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# Proto-Industrial Origins of Japanese Capitalism

DAVID L. HOWELL

**P**ROTO-INDUSTRIALIZATION HAS BEEN DEFINED as a transitional phase on the way to modern, factory industrialization, characterized by “the development of rural regions in which a large part of the population lived entirely or to a considerable extent from industrial mass production for inter-regional and international markets” (Kriedte, Medick, and Schlumbohm [KMS] 1981:6). This article will use proto-industrialization as a lens through which to reexamine a number of issues in early modern Japanese history, including the relationship between commercial agriculture and rural industry, the role of the state in economic development, and the economic geography of the late Tokugawa period. Perhaps most importantly, I hope by looking at proto-industrialization to reach a better understanding of the transition from the feudalism of the Tokugawa era to the capitalist development of the Meiji period and beyond.

The past decades have been good to the Tokugawa period. Raised from the depths of feudal stagnation, it is now appreciated as a time of cultural awakening and intellectual vitality. Its economy is looking better all the time, too, thanks to the efforts of historians and demographers who have uncovered clear evidence of a rising standard of living during the latter part of the period. “Revisionists”—the term hardly seems appropriate anymore—have demonstrated that per capita incomes grew during the century leading up to the Meiji Restoration. This growth resulted when the population stopped rising while peasants’ access to cash income increased through activities such as commercial agriculture, rural by-employments, and manufacturing. Indeed, so convincing is this new picture of the Tokugawa period that E. L. Jones (1988) counts it—along with early modern Western Europe and Song China—as one of only three readily demonstrable cases in world history of what he calls “intensive” economic growth before industrialization.

Saying that the late Tokugawa economy was growing is one thing; assessing the significance of that growth is another question entirely. In 1965, more than a decade before the Tokugawa period’s historiographical rehabilitation, Kazushi Ohkawa

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and Henry Rosovsky (1965:58) dismissed all evidence of economic development before the Meiji period as nothing more than “isolated islands of modernity” typical of “backward countries” like Japan. Since then, however, scholars’ assessments have been decidedly more upbeat. Susan B. Hanley and Kozo Yamamura (1977; Yamamura 1973; Hanley 1983) see cultivators as rational actors in control of their economic lives; for them the very fact of growth says much about Japan’s successes after 1868. For others, such as Thomas C. Smith (1986), Tokugawa economic development fostered attitudes toward work and time management that prepared the Japanese peasantry for the discipline of the factory. Hayami Akira (1989) takes a similar approach when he argues that an “industrious revolution,” predicated upon heavy investments of labor (rather than capital) in production, occurred in late Tokugawa Japan. In Hayami’s view, the commercialization of the agricultural economy gave peasants greater independence, but at the same time forced them to work longer and harder to raise the productivity of their landholdings.

Each of these approaches is instructive, but questions persist concerning *structural* changes linking the Tokugawa peasant economy to Meiji industrialization. One way to find such structural changes is to look at rural industry and its role in the economic development of nineteenth-century Japan. The concept of proto-industrialization, originally articulated by European historians, provides a useful framework to address this problem.

Historians of proto-industrialization in Europe have yet to reach a consensus on the exact relationship between proto-industry and capitalism,<sup>1</sup> but it is clear that “proto-industrialization preceded factory industrialization where it occurred, and paved the way for it” (Mendels 1972:246). Proto-industrial development did not, however, lead inevitably to full factory industrialization, as a proto-industrial region could stagnate or even “de-industrialize” (KMS 1981:147–48).

The proto-industrialization model includes an important demographic element (Gutmann 1988). Proto-industrial regions in Europe typically saw an increase in population as people married earlier and had more children once the value of household labor was not constrained by the size of a family’s landholdings. That is, people could support larger families on less land because of the opportunities for non-agricultural employment. Ironically, the economic growth engendered by proto-industrialization was often accompanied by a *decline* in living standards because incomes, while much higher than in an agricultural economy, did not keep pace with the growth in household size (Mendels 1972:252). For this reason, we cannot sanguinely assume, as many analyses of Japan seem to, that economic growth necessarily translated into better lives for people in the countryside.

The remainder of this article will present a brief overview of one example of proto-industrial development in nineteenth-century Japan, the herring fishery of

<sup>1</sup>See the discussion in KMS 1981:1–11. For the sake of clarity and consistency, let us use both “feudalism” and “capitalism” in a Marxian sense here. The feudal mode of production is characterized, according to Rodney Hilton 1978:30, by an “exploitative relationship between landowners and subordinated peasants, in which the surplus beyond subsistence of the latter, whether in direct labour or in rent in kind or in money, is transferred under coercive sanction to the former.” Conversely, capitalism, according to Maurice Dobb 1947:7, is a mode of production characterized by “the concentration of ownership of the means of production in the hands of a class, consisting of only a minor section of society, and the consequential emergence of a propertyless class for whom the sale of their labour-power was their only source of livelihood.” It is important to add that the presence of isolated instances of capitalist production does not mean that society has undergone a fundamental transformation to capitalism; only when capitalist relations of production predominate can society as a whole be characterized as capitalist.

Hokkaido. The fishery produced commercial fertilizer for sale in Honshu on a large scale throughout the nineteenth and early twentieth centuries. It will then turn to a discussion of some of the critical issues raised by the application of the proto-industrialization model to Hokkaido specifically and to Japan in general, particularly those concerning the links between Tokugawa proto-industrialization and Meiji capitalism.

