



THE SPINNING WORLD

*A Global History of
Cotton Textiles,
1200–1850*

GIORGIO RIELLO
AND
PRASANNAN PARTHASARATHI

PASOLD STUDIES IN TEXTILE HISTORY 16

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EDITED BY

GIORGIO RIELLO

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PRASANNAN PARTHASARATHI

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The Spinning World

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PREFACE

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GR and PP
May 2009

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INTRODUCTION

Cotton Textiles and Global History

PRASANNAN PARTHASARATHI AND GIORGIO RIELLO

Eric Hobsbawm famously wrote, 'Whoever says Industrial Revolution says cotton.'¹ While this statement would be much qualified today, there is little doubt that cotton textiles were central from the late eighteenth century and in the nineteenth- and twentieth-century industrialization of Britain, the United States, India, Japan, China, and elsewhere.² Cotton textile mills, whether in Europe, North America, or Asia, have become synonymous with the world in which we live, dominated by capital-intensive mass production, complex forms of distribution, and high levels of consumption. While this modern history of cotton textiles is well known and well recognized, the medieval and early modern historical antecedents and their connections with modern industrialization are far less examined. The purpose of this volume is to explore the pre-history of cotton, and to point to important links with more familiar narratives of cottons in the nineteenth and twentieth centuries as well as revisions in those narratives.

Such an undertaking requires a global perspective, for the early history of cotton was truly global in scale. Between 1200 and 1800 there was a steady expansion of cotton textile consumption and manufacturing around the world and cotton textiles displaced ramie, hemp, linen, wool, and other competing fibres from Japan and China to Europe and North America. At the same time, cotton textiles were a critical commodity in global trade, and, in the estimation of several contributors to this volume, after 1500 the most important manufactured good in world trade. In these centuries the bulk of the cottons that criss-crossed the globe had their origins in the Indian subcontinent, which was the pre-eminent centre for cotton manufacturing in the world until the nineteenth century. Broadening the chronological focus and widening the geographical framework of the history of cotton lays the foundation for a historical narrative which explicitly rejects Eurocentrism.

¹ Eric Hobsbawm, *Industry and Empire: From 1750 to the Present Day* (New York, 1999), 34.

² An excellent analysis of cotton textile manufacturing in this period is Douglas A. Farnie and David J. Jeremy (eds.), *The Fibre that Changed the World: The Cotton Industry in International Perspective, 1600–1990s* (Oxford, 2004).

Parts I and II of this book show that cotton cloth was 'the first global commodity': the scale of its production, consumption, and exchange was far greater than that of any other manufactured commodity. Cotton textiles acted as global commercial, cultural, and social connectors; they supported agrarian structures, local manufacturing economies, and systems of taxation; they were a sector of dramatic technological innovation, experimentation, and transfer; and finally they were sought-after commodities that shaped taste and material expectations of populations living across the vast Eurasian landmass and beyond. Part III of this book reinforces the move from a Eurocentric narrative and recontextualizes the so-called 'rise of European cotton textile manufacturing' within a global framework. Rather than considering this only as a new, 'revolutionary' chapter in the history of manufacturing, this book shows how this process was the result of centuries of continuous change based on profound cultural as well as economic interconnections.

THE DIFFUSION OF COTTON

Archaeologists suggest that cotton originated in India, which is supported by the discovery of cotton cloth fragments on the banks of the Indus River that have been dated to 3200 BC. It appears that the Indian subcontinent possessed a well-developed cotton industry in ancient times.³ The cotton plant diffused from the subcontinent to China, the Middle East, and Africa between AD 800 and 1000 and its geographical expansion is part of a process of 'Southernization', in Linda Shaffer's language, in which the cultivation of cotton as well as related processes and technologies spread from the Indian subcontinent to other parts of Asia and, eventually, to the entire globe.⁴ Such a process was as slow as the capacity of the receiving areas to learn and put into practice techniques and technologies that transformed cotton from a botanical rarity into a raw material for a flourishing industry. Raw materials were not always local. In the early Ming period, China's southern region of Jiangnan was the manufacturing core of cotton textiles, but much of the raw cotton itself was grown in the northern regions of the empire.⁵ The case of China, but also those of medieval Europe and Africa, make it clear that cotton did not just spread but increasingly became a commercial crop and entered into many long-distance trade networks.

