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# 3.3. Textile Industry

### Introduction

The manufacture of textiles has been a critical dimension of labour history. The ubiquity of textile production—clothing being one of the three material essentials for humans, along with food and shelter—meant that large numbers of men and women devoted their lives to the making of cloth. Textiles and the raw materials needed for their manufacture were traded extensively and formed an important part of local, regional, and global commerce. Although it is difficult to confirm quantitatively, anecdotal evidence suggests that cloth was the single largest manufactured good in world trade till well into the nineteenth and perhaps even twentieth century. For these reasons, the editors of the authoritative study of textile workers around the world write, "The relevance of a global history of textile production over a long period of time is clear: textile products cater for a basic human need, they are among the most important goods fabricated and traded by mankind and have thus played a central role in human activities throughout history."

This paper uses the prism of textile workers to examine four critical themes in labour history. First, textile manufacturing is an excellent vantage point from which to trace changes in the organization and forms of work from the sixteenth century to the present. Textiles have been made, and continue to be made, in a bewildering variety of settings and social relationships, from dispersed rural manufacturing in households to centralized computer-driven factories. Second, the making of textiles raises profound questions about the division of labour between men and women and inequalities between the sexes. Before the mechanization of textile manufacturing, the almost universal divide between spinning and weaving in which the former was allocated to women and the latter to men meant that the activity which was typically the highest value-added portion of the process was monopolized by men. After mechanization, inequality between the sexes was reproduced in factories around the world. Third, the textile trades were an important site for worker resistance, which raises fundamental questions of worker subjectivity. The Luddites, for instance, were drawn from the ranks of stocking knitters in England. In the nineteenth and twentieth centuries, textile workers formed the backbone of strikes and opposition to governments around the world. Finally, textile workers are critical for a global labour history. For centuries, the vibrant global trade in textiles shaped

**<sup>1</sup>** Els Hiemstra-Kuperus, Lex Heerma van Voss and Elise van Nederveen Meerkerk, "Textile Workers Around the World. 1650 – 2000: Introduction to a Collective Work Project", in: Lex Heerma van Voss, Els Hiemstra-Kuperus and Elise van Nederveen Meerkerk (eds), *The Ashgate Companion to the History of Textile Workers*, 1650 – 2000 (Farnham, 2010), pp. 1–13, at 1.

cloth manufacturing around the world. Booms in some regions have been matched by busts in others. And this global trade sparked momentous changes in the process of textile manufacture as well as worker politics, a striking example of which is the so-called Arab Spring in Egypt in 2011. This chapter takes each of these themes in turn.

## The organization of textile manufacturing

In 1500 textile manufacturing in many parts of the world was dominated by guilds or guild-like institutions. Europe and the Ottoman Empire possessed classic guild forms, which were associations of urban artisans that controlled prices and quality of cloth as well as the entry into the craft. These institutions were also self-governing and possessed leaders and statutes. Artisans in cloth in India, China and Japan, although not organized in classic guilds, possessed guild-like organizations which had many of the powers of European and Ottoman guilds. In Mexico, as well, guilds were formed after the Spanish conquest.<sup>2</sup> Drawing on this diverse evidence, Bo Gustafsson concluded that guilds were a "generally occurring city-based industrial form of production in all pre-industrial/pre-capitalist economies."

In the sixteenth and seventeenth centuries commercial expansion in Europe, and the growing demand for cloth, led to an expansion of textile manufacturing in rural areas, which lay outside the control of urban guilds. Although this growth in rural manufacturing had been the subject of historical research for many years, as indicated by Joan Thirsk's classic article "Industries in the Countryside", the phenomenon received widespread attention after the publication of an important article by Franklin Mendels, who dubbed the phenomenon "proto-industrialization" or the first phase of the industrialization process.4

The growing demand for cloth and a mercantile desire to obtain the commodity at lower prices were behind the shift of manufacturing to the countryside. The cheap labour of rural men, women and children was substituted for more expensive urban, male, guild workers. The guilds of Europe challenged this merchant move to elude their monopoly on production, but history was to be with the merchants and this

<sup>2</sup> Jeffrey Bortz, "Mexican Textile Workers: From Conquest to Globalization", in: Heerma van Voss, Hiemstra-Kuperus and van Nederveen Meerkerk, Ashgate Companion, pp. 333-361, at 338.

<sup>3</sup> Bo Gustafsson, "The Rise and Economic Behaviour of Medieval Craft Guilds", in his Power and Economic Institutions: Reinterpretations in Economic History (Aldershot, 1991), pp. 69 – 70, cited in Lars K. Christensen, "Institutions in Textile Production: Guilds and Trade Unions", in: Heerma van Voss, Hiemstra-Kuperus and van Nederveen Meerkerk, Ashgate Companion, pp. 749 – 771, at 750.

<sup>4</sup> Joan Thirsk, "Industries in the Countryside", in F. J. Fisher (ed.), Essays in the Economic and Social History of Tudor and Stuart England (Cambridge, 1961), pp. 70 - 88; Franklin Mendels, "Proto-Industrialization: The First Phase of the Industrialization Process", Journal of Economic History, 32, 1 (1972), pp. 241-261.

shift was part of the larger complex of changes often associated with the rise of capitalism. Historians have challenged central elements of the proto-industrialization thesis, however.