## Proto-Industry and Capitalism in Hokkaido

The Hokkaido fishery is an attractive case study of proto-industrialization for a number of reasons. First, Hokkaido, better than any other region in Japan, fits the proto-industrialization paradigm of rural industry for distant trade. No domestic trade was more distant than that between Hokkaido and central Honshu, and no people more dependent on industrial production than those of Hokkaido, who lived under climatic conditions too harsh to support much agriculture before the mid-Meiji period.

Second, unlike silk and cotton textile manufacturing or other important early industries, fertilizer production in Hokkaido was not affected by Japan's opening to trade with the West after 1854.<sup>2</sup> Technology and labor were native and demand and supply remained domestic until the fishery's collapse after World War II. The fishery therefore provides an opportunity to trace indigenous Japanese developments, and thus strengthens the case for proto-industrialization as a model of economic development not bound to the European experience. This speaks to Frank Perlin's (1985:386–87) call for a conceptualization of proto-industrialization as a tool to analyze historical change rather than simply as a euphemism to describe the phenomenon of rural manufacturing for long-distance trade.

Finally, it was those peculiarly "proto-industrial" features of the fishery in the early nineteenth century that contributed to the emergence of capitalism in Hokkaido. That is, fertilizer production for distant markets gave rise to an economy only partially subordinated to the institutions of the local political authority, the Matsumae domain. Capitalism emerged through a dialectical process of change in the organization of production within the fishery and domain-level institutional response.

Hokkaido's commercial herring fishery originated in the early eighteenth century as merchants, based mostly in central Honshu, responded to a growing demand for herring-meal fertilizer (*nishin shimekasu*) among cultivators in the Kinai and elsewhere.<sup>3</sup> During the Tokugawa period, production took two basic forms: the family fishery, in which a multitude of independent petty fishers worked with household members and perhaps a few hired hands; and the contract fishery (*basho ukeoisei*), in which merchants specially licensed by the Matsumae domain (or the bakufu) enjoyed a variety of economic and administrative powers, particularly the right to supervise large-scale fishing operations using mostly Ainu labor. The family fishery was Matsumae's answer to a peasantry of smallholders, while the contract fishery was an integral part of the domain institutional structure insofar as it evolved out of

<sup>2</sup>Saitō Osamu's (1985) discussion of Japanese proto-industrialization, which is summarized below, is framed largely in terms of the different courses taken by silk-reeling areas of northern Kantō and Shinano and cotton-spinning regions in the Kinai after foreign trade was reopened.

<sup>3</sup>The following discussion of the evolution of the Hokkaido fishery is based on Howell 1989a: chaps. 2–5, although the attempt to frame the material in terms of proto-industrialization is new.

the official trade between the daimyo and his leading retainers and the native people.

After the Meiji Restoration, the contract-fishery operators (*basbo ukeoinin*) lost their privileges and the entire fishery was opened to exploitation by anyone who cared to participate, although production remained divided between family and entrepreneurial fisheries. The period from about 1870 to 1900 saw a rapid expansion of the fishery, fed in no small part by strong demand for herring by-products in Honshu. Indeed, by the latter part of the nineteenth century, Hokkaido was by far Japan's most important source of commercial fertilizer. However, overfishing—the result of intensive production with increasingly efficient technology—depleted the stocks so that catches declined steadily throughout the first half of the twentieth century. The last herring run took place in 1958, although boats operating in deep water offshore continue to haul small catches to this day.

The Hokkaido fishery was a large but hardly heavy industry: at its peak up to a quarter-million people processed several hundred thousand tons of fish into fertilizer each year, yet the technology remained fairly simple and the capital requirements, while well beyond the means of ordinary fishers, were small compared to highly mechanized enterprises. Even as the fishery expanded and the organization of production changed, moreover, the mechanics of transforming large shoals of fish into large bales of fertilizer remained remarkably constant. Regardless of the size of the individual fishing operation, labor was divided between skilled fishers, who piloted the boats and worked the nets, and semiskilled or unskilled workers, who hauled the fish onshore and processed it into fertilizer. Processing the fish was a simple if malodorous procedure: herring was boiled, pressed, and dried into a mealy state, then packed into straw bales for shipment.

The only significant change in the way fish were caught and processed came with the introduction of a large and efficient but expensive net known as the pound trap (*tateami*) in the 1850s. The salient feature of the pound trap for our purposes was that it required at least fifteen to twenty (mostly unskilled) workers to operate, and was thus ideally suited to capitalist production. Conversely, household fishers used small, easily manipulable gill nets (*sashiami*), a set of which could be worked by just two or three skilled men. It is important to stress that, differences in scale notwithstanding, the final product in either case was the same, and was marketed as such.

The fishery underwent a period of rapid development in the middle decades of the nineteenth century. Capital began to move from the realm of circulation—that is, the buying and selling of herring-meal fertilizer—into the realm of production. By the end of the century, structural change within the fishery, bolstered by the active sponsorship of the Meiji state, had resulted in a fully developed capitalism in which small, independent proprietors found themselves increasingly vulnerable to the economic and political power of entrepreneurs.

Entrepreneurs were able to establish capitalist production in the fishery thanks to a confluence of developments in labor, technology, and capital allocation, all fed by vibrant demand for fertilizer. Demand for herring meal in markets throughout Japan grew steadily during the first half of the nineteenth century, partly because the growth of the agricultural economy had led more farmers to use commercial fertilizers, and partly because herring meal's main competitor, dried sardines, had become prohibitively expensive.

