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The Role of the Paterson, N.J. Silk Industry in the 19th-Century Atlantic Economy

Richard D. Margrave

During the course of the 19th century, the United States underwent an industrial revolution which transformed the nation from an underdeveloped primary-good producing zone in the world to one of industrial supremacy. This process was aided to a large extent by the other more mature industrial regions of the world. Britain, in particular, retained close economic ties with the United States, despite the two nations' political differences. An economic relationship based upon a "complementarity" developed across the Atlantic, ensuring that each country would be the other's best customer. A system of interregional relations within one single economy covering the entire Atlantic region established itself, transcending a typical exchange of raw materials for manufactured goods between two closed economies and governed by the laws of international trade. The Atlantic economy was dominated by the major "metropolitan" unit, Britain, and the colonial offshoot, North America--mainly the U.S. The key to the growth of the latter's economy lay in conditions that permitted a high level not only of trade but also of movement of capital and labor westward across the Atlantic into more profitable relations with markets and natural resources.

A neglected aspect of this topic is the migration from Britain of industrial labor, which not only provided the greatest number of British immigrants into the U.S. (in the year 1890 a total of 63% of British born were employed in American industry) but also represented an important input of technical skill to the infant American economy (Thistlethwaite 1954: 1-17; 1958: 264).

The development of the Paterson silk industry during this period was a singular example of this process. In the establishment and continued growth of the industry, vast reservoirs of European capital and labor were called upon. This paper concentrates upon one such aspect of this flow--the movement of workers, technical expertise, machinery, and financial support from the depressed silk textile districts of Coventry and Macclesfield in England, across the Atlantic to Paterson, N.J. The underlying motive behind such a study is to attempt to illustrate a truer picture of American industrialization within the context of the 19th-century Atlantic economy.

Previous historians of the Paterson silk industry have acknowledged the role played by the inflow of skilled industrial immigrants with no attempt to quantify this contribution. Nor have they made any efforts to relate the growth of the industry to the other major silk manufacturing areas of the world during the 19th century, although Morris Garber does acknowledge this link as being important (Garber 1968: 140-58). This paper sets the experience of the developing Paterson silk industry against a general background of Atlantic economic processes. That is to say, the silk industry of the city was not the sudden offshoot of Civil War tariff policies, rather the result of a complex set of domestic and external economic and social forces.

The 1910 *Reports of the Immigration Commission* outlined the extent of a heavy skilled industrial immigration of labor from Europe to Paterson. The role of the British was held to have been particularly important. All early attempts at silk manufacture in the city were a result of efforts by English and Scottish immigrants who had been apprenticed in the British factories. By the year 1865, approximately 100 of these immigrants were in Paterson, and once the real expansion of the silk industry was under way skilled workers were not to be found among the native Americans. Therefore, employers turned to England to recruit their labor, and the volume

of immigration rose until the 1890's. Far more interestingly, the *Reports* singled out one particular English town for special mention, stating that Macclesfield in Cheshire had alone supplied as many as 15,000 English immigrants to Paterson.

Macclesfield was the leading center for British silk manufacturing by the middle of the 19th century. The town had gradually developed as a major silk throwing, and later silk weaving, area during the previous century. By 1850 its total population was somewhere in the region of 39,000, with over half the occupied population involved in some aspect of textile manufacture (Davies 1961: passim). Given these figures, it was no surprise that Rowland Berthoff, writing in the 1950's on industrial migration in general, conceded that silk was something of a special case, stating as he did that "Nearly the whole English silk industry migrated to America after the Civil War" (Berthoff 1953: 41).

These figures are overestimates, yet they do serve perhaps to illustrate the psychological strength of the migration within the city of Paterson. In reality, most British, and, indeed, European silk centers provided emigrants bound for America during the 19th century. These areas tended to specialize in the differing branches of silk manufacture. Paterson embraced the whole spectrum of the stages of silk manufacture and products; therefore, it tended to draw upon each region of the Atlantic economy in turn for the differing varieties of silk specialists it required. Apart from Macclesfield, the English city of Coventry had strong links with Paterson. Coventry was the leading center of ribbon manufacture in the British Isles, and as Paterson diversified its silk base into narrow silk production, weavers from this city were in demand (Prest 1960: passim).