A number of scholars have questioned the universalism of its claims, which are implied in the portrayal of proto-industrialization as the first phase of industrialization. Specialists on regions such as the Middle East and South Asia have argued that proto-industrialization is not appropriate for describing the evolution of textile manufacturing outside Europe. Donald Quataert, the historian of the Ottoman Empire, writes, "Embedded in the pairing of the terms proto-industrialization and industrialization remains a sense of success or failure, approval for economies that successfully industrialized and disappointment in those that did not. This procedure seems rather judgmental to me and thus I am not entirely comfortable with the term."5 Frank Perlin systematically critiqued the term from the vantage point of South Asia and found it wanting for its teleological assumptions. In its place, Perlin proposed the concept of commercial manufactures, which he argued more accurately depicted the transformation in textile manufacturing on a global scale.<sup>6</sup> This was, of course, the growing importance of mercantile interests in the textile trades as demand from long-distance markets grew in the seventeenth and eighteenth centuries. Merchants and manufacturers began to enter into relations with textile workers, whether spinners or weavers or specialists in finishing cloth, to obtain goods of specific type, quality and price. These took the form of putting out systems in which materials were distributed to what could at times be vast networks of producers and commercial advance systems in which money was given to producers for their subsistence and purchase of materials. While the former was common in Europe, the latter prevailed in regions such as South Asia. The growth of commercialized systems for the manufacture of cloth laid the foundations for conflict between mercantile and worker interests, which will be taken up in due course. (In this period, self-financed production by peasant households to meet commercial demands also took place, which was the case in the lower Yangzi region of the Qing Empire.<sup>7</sup>)

Even in Europe, proto-industrialization did not automatically lead to industrialization and there are countless cases of proto-industrial success and industrial failure. For this reason proto-industrialization is often seen as a superfluous or unnecessary category, "a concept too many" in the words of D. C. Coleman.8 However, in

<sup>5</sup> Donald Quataert, "Proto-industrialization and Industrialization and 'Modernity' in a Global Perspective", in: Heerma van Voss, Hiemstra-Kuperus and van Nederveen Meerkerk, Ashgate Companion, pp. 577-595, at 579.

<sup>6</sup> Frank Perlin, "Proto-Industrialization and Pre-Colonial South Asia", Past and Present, 98 (1983), pp. 30 - 95.

<sup>7</sup> Robert Cliver, "China", in: Heerma van Voss, Hiemstra-Kuperus and van Nederveen Meerkerk, Ashgate Companion, pp. 103-139, at 108.

<sup>8</sup> D. C. Coleman, "Proto-Industrialization: A Concept Too Many", Economic History Review, 36, 3 (1983), pp. 435-448.

the European context, proto-industrialization did point to the changing relations of production in textile manufacturing in which the power, influence and autonomy of workers who had been organized in guilds began to wane.

While it is important to recognize that by the eighteenth century, especially in Europe, the work of textile manufacturing, both urban and rural, could be characterized by long hours, low earnings, and repetitive and tedious work, the degradation of work and workers worsened with the coming of the factory system. The centralization of work had long antecedents. There were large workshops in Europe and the Ottoman Empire and in Mughal India some textile manufacturing for the state and nobility was undertaken in karkhanas, in which state officials organized production. The karkhanas, however, were set up for the making of high value cloths (as well as other goods) in order to directly supervise the workers and prevent the embezzlement of costly raw materials.9

The modern factory emerged in Western Europe in the wake of industrialization and the mechanization of textile manufacturing. While there is certainly a technological component in the reorganization of production into central points—the power demands of some machines such as Arkwright's waterframe make it difficult to operate them in homes or cottages—that is not the full story. Stephen Marglin has argued forcefully that the factory was an effort to monitor and discipline workers in order to increase the profits of the merchant or manufacturer, now capitalist. 10 In dispersed systems of production, which characterized the putting out system, it could be difficult to get the workers to put in the effort that capitalists wanted. In a classic paper, E. P. Thompson described the uneven rhythms that characterized pre-industrial work in which the work week was populated by Saint Mondays, frequent breaks, and bouts of drinking. 11 Dispersed producers possessed more power to steal raw materials and produce goods that were subpar in quality.<sup>12</sup> The factory resolved these contradictions for the cloth manufacturer. Workers were brought under the discipline of the employer and while embezzlement was not eliminated altogether, it became more difficult. The factory was then a quintessentially modern disciplinary institution, a point that Michel Foucault acknowledged.<sup>13</sup>

<sup>9</sup> Irfan Habib, "Potentialities of Capitalistic Development in the Economy of Mughal India", Journal of Economic History, 29, 1 (1969), pp. 32-78, at 59, 68-9.

<sup>10</sup> Stephen A. Marglin, "What Do Bosses Do? The Origins and Functions of Hierarchy in Capitalist Production", Review of radical political economics, 6 (1974), pp. 60 – 112.

<sup>11</sup> E. P. Thompson, "Time, Work-Discipline and Industrial Capitalism", Past and Present, 38 (1967), pp. 56 – 97.