With steadily expanding demand for herring, fishers had a strong incentive to raise production, but many found it difficult to do so because of a paucity of labor. Contract fishers had traditionally relied on Ainu labor, but its availability declined as the native population was ravaged by diseases such as smallpox and measles.

Independent fishers, prohibited by the Matsumae domain from employing Ainu workers, drew upon a small pool of non-Ainu wage workers in southern Hokkaido.

Formally free, wage labor entered the fishery in large numbers for the first time after the Tenpō famine hit northeastern Honshu between 1832 and 1838. Hunger drove peasants to Hokkaido, where, thanks to the herring trade, food from western Japan was available. While Tōhoku workers had always been employed in the fishery, the influx during the Tenpō famine established a pattern of seasonal and permanent migration that was to last well into the twentieth century. Contract fishery operators hired some of the newcomers, but many others found employment with independent fishers based in southern Hokkaido, where they became the core of a seasonal proletariat of fishery workers.

Once wage labor became readily available, fishers were motivated to develop fishing gear that could make efficient use of that labor. Contractors had experimented with various types of large-scale gear intermittently since the late eighteenth century, but attempts to use large nets had inevitably met with the opposition of small fishers, who feared for the resource and hence for their livelihood. Lacking a supply of labor to work the nets, the early experiments were doomed to failure. Once the Tenpō famine made labor available, however, contractors—and, for the first time, the larger independent fishers—had an incentive to push for the use of pound traps over the opposition of small fishers. The Matsumae domain supported the small fishers, but the bakufu, which assumed administration over most of Hokkaido in 1854, permitted pound-trap use, thus clearing the way for the emergence of a capitalist fishery under independent operators employing wage labor from Honshu.

The introduction of new technology alone was not enough to establish the capitalist mode of production in the fishery. Capitalists, after all, need capital. The two dozen or so contractors with fisheries on the west coast of Hokkaido had the capital to make good use of the new technology and labor, but very few of them were interested in investing in expanded production. Most were satisfied to use the privileges accorded to them by the Matsumae domain to profit from low-risk, high-yield ventures such as dealing in the wholesale fertilizer market, usury and supply lending, and—lowest risk and highest yield of all—collecting taxes and access fees from small fishers operating in areas under their control.

Given the conservatism of the contractors, capitalists in the fishery came instead from the ranks of independent fishers and even complete outsiders. All the burgeoning entrepreneurs needed was capital. In fact, it was already there, thanks to the demand for herring meal, but it had to be reallocated before capitalists could dominate the fishery. This occurred through a transformation of credit relations, in which capital, formerly parceled out to small fishers in the form of credit, was instead concentrated in the hands of a few entrepreneurs.

Small fishers in Hokkaido had long depended on supply merchants (*shikomi oyakata*) to provide them with advances of cash, food, and gear before each herring season. In return, the merchants claimed substantial interest and fees as well as first lien on the catch, which they bought below the prevailing market price. It was a lucrative livelihood for the merchants and, while exploitative (insofar as it undermined fishers' independence), met a real need within the fishing population.<sup>4</sup>

Supply lending did not disappear with the advent of the pound-trap fishery, but it did become a harsher institution. That is, whereas merchants in the past had

<sup>4</sup>Given the erratic and often seasonal nature of fishing, credit arrangements of this sort were quite common. See Kalland 1981 and 1984 for discussions of credit systems financed by merchants and the Fukuoka domain, respectively, and Sider 1986 for a description of credit institutions in the Newfoundland cod fishery that resembled those of Hokkaido.

often carried defaulting fishers for a long time—years or even decades—without foreclosing, after the mid-1850s they became stricter in their enforcement of loan contracts. The reasons for this hardened attitude are simple. Before the introduction of wage labor on a large scale, it was usually to the supply lender's advantage to continue to provide credit to defaulting clients, first, to ensure a steady supply of fertilizer from those clients (which the merchant would then market for a profit) and, second, to allow for the possibility that the clients would be able to repay the principal of their loans over time. With the advent of the pound trap, however, the supply merchant had a new option: to foreclose on defaulting fishers and reduce them to wage labor in a capitalist fishery—run either by the merchant himself or by another client with an operation large enough to convert to pound traps. Capital that had once been directed into the household fishery was redirected to more efficient capitalist enterprises, and formerly independent small fishers were hired for skilled positions in those enterprises. By no means did every merchant exercise this option at every opportunity; supply lending persisted in various forms into the twentieth century and, for even the largest fishers, credit was always a fact of life. Nonetheless, the emergence of a market for the labor of skilled fishers imperiled many marginal operators in southern Hokkaido.

The situation for small fishers worsened after 1868, for the Meiji state implemented a series of institutional changes that made it even more tempting for creditors to enforce contracts to the letter. The right to fish, which had previously been free to all comers, was gradually made into a commodity as exclusive access, first, to land to process fish and, later, to the sea itself, was granted to individual fishers. This made it extremely difficult for small operators to move about in search of good catches, as they had often done in the past; it left them even less able to pay their debts and hence more liable to suffer proletarianization, with the rest of their lives spent working for wages. Thus, ironically, the condition of small producers steadily declined even as the fishing economy grew rapidly in the late nineteenth century. Nevertheless, beleaguered though they were, family fishers did not completely disappear even after a century of steady decline.