In 1860 the two leading English silk centers of Coventry and Macclesfield were extremely well established, with large local work forces heavily dependent on the one staple industry. Silk manufacture in England was a luxury industry with tariff protection throughout its history, despite the fact that it was the first English textile trade to embrace power and factory organization. Already under pressure in the 1850's, the industry suffered a severe setback in 1860 with the signing of the free trade treaty with France, which removed the protective tariff (Deane and Cole 1969: 207-11). Drastic contraction of the numbers employed in the trade occurred, with great hardship endured by the workers in both centers. With scant chance locally of occupational mobility, the unemployed workers had little choice but to accept the notion of internal or external migration.

Silk interests in the U.S. in 1860 consisted solely in a few scattered factories and workshops, yet these ventures were already dependent upon European immigrant skill (Berthoff 1953: 41). The first half of the 19th century had seen many abortive attempts to establish a native American industry, based to some degree upon home-reared raw silk supplies. A combination of interest in sericulture, or the production of raw silk from the silk worm, and silk manufacturing brought across the Atlantic, among others, a 22-year-old man by the name of John Ryle, destined to become known as the "father of the American silk industry" (see Fig. 6-1). He arrived in New York in 1839 with the intention of importing silk goods from his brothers' silk factory in Macclesfield into the American market. As with the majority of silk immigrants of this early period he had considerable silk manufacturing experience behind him, and he quickly established the first successful silk factory in Paterson (Clayton and Nelson 1882: 466-67). Other highly skilled immigrants settled in the Boston, Philadelphia, and New York areas, bringing with them a sizable input for the subsequent takeoff of the American industry. They were the carriers of a new technology, who through a mixture of native American ingenuity and finance, combined with their own Old World skills and contacts, successfully adapted it to its new setting.

Paterson, owing to its natural advantages for silk manufacture (including a water supply, an underemployed preexisting cotton textile sector, and proximity to both raw material and finished goods markets) became the United States' leading silk manufacturing center, gradually attracting most of the early skilled immigrant arrivals (Mason 1910: 44-45). The 1860 Manuscript Federal Population Census for the city enumerates 17 persons as being engaged in silk manufacturing--i.e., owning or operating small silk factories. Of these 17, only 6 were of native American birth and of the remainder, 9 were of English birth, 1 of German, and 1 of Irish. The greater proportion of these English pioneers in

Figure 6-1. John Ryle. *(Courtesy of the Paterson Museum.)*

Paterson had originated from the Macclesfield area.

The base for expansion was already established when a potential supply of skilled labor was suddenly released in England during the 1860's. Furthermore, just as British *laissez-faire* policy made the silk industry there its sacrificial lamb, the U.S. itself switched to a more protective tariff--during the Civil War duties on imports of foreign silks more than doubled (Mason 1910: 4-5). Owing to an accident of history, the doors were wide open for a tremendous upsurge of American silk manufacturing at the same time that a surplus of skilled labor was freed across the Atlantic. That this supply of labor ever came to satisfy the newly created demand for it resulted from the intricate networks that had been established over the previous years.

When the dislocation of the Civil War years was over, Paterson's silk industry entered its major growth period under the aegis of protective tariffs. The demand for additional supplies of skilled labor and capital established in this region led to a mounting immigration of silk workers and machinery from Europe. Many British manufacturers reacted to the decline of the home industry by crating up their machinery and leaving for America, with their workers not far behind (Matsui 1930: 7).

Notwithstanding the lure of a booming silk industry on the other side of the Atlantic, the dislocation in Coventry and Macclesfield was severe. The greater part of the silk work forces in these two towns found itself out of work or at least terribly underemployed. Since there was no national or local relief system able to cope on such a large scale, starvation, poverty, and general desolation hit the local populations. Private charity organizations were established in an attempt to remedy the situation in some way. The Emigration Fund Committee established in Coventry in 1862 sent out 257 persons to North America and the colonies almost immediately, with an estimated total of 1100 ribbon weavers leaving for North America by 1863 (Johnson 1913: 59).

The departure of groups of emigrants headed for North America from Macclesfield attained the status of a ritualistic purge, with bibles given to each weaver chosen by the Silk Weavers' Emigration Society under somber circumstances. The *Macclesfield Courier and Herald* of August 1863 pointed out there was no cheering or shouting despite the

 presence of so many townsfolk and the local brass band:

> The hundreds of weavers, who turned out to do honour to their brethren of the Loom, seemed to be impressed with a feeling that the occasion was one of too deep importance to be marred by mere noisy bluster.

