Knit-Fabric Trade Association was 1,534, consisting of *seizo don'ya* and small producers. However, only 488 members remained in business until 1934. The high waves of massive decline, peculiar to smaller industries, mercilessly washed away small producers and *seizo don'ya* alike.<sup>47</sup> Ironically, there even was a massive emergence of new *seizo don'ya* and producers at the same time.<sup>48</sup> I have also confirmed by my own research<sup>49</sup> that most of the *seizo don'ya* and small producers had started as workers in the same knit-fabric industry, though the average age at which they became entrepreneurs, including *seizo don'ya*, tended to rise, as shown in table 14. Thus, presumably, it became increasingly difficult to start an independent enterprise. Nevertheless, worker-turned-entrepreneurs were not rare even in the 1930s.

### The Stratification of Immediate Producers

*Seizo don'ya* were from the same class as workers and small producers. Yet this characteristic cannot be irrefutably confirmed before clarifying the tradi-

**Table 14.** Trend of average age of starting entrepreneurs

Start of enterprise	No. of new enterprises	Average age of entrepreneurs
Meiji period	4	17.75
Taisho period	45	25.20
1926–1937	56	27.93
1938 and later	24	36.88

Source: Takeuchi Johzen, "*Gyōkai annai ni yoru keiei shi bunseki no kokoromi*" (Analytical approach to the history of business administration through the *Guide to Industries*), *Hiroshima Daigaku Keizai Ronso* 2, nos. 3, 4 (1979), p. 102.

tional relationships between wholesale merchants and *seizo don'ya*. This point will be elaborated upon later after discussion of some other characteristics of *seizo don'ya*.

One of these characteristics is the uniquely flexible structure of the organization of production in which *seizo don'ya* took the leadership. This flexibility manifested itself in differences in organization of the product lines, regional differences even in the same product line, and in the constant yet smooth reorganization taking place at the farther ends of production (i.e. the lowest level of production).

Whereas underwear constituted the central product line, the organization of production differed somewhat with the destination of the underwear, whether it was for domestic consumption or for export. For export products, which are alleged to have been usually "cheap and of inferior quality," the napping and readjusting process was often skipped, and *hosai-ya* and *tokushu-ya* more extensively jobbed out their tasks to subcontractors. Products for domestic consumption were mainly made of knit textiles bought from specialized knitters to be worked on by subprocessors because the knitting of raw threads supplied by *seizo don'ya* could produce only low-quality fabrics.

The production of woolen knit items was organized as shown in figure 3. Figure 4 illustrates the production of socks. The manufacturing of sweaters was organized in still another way. These complex organizations were not constant throughout the year: depending on the relative activity of business, they were disbanded and rebuilt as required. Even if exactly the same organization was revived, it might consist of different entrepreneurs. Marginal producers whose basis was particularly unstable were the subcontractors in rural villages. Figure 5 shows how wildly the output fluctuated – depending on the business prospects of urban merchants – in the rural, eastern part of Kagawa Prefecture, known for its extensive undertaking of knit-glove sewing subcontracted from Osaka merchants. The potential of the producers there – many of whom were peasants – to eventually achieve the world's greatest productivity in the manufacture of gloves deserves a separate study.

What made this situation possible? One explanation is the extensive pres-

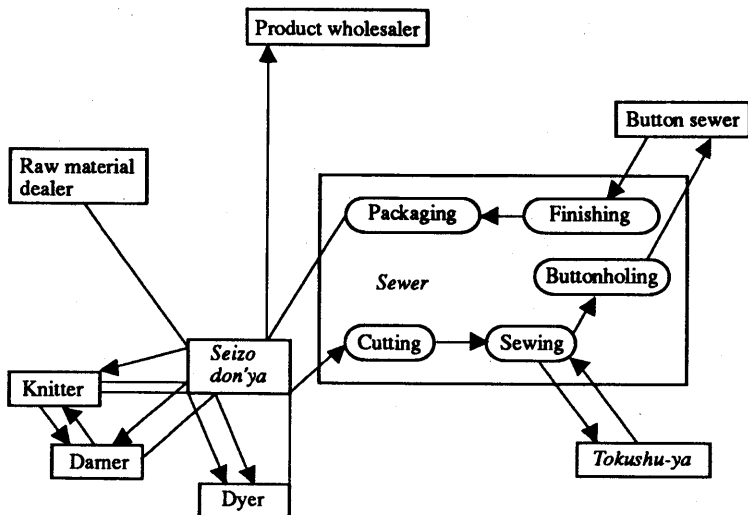


Fig. 3. Organization of knit-woolen underwear production

Source: Osaka Municipal Office, Industrial Affairs Department, Research Section, *Osaka no meriyasu kōgyō*, p. 116.