<sup>12</sup> John Styles, "Embezzlement, Industry and the Law in England, 1500 – 1800", in: Maxine Berg, Pat Hudson and Michael Sonenscher (eds), Manufacture in Town and Country before the Factory (Cambridge, 1983), pp. 173 - 210; Prasannan Parthasarathi, The Transition to a Colonial Economy. Weavers, Merchants and Kings in South India, 1720-1800 (Cambridge, 2001), pp. 25-6.

<sup>13</sup> Michel Foucault, Discipline and Punish. The Birth of the Prison. Trans. Alan Sheridan (New York,1977).

Despite the modernity of the factory, centralized production in textiles has not eliminated decentralized or dispersed production, which continues to exist to this day. Nor has mechanization spelt the end of hand-powered methods of textile manufacture. Some forms of hand production disappeared quite quickly in the face of machine competition, the most striking being the spinning of yarn which in many cases was unable to compete against the dramatic price reductions that machinery wrought. However, in weaving and finishing hand methods persist. In some cases, these hand methods endure because of worker choices—the craft was the source of livelihood and to abandon it would have meant economic uncertainty and quite possibly unemployment. For others, the craft was a source of meaning and to give it up would be tantamount to rejecting oneself and one's heritage. Such actions from below may be identified from Britain to India and China and elsewhere.<sup>14</sup>

While not minimizing these worker choices, decentralized production has also persisted because of the decisions of merchants and manufacturers. Rajnarayan Chandavarkar showed this in striking fashion for British India during the Great Depression of the 1930s. After the collapse of the agrarian economy, Indian towns and cities had plentiful supplies of unemployed men and women who could be put to work on a very cheap basis. Textile capitalists opted to employ this labour in dispersed production rather than investing in factories because it was both cheaper and more flexible. When demand for cloth increased or decreased, workers could be hired or fired more easily with decentralized systems than centralized. Not all of this dispersed production was conducted on the basis of hand machinery. Douglas Haynes has shown that in western India small workshops were established on the basis of inexpensive power machinery, some of it used powerlooms discarded by the mills of Bombay. By the twentieth century, textile manufacturing was organized in a remarkable number of ways.

This continues to be case even in the twenty-first century, where rural-based manufacturing co-exists with highly automated computer-driven spinning and weaving. In a case that is reminiscent of Joan Thirsk's "Industries in the Countryside", in the Indian state of West Bengal, the embroidery of saris, an important element in the finishing of cloth in that region, is shifting from its urban home in Kolkata to rural villages. Because of a growing demand for low-cost embroidered saris, merchants and manufacturers have established putting out networks to take advantage of cheap labour in the countryside, putting highly skilled urban artisans out of

<sup>14</sup> Quataert, "Proto-industrialization and Industrialization", pp. 590 – 594.

**<sup>15</sup>** Rajnarayan Chandavarkar, "Industrialization in India before 1947: Conventional Approaches and Alternative Perspectives", *Modern Asian Studies*, 19, 3 (1985), pp. 623–668.

**<sup>16</sup>** Douglas Haynes, *Small Town Capitalism in Western India. Artisans, Merchants and the Making of the Informal Economy, 1870–1960* (Cambridge, 2012).

work, <sup>17</sup> The flexibility, innovativeness, and sheer drive for profit of textile manufacturers are something to behold.

### Male and female textile workers

Textile manufacturing, perhaps more than any other industry, gave rise to stark inequalities between the sexes. Whether in dispersed production or centralized, in many parts of the world the making of textiles was characterized by a strict sexual division of labour in which the lucrative tasks within the manufacturing process were monopolized by men. There were of course exceptions to this general rule. In North America before industrialization women were involved in all stages of the production process and in Argentina and Mexico weaving was women's work. However, in most parts of the world, women spun and men wove. Women and children also assisted in the preparatory and ancillary work around weaving. 18

Evidence from a number of places suggests that in the pre-industrial era girls and women dominated the ranks of spinners. Quantitative data on employment is limited and imprecise. However, the data which exists suggests that in the Netherlands in the sixteenth to eighteenth centuries 51 to 92 per cent of spinners were female. In lower Austria, the figure was up to 80 per cent. 19 In many regions of India spinning was considered women's work and men refused to do it. In the nineteenth-century South Indian jails, in order to cover their keep, the British put prisoners to work in the manufacture of textiles. The male prisoners were amenable to learning to weave, which was the preserve of men, but refused to spin on the grounds that it was a woman's job.<sup>20</sup>

Because there were so many spinners, in the pre-industrial era the bulk of textile workers were female. Spinning was less productive than weaving and for each weaver several spinners were required to work distaffs and wheels to produce adequate supplies of yarn. The ranks of spinners were swelled further by the fact that many spinners did not work full time but rather in snatches during free moments in the day or in the agricultural off-seasons. Maxine Berg has described the former when she argues that the distaff survived because it "could tap labour not otherwise in

<sup>17</sup> Durba Chattaraj, "Globalization and Ambivalence: Rural Outsourcing in Southern Bengal", International Labor and Working Class History, 87 (2015), pp. 111–136.