As the English silk industry briefly recovered during the hostilities between France and Prussia, some workers returned home temporarily. Most remained in the U.S., gradually adding other members of their families and friends to the local population in a steady migration of labor and capital across the Atlantic (Berthoff 1953: 41).

Gradually over the late 1860's and 1870's, many English master silk weavers arrived in Paterson. In a vain attempt to escape the technological change and unemployment at home, they assembled handlooms in their new residences and attempted to carry on the traditional aspects of their trade. Their main settlement area was the section of Paterson around 12th Avenue and Godwin Street, near the Susquehanna Railroad--an area known by the 1880's as "Weavertown" (see Fig. 1-1).

As a result, a whole section of one-story brick houses was built. Space was divided equally between a room for general living purposes and another room that housed the silk weaving equipment (State Normal School 1932: 39-40). The traditional silk weaver's garret in England was of a similar layout, the workroom in this case being located above the general living room.

The attempt to preserve the independence of the traditional silk trade in this manner led to small factory shops long characterizing the Paterson industry (Swan 1937: 4-5). Catholina Lambert, himself an English immigrant and prominent Paterson silk manufacturer, noted in the 1876 *Annual Report of the Paterson Board of Trade* that there were six broad-silk factories but also "about one hundred and fifty hand looms in small houses and worked by men in their own homes."

The real basis for future expansion lay with the factories, where something in the region of 1000 English silk workers were employed by 1880. This represented only one-ninth of the total silk work force, but the English workers were at least skilled weavers, throwsters, or dyers, and, more often than not, mill managers, foremen, supervisors, etc. This was not to exclude the still-growing numbers of small- and large-scale English-born manufacturers setting up in Paterson. The names Ryle, Lambert, Strange, Tilt, Grimshaw, Mackay, Crew, Henshall, Booth, and Nightingale all shared a common birthplace, a common previous experience of English silk manufacturing techniques, and a common part to play within an elaborate Atlantic network that could call upon supplies of capital and labor from England at will.

John Ryle bought his first Paterson silk factory with financial help from his brothers in Macclesfield. His fellow workers in America had been among his closest friends and family in England (Clayton and Nelson 1882: 465-67). Ryle's personal correspondence illustrates that throughout his career in American silk he had agents working for him in the European silk manufacturing districts as well as in Macclesfield, London, and New York. Large quantities of good quality raw silk and specialized machinery were purchased through Macclesfield. For John Ryle and his compatriots, the entire Atlantic region defined the limits of their operations, not solely the tariff makers in Washington, D.C. or, indeed, the silk merchants in New York City.

Blanket coverage in the local English press of all events and latest developments in Paterson continued to attract the English silk workers. By the 1880's, the network had begun to develop a certain degree of sophistication. Paterson by this time boasted a Macclesfield Provident Association, a special English broad-silk weavers' Knights of Labor local, and a reading room offering the subscriber the latest Macclesfield newspapers. Early arrivals in Paterson saved a proportion of their earnings so as to assist family and fellow townsfolk with the steamer fare over the Atlantic. The Macclesfield Silk Weavers Union, faced with a permanently overstocked labor market at home, organized lotteries with the highly prized winnings being free passages to Paterson. In the summer of 1880, an especially busy time, new arrivals flooded the Paterson railroad depot. Every night the immigrant train containing "quaintly attired new-comers from the Old World--from England, Scotland, Ireland, France, Germany, and Italy, and other countries," was a bemusing spectacle to watch (Clayton and Nelson 1882: 407). Manufacturing techniques in the silk industry had already begun to change by this date, yet experienced immigrant weavers were still made welcome and paid higher wages than they

could earn on the handlooms at home (Berthoff 1953: 42).

In addition, America offered the opportunity for upward social mobility. Several master weavers eventually saved enough to establish themselves in businesses of their own. John Ryle, writing to his family in Paterson while on a trip to England in 1887, noted a conversation he had had with an old friend in Macclesfield concerning a new silk loom. Over in Paterson "We should have nobody competent to put it to work," Ryle had said. "Oh," his friend replied, "I could send you out a man that could put it to work for you, without any delay." "Yes," answered Ryle, "and in a weeks time he'd own the place.... we [are] not willing to part with our property on such easy terms."