The basic changes in labor, technology, and capital were effected before the Meiji Restoration, but the establishment of a Westward-looking state, eager for rapid economic growth, helped bring about the final transformation of the fishery. Aside from institutional changes, mentioned above, that made the right to fish a commodity, the new regime stripped the contract-fishery operators of their economic and administrative privileges, which diverted even more financial and human resources toward capitalist development, much of it directed by entrepreneurs with a background in commerce but not fishing. Moreover, the Meiji government's policies consistently put economic growth ahead of other considerations, so that any support dispossessed fishers got from the state in their efforts to avoid proletarianization came grudgingly at best.

Given the nature of the Hokkaido herring fishery, with production dispersed among hundreds of fishing grounds of unequal and unstable value, it is not surprising to learn that factory industrialization never took place. In the 1920s and 1930s, however, a surrogate for full industrialization did emerge in the factory ships that canned crab and salmon in the Sea of Okhotsk.<sup>5</sup> Unlike the comparatively small capitalist enterprises of Hokkaido, the factory ships were owned and operated by large, modern corporations based in Hakodate or Tokyo.

<sup>5</sup>For a discussion of the factory ships, see Howell 1989a:210–12. See also Kobayashi Takiji's (1973 [1929]) fictional account, *Kani kōsen*. The events in Kobayashi's account are mostly true, although they did not occur during a single voyage.

The factory ships' ties to the herring fishery were twofold. First, many of the entrepreneurs who made fortunes in the crab fishery had begun their careers in the herring fisheries of Hokkaido and Karafuto (southern Sakhalin). Thus, there was a certain continuity of both purpose and capital. Second, and more important, the work force was drawn from the same pool of poor, unskilled peasants from northeastern Honshu, and poor, skilled fishers from southern Hokkaido. These were men (and a few women) for whom the declining Hokkaido fishery no longer had any use, so they had little choice but to endure the long hours and arduous routine of the six-month voyages into Soviet waters. The pay was good, at least compared to what was available at home, but it was scant compensation for the danger and indignity the workers suffered. But the capitalist transformation of the fishing economy was complete and, as one veteran of the factory ships later recalled, "the time would come and there'd be no other way to make any money, so we all had to endure the hardship and go back" (Kuwabara 1987:26).

### Proto-Industrialization, Capitalism and the Tokugawa Economy

The Hokkaido fishery stands out in the history of the Japanese economy because the fundamental transformation to capitalism was complete *before* the establishment of a regime dedicated to Western-style economic development. But the fishery, for all its precocity, was not an isolated "capitalist sprout." Rather, the development of the fishery during the late Tokugawa period was part of a broader process of proto-industrial development that affected social and economic relations throughout Japan. In the remainder of this article I will examine how the proto-industrialization model can help us better understand the development of the late Tokugawa economy in general and the Hokkaido fishery in particular. And since it is better to give than to receive, I will suggest ways that the Japanese experience can contribute to the refinement of the proto-industrialization model as it applies across societal boundaries.

The Hokkaido fishery was by no means the only, or even the best known, example of proto-industrial development in nineteenth-century Japan. The textile industry stands out in particular, but others included papermaking, sake and soy-sauce brewing, iron and other metalworking, and the processing of agricultural and marine products, such as tea, indigo, sugar, wax, vegetable oil, whale by-products, and a variety of fertilizers.<sup>6</sup> The historical significance of these industries is obscured by the course of Japanese development after the opening to the West in the 1850s. Factory industrialization did not occur as the result of natural evolution so much as through a deliberate policy of modernization implemented by a state anxious to emulate the more advanced West. Given the dramatic transformation of the Meiji years, it is natural enough to ascribe the origins of Japanese industrialization to the policies of the Meiji state. But overlooking the existing base of proto-industrial development restricts our understanding of Japan's rapid and successful transformation.

Application of the proto-industrial model to late Tokugawa Japan is not, however, without its pitfalls. Saitō Osamu, who has made the most extensive study of the problem to date (1985:168–69; see also Saitō 1983), concludes that the differences

<sup>6</sup>See Leupp 1989:500–45, for an overview of rural industries in Tokugawa Japan. See also a number of case studies: Hauser 1974; Howell 1989b; Kalland 1986; Nishikawa 1986; Saitō 1986; Smith 1969; Wigen 1990.



between Europe and Japan were such as to make the model basically inapplicable in the Japanese case, the widespread incidence of rural industry notwithstanding. Saitō (1985:197–205) sees three critical differences between the two cases. First, in Japan there was never a clear-cut distinction between agricultural and industrial regions. While some regions did rely heavily on rural industry, and others on grain production, it was not enough, in his view, to spark a fundamental transformation of the peasant economy. This was because the inseparability of agriculture and industry in the peasant household, as reflected in the sexual division of labor, inhibited regional specialization. Second, even in those regions with rural industry, Japan did not conform to the demographic model of European proto-industrialization, which predicts a drop in age at first marriage, leading to higher fertility and a decline in living standards. If anything, people in proto-industrial regions in Japan tended to marry later than those in agricultural ones, with the result that they benefited from the economic growth engendered by manufacturing. Saitō (1985:173) sees this as a function of the fact that proto-industrial development generally followed agricultural expansion, so that population densities were already high before the onset of proto-industrialization. This meant, third, that Japanese proto-industrial regions did not develop higher population densities than agricultural ones, and thus did not generate a large pool of dispossessed peasants vulnerable to proletarianization.