<sup>18</sup> Janet Hunter and Helen Macnaughtan, "Gender and the Global Textile Industry", in: Van Voss, Hiemstra-Kuperus and van Nederveen Meerkerk, Ashgate Companion, pp. 703-724, at 707-708. It should be noted that in Qing China, as well as parts of Europe and the Middle East, commercial production of high-value cloth (silk in the Chinese case) was a male occupation and the domestic production, including weaving, of low-value goods (cotton again in China) was done by women.

<sup>19</sup> Elise van Nederveen Meerkerk, Lex Heerma van Voss and Els Hiemstra-Kuperus, "The Netherlands", in: Heerma van Voss, Hiemstra Kuperus and van Nederveen Meerkerk, Ashgate Companion, pp. 363 – 395, at 374; Hunter and Macnaughtan, "Gender and the Global Textile Industry", p. 705. 20 Parthasarathi, Transition to a Colonial Economy, p. 59.

use—that of feeble old women and young children, and the hands of women not otherwise in use when walking, talking, tending animals or watching over children."<sup>21</sup> She has further argued that such a rhythm distinguished female work from that of males, who did not face a double bind of both market and domestic work and were able to exert greater control over their schedules in the manner that E. P. Thompson described in his classic article on time and work discipline.<sup>22</sup>

The latter, the seasonality of spinning, is evident in South India where the work of making yarn was concentrated in areas that had a long agricultural off-season. In ecological zones where there was plentiful irrigation, and thus shorter periods in which there was not much agricultural work, there was little spinning. However, in unirrigated or rain-fed areas, the long dry months when there was no cultivation gave ample time for spinning. In these dry areas, agricultural output was also more uncertain and spinning provided a form of insurance in bad seasons. It was work that could be taken up when there were harvest shortfalls and at such moments so many hands turned to spinning that yarn prices could fall at times of dearth when food prices rose.<sup>23</sup>

In Britain, the division of labour in which women spun and men wove, the latter being the more remunerative part of the production chain, was justified either by arguments that women's fingers were more nimble, thus more appropriate for spinning, or that spinning was unskilled work. Weaving, on the other hand, was perceived as a preserve of masculine knowledge and ability. Maxine Berg has noted, however, that "the very definitions of skilled and unskilled labour have at their root social and gender distinctions of far greater significance than any technical attribute."<sup>24</sup>

A sexual division of labour persisted in the industrial era. Young women, as well as children, became the backbone of textile factory labour forces around the world. Janet Hunter and Helen Macnaughtan write, "During and following the process of industrialization, a significant majority of textile factory operatives around the world were characterized as female, young and initially of rural origin." This was the case in many parts of Europe, East Asia, and the Americas and in some of these places the factory girl became synonymous with the manufacture of textiles.

The introduction of machinery made it possible to replace more expensive male workers with cheaper female. However, this was a slow and uneven process. In early industrial Britain, for example, men dominated in early mule spinning factories. They were well-paid and militant workers and according to Alan Fowler, "The self-actor spinning machine was developed in the 1820s by Richard Roberts as a response to this problem with the specific aim of substituting female for male operatives as

<sup>21</sup> Maxine Berg, The Age of Manufactures, 1700-1820 (London, 1985), p. 140.

<sup>22</sup> Ibid., pp. 172-4.

<sup>23</sup> Parthasarathi, Transition to a Colonial Economy, p. 59.

<sup>24</sup> Berg, Age of Manufactures, p. 150.

<sup>25</sup> Hunter and Macnaughtan, "Gender and the Global Textile Industry", p. 705.

women were seen as more tractable as well as providing cheaper labour."26 This effort failed, however, and men continued to dominate spinning. They were simultaneously an elite class of workers and the supervisors of male and female assistants on the factory floor. In weaving, however, after the introduction of the powerloom women dominated that sector of factory production. Women were preferred in British mills because they could be paid less than men and they were also thought to be more docile.<sup>27</sup> Between 1850 and 1871 the wages of male self-actor spinners rose by 8s. 3d. while those of women weavers increased by only 3s.<sup>28</sup>

On the other side of Eurasia, when textile factories were first established in Japan in the 1870s and 1880s they employed both men and women, but over time the workforce was feminized. Men were retained for tasks that required skill or strength, but women came to predominate in all other areas. Women were preferred for their docility and lower wages, but the recruitment of female labour, especially in the countryside, was also a product of the rapid growth of textile factories, which greatly increased the demand for workers. Rural households were willing to part with young females because they were seen as less critical for production on the farm but many left the mills after they married.<sup>29</sup> A strikingly similar system emerged in the early nineteenth century textile factories of New England, in the northeastern part of the United States.30

India was the exception to the general rule that women workers predominated in textile factories. In the Bombay cotton industry some 20 per cent of the work force was female in 1885. (By contrast at that time the Lancashire cotton industry was 60 per cent female.) The bulk of these women in the Bombay mills were concentrated in reeling and winding where they worked with hand-driven machinery. It was thought to be inappropriate for women to use power-driven machinery so the tasks of running those, primarily spinning machines, was restricted to men. Women were not even allowed to repair power-driven machines.<sup>31</sup> A roughly similar situation pre-

<sup>26</sup> Alan Fowler, "Great Britain: Textile Workers in the Lancashire Cotton and Yorkshire Wool Industries", in: Heerma van Voss, Hiemstra-Kuperus and van Nederveen Meerkerk, Ashgate Companion, pp. 231–252, at 237.