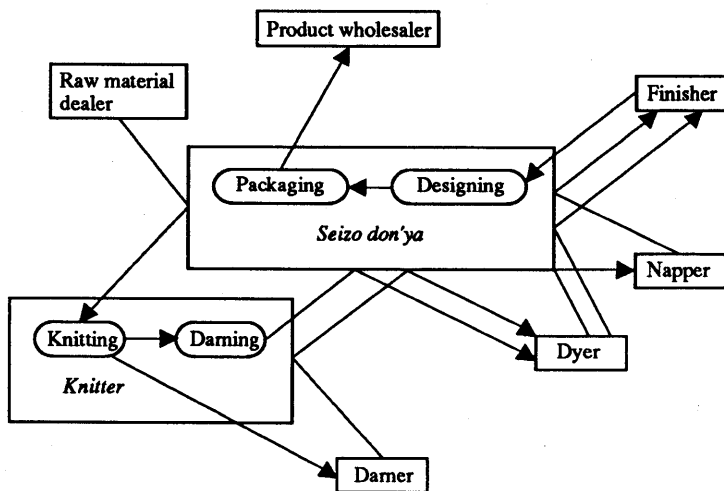


Fig. 4. Organization of sock production

Source: Osaka Municipal Office, Industrial Affairs Department, Research Section, *Osaka no meriyasu kōgyō*, p. 118.

Note: This chart corresponds to the production of patternless socks, whose process is the simplest.

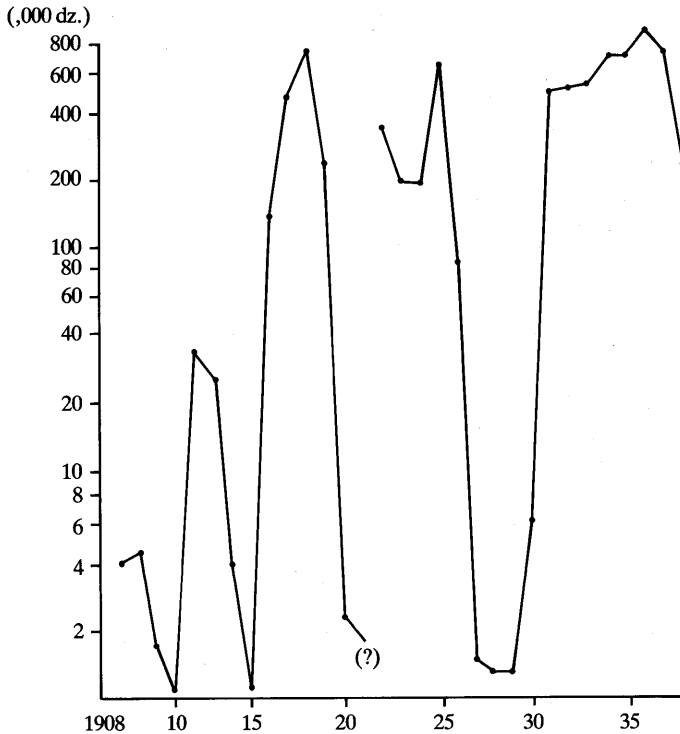


Fig. 5. Annual glove production in Kagawa Prefecture

Source: Research Committee on Problems of Local Industries, ed., *Jiba sangyō mon-dai taisaku chōsa hōkoku* (Research report on problems of local industries) (Manuscript in the possession of the Shiratori Town Office, Kagawa Prefecture), p. 4.

Note: Data unavailable for 1921.

ence of final processors and piece-workers, reinforced by absence of the need for advanced skills and the trivial sums of required capital investment. There is one important element, however, that should not be overlooked. To keep so complex an organization running, someone had to have detailed information on the subprocesses of production and the people engaged therein and be personally acquainted with many producers. This could be reasonably expected of only those who had been immediate producers themselves. There lay the necessity for the emergence of *seizo don'ya*; however, they could not function beyond the limitations of personal relations. How could they adequately respond to social demand for a greater scale of production?