While Saitō's misgivings about the applicability of a European model of proto-industrialization to Japan are certainly compelling, they should not obscure the fact that rural industry was an important and widespread phenomenon in nineteenth-century Japan; Saitō himself says as much (1985:168). In fact, many of his objections can be accommodated by examining the political constraints placed upon the late Tokugawa economy, for the role of the state was critical in determining the degree and significance of rural industrialization in any given area. Before turning to a discussion of this problem, however, we must first locate proto-industrialization relative to commercialization and capitalism.

Proto-industrialization was distinct from the expansion of commercial agriculture. Whereas the growth of commercial agriculture changed the way things were bought and sold, but not the way they were produced, proto-industrialization facilitated the penetration of capital into the realm of production, thus—potentially, at least—leading to the emergence of capitalism. To be sure, commercialization affected the peasant economy in important ways: Thomas C. Smith (1959) has shown how the expansion of the money economy after the middle of the Tokugawa period weakened hereditary bonds of dependency and led to a restratification of society on the basis of wealth as village elites came to function as landlords, merchants, and moneylenders. Nevertheless, insofar as household rather than wage labor remained primary, the growth of commercial agriculture did not immediately affect the social relations of agricultural production. While rural industry could and sometimes did emerge in regions with highly commercialized agriculture—and often involved the processing of agricultural products—there was no necessary connection between the two; indeed, industrialization frequently proceeded more rapidly in regions without much commercial agriculture.<sup>7</sup>

<sup>7</sup>According to Mendels 1972:245, “Those [in continental Europe] who had remained isolated from market forces and those who had become fully specialized in commercial agriculture did not feel the necessity of turning to modern industry as much as those who had been depending on handicrafts.” On the other hand, Gay L. Gullickson (1986:65), while conceding that “proto-industrialization may have occurred more often in subsistence farming or pastoral regions,” argues that “seasonal unemployment and landlessness, not poor land, were the distinguishing features of proto-industrial regions.”

But if proto-industry was qualitatively different from commercial agriculture, so, too, was it distinct from modern industry. Proto-industrialization, instead, occupied a sort of middle ground between the two. Peasants working in or near their homes provided the labor for rural industry, and most no doubt maintained a strong identity as tillers of the soil. Although such peasants were assuredly not an industrial proletariat, their participation in proto-industrial production did affect the household economy in profound ways.

Ultimately more important than the identity of the producers or the location of production, however, is the organization and purpose of production. As Jürgen Schlumbohm (KMS 1981:108) writes, "There exists . . . a basic distinction between the two forms of commodity production: either its goals are in principle limited to satisfying the needs of the producers, or its goals consist in the essentially unlimited maximization of profit." Peasant production is geared to the producer's subsistence, in the broadest sense of the word. That is, the market does no more for the peasant than to facilitate the exchange of commodities he cannot produce for himself. While the use of cash in exchange is certainly significant, it does not affect the fundamental nature of the transaction. In other words, the peasant uses money to obtain goods, and is thus distinct from the capitalist entrepreneur who uses money to make more money. With proto-industrialization, the economy goes beyond "mere" commercialization, as capital moves from the realm of circulation (the buying and selling of goods) into the realm of production (investment in tools, raw materials, and labor) for the first time, thereby opening the door to the possibility of capitalism and sustained economic growth.

The critical difference between commercialization and capitalism lies in the impact capitalism has on social relations. While commercialization refers to the widespread commodification of agricultural produce and other goods, under capitalism the last great commodity—people's labor-power—is bought and sold on a large scale and, for the first time, the organization of production becomes characterized by that buying and selling.

Proto-industrialization represents the nexus between commercialization and capitalism. To illustrate this point, let us return for a moment to Hokkaido. The division of the Tokugawa fishery into a mass of petty, independent producers, on the one hand, and a small group of fishing contractors who received administrative and economic privileges from the Matsumae domain, on the other hand, parallels an internal division within proto-industry between putting-out and manufactures, recently described by Gary Leupp (1989:500–8). Putting-out, in which a merchant provided raw materials, credit, and sometimes tools to a peasant who then engaged in handicraft production at home, was the most common form of proto-industrial production in both Europe and Japan. Its functional equivalent in Hokkaido was the supply-lending institution described above, in which merchants provided advances of cash, daily necessities, and gear to small fishers in return for exclusive marketing rights to the fishers' herring, in addition to interest and commissions. Insofar as the individual fisher had control over his productive activities and usually owned his means of production, the arrangement was not capitalist: the fisher sold fertilizer—not labor-power—to the merchant. The same could be said of other putting-out arrangements, making them akin to commercial agriculture (which often entailed credit relationships between cultivators and merchants).

Production at the contract fisheries, on the other hand, corresponded to manufactures, in which an entrepreneur brought peasant workers together at a single location, provided them with tools and raw materials, and oversaw their labor. Thus at contract fisheries, merchants supervised the fishing operations of Ainu and other

laborers, to whom they provided boats, nets, and other equipment. Non-Ainu workers received a seasonal wage in cash; Ainu generally received commodities like rice, sake, tobacco, and ironware in lieu of a cash payment.

Manufactures differed from factory industrialization in two respects. First, there was relatively little division of labor within the manufactories (workers performed tasks similar to those performed by peasants engaged in putting-out arrangements at home) and, second, there was little or no mechanization. These differences aside, the manufactories were at least *superficially* capitalist enterprises in the sense that the workers sold their labor-power rather than some other commodity to their employer.<sup>8</sup>

I say *superficially* capitalist because the manufactories often emerged out of a close relationship between privileged merchants and feudal authorities. At the contract fisheries, for example, the merchants' control of land to process fish (tantamount under the circumstances to the right to fish) and their access to Ainu workers (who were not formally free to enter into a wage-contract) were both derived from their privileged position vis-à-vis the Matsumae domain.<sup>9</sup> Look beneath the veneer of apparently capitalist production and one finds merchants whose control over both the means of production and their workers' labor were linked so closely to the protection of the domain that once that protection was removed—as indeed it was after 1868—their operations ceased to be viable. In other words, the contract-fishery operators were “capitalists” who needed feudalism to survive.