**<sup>27</sup>** *Ibid.*, p. 238.

<sup>28</sup> E. J. Hobsbawm, "The Labour Aristocracy", in: Labouring Men. Studies in the History of Labour (New York, 1964), pp. 346-347.

<sup>29</sup> Hunter and Macnaughtan, "Japan", in: Heerma van Voss, Hiemstra-Kuperus and van Nederveen Meerkerk, Ashgate Companion, pp. 318-319.

<sup>30</sup> Mary H. Blewett, "USA: Shifting Landscapes of Class, Culture, Gender, Race and Protest in the American Northeast and South", in: Heerma van Voss, Hiemstra-Kuperus and van Nederveen Meerkerk, Ashgate Companion, pp. 531-557, at 534.

<sup>31</sup> Hatice Yıldız, "Parallels and Contrasts in Gendered Histories of Industrial Labour in Bursa and Bombay 1850-1910", The Historical Journal, First View, https://www-cambridge-org.proxy.bc.edu/ core/journals/historical-journal/article/div-classtitleparallels-and-contrasts-in-gendered-histories-ofindustrial-labour-in-bursa-and-bombay-18501910a-hreffns01-ref-typefnadiv/28BC4 A3926943CD F0994EF0C890AB545, accessed on 7 February 2017.

vailed in the jute mills of Calcutta, where between 1911 and 1950 the proportion of women in the work force was around 15 per cent, in contrast to the predominance of females in Dundee, Scotland, the other major center of jute manufacturing in the world.32

There is a final important point about men and women and textile manufacturing which has to do with the transition from dispersed production to factory. In that transition a number of world regions suffered deindustrialization. While historians have tempered the rapidity of the decline of industry in places such as China, the Ottoman Empire and India, there is little doubt that there was significant loss of manufacturing. The deindustrialization debate with its focus on weaving has had a male bias, however. Women textile workers were likely to have borne the consequences of deindustrialization in these places, simply due to the fact that they were concentrated in hand spinning, the textile activity which was hardest hit by mechanization. While some numbers of weavers adopted machine-spun yarn and survived, spinning was largely wiped out by the end of the nineteenth century. The loss of this income must have hit women hard and affected their social power and position, but this question remains under-studied and is in need of further serious examination.33

# **Resistance and subjectivity**

Textile workers loom large in accounts of worker resistance and subjectivity. Recall the famous passage from E. P. Thompson's The Making of the English Working Class: "I am seeking to rescue the poor stockinger, the Luddite cropper, the 'obsolete' hand-loom weaver, the 'utopian' artisan, and even the deluded follower of Joanna Southcott, from the enormous condescension of posterity."34 Two of these, the stockinger and the weaver, fall squarely within the textile trades. And both were central in Thompson's account of the making of working class consciousness in England between the 1790s and 1832. Of weavers, Thompson wrote, "The Lancashire radicalism of 1816 – 20 was in great degree a movement of weavers, and the making of these later

<sup>32</sup> Samita Sen, Women and Labour in Late Colonial India. The Bengal Jute Industry (Cambridge, 1999), p. 5.

<sup>33</sup> Prasannan Parthasarathi, "Historical Issues of Deindustrialization in Nineteenth-Century South India", in: Giorgio Riello and Tirthankar Roy (eds), How India Clothed the World. The World of South Asian Textiles, 1500-1850 (Leiden, 2009), pp. 415-435 and Nirmala Bannerjee, "Working Women in Colonial Bengal: Modernization and Marginalization", in: Kumkum Sangari and Sudesh Vaid (eds), Recasting Women. Essays in Indian Colonial History (New Brunswick, NJ, 1989), pp. 269 – 301. Craig Muldrew has documented the important contribution that earnings from spinning made to household incomes in seventeenth and eighteenth century England. See his "'Th'ancient Distaff' and 'Whirling Spindle': Measuring the Contribution of Spinning to Household Earnings and the National Economy in England, 1550-1770", The Economic History Review, 65 (2012), pp. 498-526. 34 E. P. Thompson, The Making of the English Working Class (New York, 1964), p. 12.

leaders was in communities of this kind."35 And resistance to the new order played no small role in that process. The Luddites, who Thompson explores in detail, were drawn from the ranks of croppers and framework-knitters who feared unemployment and loss of status as a consequence of mechanization.