One answer can be found in the differences in production between cotton underwear, which constituted the bulk of knit products, and woollen under-



wear (see figures 2 and 3). In the case of cotton underwear production, sewers had been controlled by *seizo don'ya* in a simple way at first. The production of woolen underwear, considered "luxury goods" and supplied only in a limited quantity, must have been relatively stagnant. These assumptions point to the likelihood that *hosai-ya* emerged from the ranks of knit cotton fabric sewers, who had been solely engaged in a much simpler process. Incidentally, one noticeable characteristic in the relationships between *hosai-ya* and other processors around them is the close resemblance of the relationships between *hosai-ya* and subcontracting sewers to those between *seizo don'ya* and small producers. Thus in the *seizo don'ya*-led organization of production, opportunities for productivity improvement were explored by stratifying the *seizo don'ya*-like functions within the organization. This trend made further progress as intermediaries emerged between *hosai-ya* and their subcontractors.<sup>50</sup>

### *Seizo Don'ya* and Traditional Merchants

As noted before, substantial increases in the output of knit fabrics were triggered by the Sino-Japanese and Russo-Japanese wars. Growth in exports was particularly significant. However, the exports comprised mostly products of poor and uneven quality, and the average scale of operation by each producer diminished in spite of the increase of total output.

The productivity rise was based not on the development of division of labour and co-operative work in factories but on the separation of the production process into many different subprocesses supervised by a growing number of small producers. It was too troublesome for traditional wholesale merchants to co-ordinate the activities of so diverse a group of small producers, which included domestic workers (and sometimes even part-time agents). The market was further developing as competition intensified, and the traditional putting-out system that required wholesale merchants to maintain relations with immediate producers by supplying raw materials on credit or making advance payments was becoming a heavy burden for the merchants. What solved the wholesale capitalists' problems seems to have been the emergence of *seizo don'ya*. They had direct experience in production, were familiar with the inside circumstances of individual subprocessors, they could make technical judgments on the affairs of production, arrange for the supply of raw materials, co-ordinate the relations among subprocessors, and deliver the finished goods to the wholesale merchants on time; yet they needed neither the supply of raw materials on credit nor advance payments. Nothing could better satisfy the requirements of wholesale merchants than the emergence of those who made it their business to take over the most troublesome of the functions previously performed by the merchants. Thus *seizo don'ya* increasingly appeared during the years of the Russo-Japanese War.

The wholesale merchants had no other direct relations with *seizo don'ya* than purely commercial ones. Some merchants began to operate factories, but their relations with *seizo don'ya* were continued almost without excep-

tion even after the start of their own factories because the *seizo don'ya* provided effective means of adjustment between busy and slack seasons by taking advantage of the low costs of small enterprises. Their historical characteristics were well revealed in their commercial transactions.

Their mercantile talent was reflected, first of all, on their high rates of capital turnover:

To explain how knit-fabric dealers (either wholesale merchants or export traders) in Japan invest and reinvest their funds, they job out the orders they receive to specialists (*seizo don'ya* and small workshop owners), and in this way they can turn over their capital 12 times a year at the maximum. If their commissions are 5 per cent at a time, their yearly margin of profit can be 60 per cent. Therefore, Japanese merchants can take orders with very slim margins of profit. The usual commercial practice in foreign countries is for the manufacturer or the exporter to present a catalogue quoting the price of each product. The prices in the catalogue remain unchanged for four to six months. Japanese merchants are in a very favoured position because they take into account even the day-to-day fluctuations of raw materials when quoting their prices.<sup>51</sup>

The specific way of transaction described in this quotation was the biggest factor in the abnormally high level of capital turnover. This system of entering into a sales contract on either a spot or futures basis and completing the contract by either delivering the goods or paying the balance on the due date was most common in the transactions of textile items; moreover, the account was settled by day-to-day calculation, and if the price proved unfavourable to the wholesale merchant, the *seizo don'ya* had to bear the loss.<sup>52</sup> Whatever the daily price fluctuations were, the wholesaler's risk of loss was skilfully hedged. Presumably with a view to overcoming their disadvantageous position, some *seizo don'ya* and others began production in anticipation of demand preceding World War I. Their attempts, however, mostly ended in failure on account of their lack of a market share and Japanese merchants' tendency to belittle newcomers. They were further handicapped by the scarcity of financial resources of small producers and the questionable quality of their products, which they tended to sell in a hurry at low prices, and fierce competition among fellow traders, which further intensified the price-cutting race.

In contrast, the merchants enjoyed steady consumer trust – this was a very important social factor in pre-war Japan – in a market that enabled some of them to undertake the operation of their own factories. In the 1930s, there was a tendency to categorize the influential merchants into two groups: those who had succeeded in managing their own factories and those who had not (the latter included those merchants who did not start their own factories). Characteristically, even among the merchants who succeeded in the operation of factories, the behavioural patterns of traditional merchants remained. Several merchants, for example, engaged in market speculation, which sometimes brought on abnormal growth but at other times drove them quickly into a disaster.