Paterson in a sense became a miniature Macclesfield. Joseph Wright, a silk manufacturer and ex-mayor of the Cheshire town, visited Paterson in the fall of 1876. His book, published in 1877, offered the notion of a transplanted Macclesfield community: "We had the pleasure of meeting many faces in Paterson that we knew, and many were the enquiries after 'the old folks at home'" (Wright 1877: 28). Ribbon weavers from Coventry stood over their looms in Paterson singing Methodist hymns together as they had once done at home. The factories in which they worked were similar in design to those in Coventry. In both Coventry and Macclesfield, the local press was full of news from Paterson, and in Macclesfield the socialist *Paterson Labor Standard* circulated freely with much local support. Paterson, in the imagination of those left behind, became a half-hour's run on the train from the Macclesfield railway station. As wages rose and fell, many workers became "birds of passage," working in the silk center that paid the highest wages. Even the rigid English class structure remained seemingly intact, with the English-born manufacturers acting in unison with the local manufacturing interest rather than with their fellow countrymen. William Strange, again English by birth and a leading Paterson silk manufacturer, denounced his fellow countrymen as troublemakers tainted with the "communistic spirit," saying he would do anything to avoid hiring an English weaver.

The morality of the new arrivals as well as their political affiliation was a further moot point for the local community. The *Paterson Weekly Press* in 1881 questioned the behavior of the silk mill girls:

> Paterson's reputation for morality is not the best, and at times some queer stories are told in its courts concerning the actions of some of its citizens .... These cases are generally those of foreigners who come to this country with companions other than those they chose in marriage, and if the stories told by the police are to be believed there are a great many cases of this kind in Paterson. These ... belong to the small minority of professional weavers who bring with them the prejudices and vices of other countries.

In 1890 a higher tariff placed upon plush and velvet goods entering the U.S. led to further specialized westward movement of labor and capital. Once again the fillip of protection provided the impetus for migration into a small branch of the industry (Berthoff 1953: 43). John Ryle had visited Congleton, a specialist silk center near Macclesfield, only three years previously. He considered then that it would be marginally profitable to buy out an entire factory that specialized in silk crepe production in order to transfer the whole concern to Paterson, where crepe manufacture was in its infancy. "It should be lifted bodily out, and put on a steamer to America," he wrote back to his family in 1887. Without the affirmed support of a protective tariff, the move would remain only marginal.

The renewed flurry of immigration caused by tariff changes in the 1890's was, however, of reduced proportions. The Contract Labor Laws of 1885 may have been the reason for this reduction in the numbers of new arrivals. More likely, the Paterson manufacturers were already transferring their simpler operations to Pennsylvania, utilizing improved throwing machinery to exploit a less skillful, yet cheaper and more docile labor supply composed of miners' dependents (Mason 1910: 50-51). Housing shortages and high food prices in an overextended Paterson city region, plus local agitation against further immigration of skilled weavers, also mitigated against new arrivals. The decade of the 1890's witnessed a severe decline in the inflow of English silk workers; the heaviest decades of immigration had been the 1870's and 1880's. By the first decade of the 20th century, very few fresh transfers of skilled labor between English silk centers and the U.S. took place.

The peak of the movement came in the 1880's, and in 1890 one-fourth of the foreign-born silk workers in America were British (Berthoff 1953: 43). Gradually during this period new immigrants, such as Italians from the silk centers of northern Italy, had begun to replace them (Vecoli 1965: 191). The English from Coventry and Macclesfield are today only remembered locally for having been the "bosses" during the stormy labor disputes of the early 20th century. Yet anyone who has viewed Paterson's mill district from atop Garret Mountain and the equivalent section of Macclesfield from the Cheshire hills cannot fail to see the lasting visual similarity between the two old silk-producing centers.

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Throughout the text, only major secondary sources are acknowledged. The presentation does, however, go some way beyond these sources. The following have been referred to to some extent: the 1910 Immigration Commission Reports; the 1860-80 and 1900 Manuscript Population Censuses for Paterson; contemporary local press reports for Coventry, Macclesfield, and Paterson; local directories; Paterson Board of Trade Reports; and the Ryle Family Papers. The whole question of silk manufacturing factor of production transfer in the 19th-century Atlantic economy will be treated more thoroughly in the author's forthcoming doctoral dissertation, "The Emigration of Silk Workers from England to the United States in the 19th-Century," now in progress at the London School of Economics and Political Science.

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