But even if production at the contract fisheries was not “really” capitalist, there is no question that they established the model for capitalist production later emulated by entrepreneurs independent of the feudal regime. In that sense, the contractors played a critical role in the process of transformation—one typical of merchant capitalists in a declining feudal economy—by acting as a solvent of the old forms of production (see Fox-Genovese and Genovese 1983:6–7).

### Proto-Industrialization and the Economic Geography of Nineteenth-Century Japan

The failure to distinguish between commercial agriculture and rural industry has resulted in an unfortunate rendering of the economic geography of late Tokugawa Japan. Economic historians commonly classify regions as “advanced” or “backward” based on the extent of commercial agriculture and the development of local markets. According to this view, central Honshu—particularly Osaka and the surrounding Kinai plain—is the archetypical advanced region, and the northeastern and southwestern peripheries of the country the most backward.<sup>10</sup> While this dichotomy

<sup>8</sup>It is worthwhile to note, however, that the merchant overseeing a putting-out operation was just as interested as the proto-factory operator in getting the surplus-value of peasant labor—rather than the use-value of the commodities being produced—and thus equally fulfilled a key criterion of capitalist production. In other words, Leupp's distinction between putting-out and manufactures is more valuable when looking at labor than when considering the purposes of production. See the discussion of the so-called manufactures debate among pre-World War II Japanese Marxist historians, and particularly the analysis of the work of Hattori Shisō in Hoston 1986:95–126.

<sup>9</sup>For an elaboration of these points, see Howell 1989a:41–65.

<sup>10</sup>Hanley and Yamamura 1977 organize their book in terms of this dichotomy, but in doing so follow common practice. For a discussion of the innovative aspects of their treatment of regional differences, see Wigen 1990:31–34.

works well when talking about markets, it unfortunately diverts attention from those “backward” areas where critical changes in the organization of production—the key to the development of capitalism—were occurring.

Rural districts in the Kinai, where commercial agriculture developed early and effectively, did see some proto-industrialization, but the impetus for industrial development was weak because villagers could easily participate in commercial agriculture to meet urban demand for foodstuffs (Saitō 1985:176). Conversely, proto-industry thrived in many ostensibly backward regions. For example, the northern Kantō plain and Shinano were centers of silk thread production, Tosa was a leading producer of paper, Nanbu had a large iron-working industry, and Hokkaido, of course, was a center of commercial fertilizer production. These regions lagged in agricultural development and lacked extensive internal demand for industrial commodities, but were well-suited to proto-industry. Indeed, since in some cases even subsistence agriculture was impractical because of poor soil or climate, people had little choice but to turn to proto-industrial endeavors and long-distance trade with the Kinai and similar areas. The influx of industrial products from peripheral areas in turn spurred growth in commercial agricultural regions and thus furthered the development of the economy as a whole.

Rather than looking at Tokugawa economic history in terms of a dichotomy between “advanced” and “backward” areas, it is better to see the regions as complementing one another. Given the importance of long-distance trade—both in industrial products and tax rice—“backward” areas were hardly isolated from market forces, even if commercial agriculture was slow to develop (Hayami 1989:22). Indeed, “backward” regions turned to proto-industrial production for distant markets in more developed areas—instead of developing commercial agriculture and local markets for industrial commodities of their own—in response to developments that had already occurred elsewhere.<sup>11</sup>

Moreover, dividing Japan into just two or three regions does not do justice to the complexity of development at a lower level of geographical abstraction (Wigen 1990:41). This point is especially important if considered in conjunction with Thomas C. Smith’s (1973) observations about the movement of industry from urban to rural areas during the latter part of the Tokugawa period. Shinbo Hiroshi and Hasegawa Akira (1988) discuss urban deindustrialization in the Kinai soy-sauce brewing and cotton textile industries, and I have elsewhere (1989b) looked at intraregional specialization in the southern Kantō plain. By looking at economic differentiation as a phenomenon that occurred within broad regions more than between them, we can, at least, circumvent the questions raised by Saitō’s observation that Japan lacked regional specialization on a scale comparable to Europe. Perhaps there need not be much specialization—whether within regions or among households—to get the proto-industrial engine of economic growth and institutional tension started.

A telling example of regional differences within a single political unit was the Nanbu (Morioka) domain in northeastern Honshu—the classic “backward” region (Hanley and Yamamura 1977). Nanbu can be seen as a microcosm of the entire country, with the central Kitakami river valley representing the “advanced” agricultural regions and the mountains and coast the “backward” centers of proto-industrial development. Agricultural, but not industrial, production in the domain was centered on the Kitakami valley, which included the castle town of Morioka. Proto-industry—most notably large-scale commercial fishing and fish processing (not herring, alas!)

<sup>11</sup>In Europe, too, “proto-industrialization was most likely to occur where urban and rural needs complemented each other” (Gullickson 1986:67).

and iron working—was found along the Pacific coast and in the mountains separating the coast from the Kitakami valley.