While the worker subjectivity that Thompson explores was new—it was the articulation of class consciousness—it was preceded by and built upon long traditions of resistance and community consciousness in England to which textile workers were key contributors. Adrian Randall has brought out this pre-history in the case of machine breaking, which was found in the woolen cloth industry in the decades before the emergence of Luddism. For Randall, custom and community were the foundations upon which resistance was built. He writes, "It was the structure and customs of the woollen industry which shaped community as a dynamic force for social cohesion and resistance to change."36

With his emphasis on custom, Randall builds upon the important work of John Rule for whom custom was central in understanding work and workers in eighteenthcentury English industry. According to him, custom was critical for labourers in "determining the expectations from work"; "conditioning their attitudes in practices in performing it"; and "defining their relationships with their employers,"<sup>37</sup> And Rule shows that custom played a key role in weaver struggles against merchant-manufacturers in the West Country of England throughout the eighteenth century and in their efforts to organize themselves for more effective action.<sup>38</sup> Randall and Rule focus on urban, male, textile labourers, but Maxine Berg has argued that a powerful community culture resting on custom was found among rural textile workers. She writes that in the mid-eighteenth century "dispersed production and a workforce scattered over many parishes did not prevent the cotton check weavers [of Lancashire] from organizing."39 Berg believes that similar community networks, often based on neighborhoods, existed among women textile workers as well, but the limitation of the sources makes it impossible to establish this with certainty.

Powerful community organizations of textile workers existed outside Europe as well. In South India, there is evidence for the corporate organization of weavers going back to medieval times. Marriage, worship at temples, and common residency in neighborhoods of towns and villages created and sustained these community ties. Weaver corporate organization did not exist only at the local level, but extended to

<sup>35</sup> Ibid., pp. 294-295. Emphasis in original.

<sup>36</sup> Adrian Randall, Before the Luddites. Custom, Community and Machinery in the English Woollen Industry, 1776-1809 (Cambridge, 1991), p. 7. For a rigorous examination of community and collective action, see Craig Calhoun, The Question of Class Struggle. Social Foundations of Popular Radicalism during the Industrial Revolution (Chicago, 1982).

<sup>37</sup> John Rule, The Experience of Labour in Eighteenth-Century English Industry (New York, 1981), p. 194.

**<sup>38</sup>** *Ibid.*, pp. 158–164.

<sup>39</sup> Berg, Age of Manufactures, p. 161.

the regional as well. These were maintained through ties of caste, marriage, pilgrimage and patronage of temples. 40 Weavers activated both local and regional corporate organizations in the late eighteenth century to mount a series of spectacular protests against the newly formed English East India Company state and its attempts to restructure the cloth procurement system. The Company state sought to reduce weaver autonomy and power, which called forth powerful efforts to resist from weavers. The idiom of custom (*mamool*) was also found in South India where the East India Company was seen as upending a longstanding customary order that shaped relations between weavers and the merchants who financed cloth production. 41

These pre-industrial notions of custom and community continued to inform the subjectivities and the resistance of textile workers in the era of the factory, but they were of course mixed with new political ideas as well. The case of weavers in Lyons, who were seeking to organize a trade union in 1828, is instructive. According to Eric Hobsbawm, these weavers "naturally organized their society of 'Mutualists' on the revolutionary model. Thus they described their foundation year as 'Year One of Regeneration', an obvious echo of Jacobinism", but this was combined with organization into small conspiratorial groups which may have owed something to the 'old Compagnonnages." Hobsbawm concludes that "it is mere antiquarianism to think of the [labour] movement of the 1870s, or even of the 1830s in terms of, say, the early hatters' and curriers' trade societies. However, historically speaking, the process of building new institutions, new ideas, new theories and tactics rarely starts as a deliberate job of social engineering. Men live surrounded by a vast accumulation of past devices, and it is natural to pick the most suitable of these, and to adapt them for their own (and novel) purposes."

Another source of textile worker solidarity which had a long life was the neighborhood. Berg in the case of England and Parthasarathi in the case of South India have pointed to the important role that neighborhoods played in worker organization in the eighteenth century. Jumping to the interwar years of the twentieth century, Rajnarayan Chandavarkar has shown that the social ties formed in the neighborhoods of Bombay were critical in the forging of remarkable mill worker cohesion. Chandavarkar writes, "Historians of labour have generally regarded the workplace as the decisive arena for the development of the political consciousness and political action of the working class. However, ... the associations forged in the neighbourhood provided an important base for wider social and political organization." It was such organization and solidarity that made it feasible for workers to mount spectacular acts of resistance such as the general strikes of 1928–29 which mobilized

**<sup>40</sup>** Parthasarathi, *Transition to a Colonial Economy*, pp. 31-4.

**<sup>41</sup>** *Ibid.*, chap. 4.

<sup>42</sup> E. J. Hobsbawm, "Labour Traditions", in: Labouring Men, p. 438.

<sup>43</sup> Ibid., p. 437.

**<sup>44</sup>** Rajnarayan Chandavarkar, *The Origins of Industrial Capitalism in India. Business Strategies and the Working Classes in Bombay, 1900 – 1940* (Cambridge, 1994), pp. 237–238.

over 150,000 workers and crippled work at more than 80 cotton mills for a period of eighteen months.45

## Textile workers and global history

The fate of textile workers in the centuries after 1500 cannot be understood fully without a global lens. Although there is little evidence for the development of a consciousness of being part of a "world working class" among textile labourers, the global trade in cloth shaped the economics and politics of textile manufacturing around the world.46

Cloth entered into long-distance trade because of its high value and low weight and the global exchange of cloth grew steadily in the centuries after 1500 when New World silver fueled a boom in world trade. From the perspective of textile workers, the half millennium from 1500 to the present may be divided into three periods. The first runs roughly from 1500 to 1780. In this period the most important cloth exporting regions lay in India. The second, from 1780 to the eve of World War I, represented a shift in textile manufacturing for export from Asia to Northwestern Europe as a result of the British Industrial Revolution. Finally, from 1913 to the present world textile manufacturing returned to Asia, but on very different foundations than in early modern times.