³ Andrew M. Watson, 'The Rise and Spread of Old World Cotton', in Veronika Gervers (ed.), *Studies in Textile History in Memory of Harold B. Burnham* (Toronto, 1977), 355–68.

⁴ See Linda Shaffer, 'Southernization', *Journal of World History*, 3/1 (1994), 1–21 and her *Southernization* (Washington, 2003).

⁵ Francesca Bray, *Technology and Gender: Fabrics of Power in Late Imperial China* (Berkeley, 1997), 214; Ramon H. Myers, 'Cotton Textile Handicraft and the Development of the Cotton Textile Industry in Modern China', *Economic History Review*, 18/3 (1965), 616.

Local production systems in cotton had long-distance links in terms of technology as well. It is likely that bowing, ginning, reeling, and spinning technologies travelled along the very routes that took the cotton plant both eastwards and westwards from India. The spinning wheel appeared in India in the fourteenth century and in all likelihood came from west Asia.⁶ Middle Eastern producers adopted the bow, reel, and cotton gin from India probably before AD 1000. Bowing, ginning, and spinning technologies spread from India across South-East Asia and reached China in the second half of the thirteenth century. Multi-spindle spinning machines were already in place in mainland China in 1313, although probably not for the spinning of cotton.⁷

In the cases of bowing, reeling, ginning, and spinning of cotton there was a convergence in methods and tools over a large geographical space across Africa, Europe, and Asia. Cotton-weaving technologies, however, remained much more varied across the Afro-Eurasian landmass and they were a function of the specific varieties of textiles that were to be produced. There is evidence for the adoption of vertical looms in India in 1184. Horizontal looms were also widespread and this technology was probably introduced by Muslims from Iran in the eleventh century and adapted to the local dry climate by digging pits where the weavers could sit.⁸ Backstrap looms based on mobile body tension were common in India, especially for domestic production, but remained little used in China. In China, instead, the draw-loom was widely used, probably adapted for cotton from looms that were used in the weaving of silk and hemp. In western Africa different looms could be found. Narrow cotton strips dated from AD 1000 to 1200 were woven on a treadle loom that was originally from Asia, but in present-day Nigeria, and since the fifteenth century, cotton textiles have been woven on vertical looms operated by hand rather than by foot and they were probably adapted from raphia looms.

This cursory analysis of cotton technology in the period before 1500 should not lead to the conclusion that the industry developed on an equal footing across the world. Many of the essays in this book reveal limitations and barriers to the growth of cotton textile manufacturing for it was not simply a matter of transmitting technologies but also one of adapting cotton manufacturing to varied

⁶ Irfan Habib, 'Indian Textile Industry in the 17th Century', in Arun Das Gupta and Barun De (eds.), *Essays in Honour of S. C. Sarkar* (New Delhi, 1976), 182.

⁷ Mark Elvin, 'The High-Level Equilibrium Trap: The Causes of the Decline of Invention in the Traditional Chinese Textile Industries', in W. E. Willmott (ed.), *Economic Organization in Chinese Society* (Stanford, 1972), 148–9. See also Xu Dixin and Wu Chengming, *Chinese Capitalism, 1522–1840* (London, 2000), 214–15.

⁸ Some looms such as the 'four-cornered frame' introduced from the Muslim north in the fifteenth–sixteenth century was used only in Muslim communities of the south. Carla M. Sinopoli, *The Political Economy of Craft Production: Crafting Empire in South India, c.1350–1650* (Cambridge, 2003), 178.