Interestingly, the most highly industrialized parts of the domain saw the most serious occurrences of unrest among Nanbu's notoriously contentious peasants; the best-known instances of conflict (the Sanhei rebellions of 1847 and 1853) involved disputes over domain commercial and industrial policies, and were directed in large part against merchants who had purchased samurai status from the domain. The disorder in Nanbu may be attributed to the fact that the impetus for economic growth came from the proto-industrial hinterland, and the feudal institutional structure—located as it was both physically and ideologically in the agricultural core—could not adapt.<sup>12</sup>

As important as geographical factors in proto-industrialization were political and institutional ones. After all, proto-industrialization in Japan, as elsewhere, occurred only within the framework of the political structure. The structure of the Japanese polity helps to explain why it did not conform to the European pattern of proto-industrialization and, in particular, was slower to make the transition to industrial capitalism. The Japanese case was complicated by the critical importance of agriculture—especially rice—in the political economy. The emphasis on rice cultivation, as manifested in the *kokudaka* system, may have inhibited the sort of broad regional specialization found in Europe and thus prevented the demographic transformation necessary to fuel full factory industrialization.

Under the *kokudaka* system a daimyo's place in the institutional hierarchy of the Tokugawa state was measured in terms of the putative agricultural productivity of his domain.<sup>13</sup> Although it very quickly ceased to reflect actual economic conditions, the *kokudaka* system retained its institutional importance throughout the Tokugawa period. Even as many domains came to tolerate and even actively foster a wide variety of economic activities, peasants were expected to grow grain—preferably rice—unless there was some compelling reason for them not to do so. When officials pressed peasants to produce as much rice as possible—even where climatic or technological conditions made rice cultivation impractical—they were responding to the position of rice as a measure not only of wealth but also of status in the feudal polity.

The *kokudaka* system thus represented an institutional hurdle to economic development, although not an insurmountable one. For daimyo and their officials the critical distinction was not between subsistence and commercial agriculture, or even between agriculture and industry, but rather between rice and non-rice production.<sup>14</sup> Whether proto-industrialization occurred or not became largely a question of a domain's attitude toward non-rice production—or, more precisely, whether other commodities could supplement or even replace rice in the domain economy.<sup>15</sup>

In Hokkaido, to take an extreme example, rice cultivation was impossible, so the herring fishery became a proxy for agriculture. In a sense, herring was “rice”

<sup>12</sup>For treatments of economic development and peasant rebellion in Nanbu see, in addition to Hanley and Yamamura 1977; Iwamoto 1977; Mori 1974:345–570; Moriya 1975; and Yokoyama 1977:173–96.

<sup>13</sup>See Wakita 1975 for an overview of the origins of the *kokudaka* system.

<sup>14</sup>As Mintz 1985 demonstrates so well, the preoccupation of the Japanese with rice as a staple food is consistent with practice in most world cultures. See also Braudel 1979 for a discussion of staple grains throughout the world.

<sup>15</sup>Much of the economic thought of the Tokugawa period can be seen as an attempt to rationalize commerce and industry as legitimate alternatives to a rice-based economy. See, for example, Najita 1987 and Roberts 1991.

in Matsumae:<sup>16</sup> its economy revolved around the fishery in a way that satisfied the requirements of the feudal polity while opening the door for considerable proto-industrial and eventually even capitalist development. In other domains, where rice cultivation was more feasible, the authorities could adopt a narrower definition of “rice,” with the result that support for industry—and even commercial agriculture—was not readily forthcoming. For instance, the southern Kantō was the locus of a number of industries, most notably soy-sauce brewing and sardine fertilizer processing, that drew labor from the peasant population. However, local authorities were either unwilling or unable to appreciate the value of these industries. Instead of seeing their potential benefits, all they saw was the decline of agriculture. Rather than profiting from industrial growth, they vainly tried to get villagers to go back to the fields (Howell 1989b:357–64).

Interestingly, in this case it does not really matter whether the failure of officials to capitalize on industrial endeavors was the result of a Confucian reverence for grain cultivation or a structural inability to tap the wealth created by industry; one reinforced the other. The centrality of rice in the Tokugawa political economy, as reflected in the *kokudaka* system, was ultimately responsible for an atomized administrative structure in places like the Kantō, where it was not unusual for a half-dozen or more bakufu retainers to share tax revenues from a single village. Ironically, this may actually have contributed to proto-industrialization in some cases because, as Kären Wigen (1991:1) has noted, “commercial ventures followed their own spatial logic, which was not that of the Tokugawa feudal settlement; economic regions coexisted with political regions, but did not conform to them.” In other words, parcelized sovereignty made it difficult for feudal authorities to tax the commercial sphere. This explains the apparent anomaly seen in the Kantō of rapidly rising material standards of living in the face of what in the authorities’ eyes was widespread rural decline.

The inability of the Tokugawa state to take full advantage of proto-industrial development reflects the rigidity of a feudal polity. Economic institutions may come under pressure and begin to change, but they cannot complete the process of transformation so long as political impediments remain (KMS 1981:95–96). In Japan proto-industrialization had its ultimate origins in the political integration of the early Tokugawa period and the subsequent development of transportation routes and markets to handle tax grain.<sup>17</sup> Later, however, the sort of structural change prompted—indeed, required—by proto-industrialization was impeded by the inflexible institutional structure of the Tokugawa polity. Once the feudal polity was eliminated by the reforms following the Meiji Restoration, economic change proceeded at a rapid pace, so that Japan was a genuinely capitalist economy by the beginning of the twentieth century. One casualty of this transformation was rice, which lost its ideological and institutional place of honor in the Japanese political economy with the enactment of the land-tax reform of 1873.