Till the twentieth century cotton accounted for the bulk of the textiles that were traded globally. In 1913 cotton represented 80 per cent of global fiber consumption and even in 1990 when synthetic fibers had grown in popularity, and came to represent 38 per cent of world fiber use, cotton still accounted for 48 per cent. 47 In the centuries before 1780 the preeminence of cotton meant that the regions that accounted for the bulk of textile exports lay in Asia, most importantly in India. This export trade was not only in luxury goods, but for many centuries included lower priced cloths which fit the budgets of middling and lower class buyers.<sup>48</sup>

India had long been the home of sophisticated cotton manufacturing and its textile workers possessed abundant knowledge and skill as well as the ability to cater to the tastes of diverse markets. Indian knowledge extended from the spinning of yarn in a variety of counts for different purposes. The yarn for the manufacture of muslins

<sup>45</sup> Rajnarayan Chandavarkar, "Questions of Class: The General Strikes in Bombay, 1928 - 29", Contributions to Indian Sociology, 33, 1-2 (1999), pp. 205-237.

<sup>46</sup> The term "world working class" comes from Marcel van der Linden, "The Promise and Challenges of Global Labor History", International Labor and Working Class History, 82 (2012), pp. 57-76, at 67. 47 Prasannan Parthasarathi, "Global Trade and Textile Workers", in: Heerma van Voss, Hiemstra-Kuperus and van Nederveen Meerkerk, Ashgate Companion, pp. 561-576, at 561. For discussions of cotton, see Giorgio Riello, Cotton: The Fabric that Made the Modern World (Cambridge, 2013) and Sven Beckert, Empire of Cotton: A Global History (New York, 2014).

<sup>48</sup> Parthasarathi, "Global Trade and Textile Workers", p. 563.

was particularly impressive for its fineness and strength and the cloth that was made from it was extolled around the world.<sup>49</sup> While India was famous for its complex weaves (ikats and fine brocades come to mind immediately), the bulk of the export goods were simply woven. However, they were remarkable for their colors, which could be created in the loom itself with dyed yarns—such as the checks and stripes which were widely demanded in West Africa—or by painting and printing on white cloth. Here, the knowledge of dyeing that these Indian craftsmen possessed was unmatched in the world and they produced fabrics in which the colors were not only fast but were also reputed to become more beautiful after repeated washings.<sup>50</sup>

In the seventeenth and eighteenth centuries European observers focused less on the knowledge of Indian workers and more on the low prices of the textiles to explain their success in global markets. These observers attributed the cheapness of the cloth to the abysmal and exploited conditions under which Indian workers laboured, which translated into very low wages. Daniel Defoe wrote, "The People who make all these fine Works are to the last Degree miserable, their Labour of no Value, their Wages would fright us to talk of it, and their way of Living raise a horror in us to think of it."<sup>51</sup> The exploitation of Indian workers became a rallying cry for textile labourers in Europe to oppose the import of the cloth and in response to spectacular protests against imports—in London weavers ripped cotton gowns off the backs of women in the streets—states across Europe restricted the entry of these goods.<sup>52</sup>

While the lowness of Indian wages has been questioned, the debate over comparative standards of living between India and other parts of the world continues.<sup>53</sup> What is more widely accepted as a consequence of the global turn in economic history is that the challenge of Indian cottons sparked a response in Europe in the form of mechanization. The European-wide process of imitating Indian goods began with cloth printing and then extended to spinning and weaving. This entailed the development of knowledge, sometimes obtained from India itself, and at other times developed independently. The crucial breakthrough was the British invention of machinery which could spin yarn that matched the Indian for strength and quality. These machines were the waterframe and then the mule.54

<sup>49</sup> For a discussion of these cloths see Prasannan Parthasarathi, Why Europe Grew Rich and Asia Did Not: Global Economic Divergence, 1600-1850 (Cambridge, 2011), p. 33-34.

**<sup>50</sup>** *Ibid.*, pp. 27–34.

<sup>51</sup> Daniel Defoe, A Plan of the English Commerce (London, 1728, repr. Oxford, 1928), pp. 49-50.

<sup>52</sup> Beverly Lemire, Fashion's Favourite. The Cotton Trade and the Consumer in Britain, 1660-1800 (Oxford, 1991), pp. 34-36; Parthasarathi, Why Europe, chap. 5.

<sup>53</sup> Prasannan Parthasarathi, "Rethinking Wages and Competitiveness in the Eighteenth Century: Britain and South India", Past and Present, 158 (1998), pp. 79-109; Stephen Broadberry and Bishnupriya Gupta, "The Early Modern Great Divergence: Wages, Prices and Economic Development in Europe and Asia, 1500 - 1800", Economic History Review, n.s., 59 (2006), pp. 2-31; Parthasarathi, Why Europe, pp. 37-46.