## Conclusion

The proto-industrialization model has run into criticism from various quarters, some of it prompted by the confusion concerning the precise role rural industry is

<sup>16</sup>The Chinese character used for “herring” in Matsumae was a compound of the characters for “fish” and “not” [鯿], signifying (at least in the folk etymology) that herring was more than just a fish in that riceless domain. The usual character is 鯿.

<sup>17</sup>See Miyamoto and Uemura 1988. Also useful are Furuta 1988, for his discussion of early sea transportation, and Kawana 1982, for his discussion of transportation in the Kantō region.

supposed to have played in the process of structural transformation.<sup>18</sup> Part of the problem is that the “model” is not a single model at all, but rather a number of distinct constructs organized loosely around the notion that early industry belongs in some broader context; what sort of context, though, depends on one’s perspective. Thus we have demographically oriented studies of proto-industrialization like those of Saitō, as well as those that are more concerned with the structural transformation from feudalism to capitalism, such as the work of Kriedte, Medick, and Schlumbohm. This study, of course, falls very much into the latter category, in part because reliable demographic data are simply unavailable for Hokkaido before the Meiji period. That is not the problem it might appear to be, however, since it at least shifts the focus from demography to the proto-industrialization model’s ultimate goal of accounting for the rise of modern industry.

This brings us back to the role of rural industry in Japan’s structural transformation. The mere existence of rural manufacturing did not of itself cause capitalism; it did, however, open a window of opportunity for the emergence of capitalism. Whether capitalist production actually arose or not hinged on the place of merchant capital in the feudal structure of a given location. In Hokkaido, merchant capital, as represented by the contract-fishery operators, laid the groundwork for large-scale production, but resisted taking the final step to capitalism. Once the series of changes set into motion by the influx of labor and adoption of new technology began, the contractors lost the initiative and independent capitalist entrepreneurs appeared and eventually came to dominate the fishery.

In other domains, the situation was similarly linked to local circumstances. In a large domain like Nanbu, the regional diversity of economic activity encouraged the development of proto-industry, but manufacturing remained under the domination of merchant capital, backed by the sanction of domain monopolies and monopsonies. Incidents like the Sanhei rebellions, in which peasants reacted against tight domain (and hence merchant capital) control over the economy, may have represented failed attempts to open the door to future capitalist development. Conversely, in areas without centralized control, such as the Kantō plain and southern Shinano, the course of proto-industrialization was not tied so closely to the feudal structure; there is evidence (Wigen 1991) to suggest the evolution of capitalist production in at least some sectors.

If proto-industrialization was not the direct cause of capitalism in Japan, it was a symptom of stress in the structure of the feudal polity. This is perhaps about as much as we can ask of the concept of proto-industrialization as an explanatory tool. After all, the push for structural transformation was not a foregone conclusion; the rent-seeking tendency of feudalism was much more the “natural” state of affairs.<sup>19</sup>

This view of the role of proto-industrialization in the emergence of capitalism contributes not only to our understanding of Japanese economic history, but it refines the proto-industrialization model as a theoretical construct as well. The emergence of capitalism from a proto-industrial base within the Hokkaido fishery, before the transformation of the Japanese economy as a whole, supports Jürgen

<sup>18</sup>For a critique of the proto-industrialization model in general, and particularly its claims for universal applicability, see Coleman 1983. See also the debate surrounding the value of Kriedte, Medick, and Schlumbohm 1981, particularly Geoff Eley’s (1984) defense of that work, the response by Frank Perlin (1985), and the numerous works cited in those articles, especially Berg, Hudson, and Sonenscher 1983. For a response to their German critics, see Kriedte, Medick, and Schlumbohm 1986. See also the discussions in Wigen 1990:35–41 and Wray 1989:365–71.

<sup>19</sup>Although he eschews terms like feudalism and capitalism, Jones (1988) organizes his argument around this point.

Schlumbohm's characterization (KMS 1981:10) of proto-industrialization as a process in which the structural transformation from feudalism to capitalism is played out in microcosm within a region. In contrast, Schlumbohm's collaborators, Peter Kriedte and Hans Medick (as well as Franklin Mendels), see proto-industrialization as an intermediate stage between feudalism and capitalism,<sup>20</sup> but the Hokkaido evidence, when seen in the full context of Japanese history, does not support the teleology suggested by their model. That is, although (1) the preconditions for Hokkaido's development as a proto-industrial region lay in the structure of Japanese feudalism, and (2) capitalism could not have emerged in the fishery had it not undergone a proto-industrial stage first, there was nothing inevitable about the course of development in the industry.

Proto-industrialization in the Hokkaido fishery did not represent a distinct stage of historical development, but rather consisted of a series of interrelated developments—in demand, labor, technology, capital, and state institutions—the net effect of which was to undermine feudalism and replace it with something new—capitalism. Until that theoretical magic moment when capitalism was born in Japan, the fishery was still very much part of the Tokugawa feudal economy, even as it served to undermine the social and economic foundations of that economy.

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<sup>20</sup>See KMS 1981:9–10 and Eley 1984:523–26 on the differences among the authors' conceptions of proto-industrialization. Mendels 1972 subtitled the article in which he coined the term "proto-industrialization" "the first phase of the industrialization process," which certainly suggests a teleology.



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