<sup>54</sup> For an account of this see Parthasarathi, Why Europe, chap. 4.

With these inventions the center of gravity in textile manufacturing, and thus cloth export, moved from India to northwestern Europe and in the nineteenth century Britain became the workshop of the world. These inventions also gave birth to the new industrial order based on machinery, power, and the factory, which created a new class of labourers, the industrial working class. Over the next two centuries, wherever some form of protection could be erected from external competition this form of production was replicated around the world, forging not only a new economic system but also a new political order in which textile labourers played a pivotal role in trade unions, labour parties, and the struggle for alternative futures.

In several parts of the world, where protection from imports was not politically feasible, the expansion of textile manufacturing in northwestern Europe had a deleterious impact, producing deindustrialization and a reduction in the size of the textile labour force. In Mexico, due to cheap imports from Britain, textile workers went from comprising half of Mexico City's population in 1788 to one-third in 1842. In the Ottoman Empire, imports of cheap British varn led to a sharp reduction in the ranks of spinners and by 1900 hand-spun yarn only accounted for a quarter of total yarn consumption. Similar stories may be told about China and India. In the case of India, in 1900 – 1901, nearly two billion yards of cotton cloth were imported from Britain.55 Forced to compete against machine-made yarn and cloth, textile workers in these regions were immiserated, laying the foundations for future sweating as described by Rajnarayan Chandavarkar, Douglas Haynes, and others.<sup>56</sup>

A global textile order in which northwestern Europe, and in particular Britain, dominated the world trade in cloth remained in place till World War I. In the case of jute, Calcutta challenged the Scottish city of Dundee's reign even before the war, but in the much larger cotton industry it was not till the interwar period that India and Japan began to challenge British dominance in major markets, most critically China.<sup>57</sup> The economic depression of the 1930s and World War II smashed that British-led order and in the post-war period a new global textile regime emerged. In in the decades between 1945 and 1980 textile manufacturing grew around the world, from Argentina, Uruguay, India and China, to Turkey.<sup>58</sup>

From the 1980s, however, new pressures of global competition pushed textile manufacturing back into low-wage countries. From the United States, textile factories shifted across the border to Mexico. In the case of Japan, cotton mills were moved to China where cheap labour and modern technology created a formidable global competitor. India, Bangladesh and Pakistan were other nations where textile manufacturing expanded rapidly and by 1998 China and South Asia together accounted for about a third of the world's production of cotton yarn. The return to Asia is reminiscent of the pre-industrial period, but it rests on radically different foundations. While

**<sup>55</sup>** Parthasarathi, "Global Trade and Textile Workers", pp. 569 – 571.

<sup>56</sup> Chandavarkar, Origins of Industrial Capitalism; Haynes, Small Town Capitalism.

<sup>57</sup> Jim Tomlinson, Dundee and the Empire: "Juteopolis" 1850 – 1939 (Edinburgh, 2014).

<sup>58</sup> Parthasarathi, "Global Trade and Textile Workers", p. 572

pre-industrial Asian manufacturing prowess rested on high standards of living and worker knowledge, the twentieth-century version rested on low wages and a deskilled labour force.<sup>59</sup>

Exports from these Asian centers had an impact on textile industries around the world and the United States, Japan, Argentina all lost employment as a consequence of lower price imports.<sup>60</sup> In a striking echo of the eighteenth century, however, imports of textiles from South Asia (and this time Southeast Asia as well) contributed to economic dislocation and loss of jobs in Egypt. According to Joel Beinin, the strike waves that gripped Egypt for several years, and contributed to the Arab Spring protests of 2011, were organized by textile workers who were thrown out of work by lower cost imports from the South and Southeast Asia.<sup>61</sup>

### **Conclusion**

The work of textile manufacturing raises a number of central questions in labour history. The organization of production, and thus the nature of work and the relationship between workers and merchants and employers, looms large and textiles were made in a variety of settings, from households to small workshops and large factories and in both rural and urban settings. The manufacture of textiles also rested on deep sexual divisions of labour, but these divisions could vary widely across space and time. And in general, men monopolized the higher paying jobs, while women were deemed as unskilled and docile and given the less remunerative. Textile workers were also politically organized and resisted transformations in the market as well as organization of production and payment which they deemed to be disadvantageous. And in the last several centuries textile workers have been at the heart of spectacular movements of protest. Finally, a study of textile workers is incomplete without a global perspective. The trade in cloth and the movement in production from one place to another have been and continue to be significant.

In this complex world of textile manufacturing there are no universals. The making of cloth looks different in different places and in different time periods. Nor is there a single direction of change. Decentralized production has given way to centralized, only to return to decentralized. And in many places in the last two hundred years household production has existed alongside factory, at times in close proximity. The only certainty is that textiles will continue to be manufactured, for the need for cloth will never disappear.

**<sup>59</sup>** *Ibid.*, p. 574.

**<sup>60</sup>** *Ibid.* 

**<sup>61</sup>** Joel Beinin, "Workers and Egypt's January 25th Revolution", *International Labor and Working Class History*, 80 (2011), pp. 189–196.

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