400 Years of Decline?: Understanding the Changing Structure of the South Indian Textile Industry

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Historical narratives about economies and societies exert powerful influences on the ways we interpret the past. Of course historical narratives analyze continuity and change over time. But additionally, historical narratives also make subjective value judgments regarding the nature of change and continuity. The world is constantly changing. Within the context of complex transitions, such as industrialization, historians may evaluate change and continuity in powerful, conflicting, value based terms. This paper will compare the ways historians from different regional and national historical traditions across Asia have valued and characterized industrialization. Characterizations of decline, stagnation, growth, transformation, agency and oppression stem from subjective judgments that about changing economies. The parameters, plot and discourse of many historical analyses of industrialization are powerfully influenced by the broader dominant national or regional narratives.

This article compares historical narratives about the textile industries of Japan, Southeast Asia and India during the 18th and 19th centuries. It then utilizes that broad context to specifically examine the changing structure of the textile industry in South India during that

1

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period; and it reframes the narrative of industrialization and de-industrialization in South India.

Narratives about modern economies are dominated by the major transitions engendered by industrialization. The story of the Industrial Revolution is a celebratory European, and North American, narrative describing a rapid, radical transformation of western economies and societies during the 18th and 19th centuries. With time, historians have recognized the complexity of these changes, and usually speak now of a process of industrialization, which recognizes long term, uneven transitions, changing labor relations and capital accumulations, and complex results for differing socio-economic groups. The timing, scope, values and direction of industrialization have all become subjects of debate. Historians recognize that industrialization has a pre-history, often called proto-industrialization. Moreover, industrialization is not inevitable or perhaps not even permanent, as exemplified in debates over de-industrialization.

Regional or national narratives about industrialization exert powerful influences across their broader historiographies. The historical understanding of industrialization is often closely related to the national myth. Some of the most prominent components of narratives about industrialization include:

- Economic growth and technological development;
- Realignment of social, economic and structural relations within production and commerce;
- Outside intervention, world economy, colonialism/imperialism;
- Agency or internal autonomy;

• Continuity and decline.

Agency is central to historical narratives about the nature and meaning of industrialization. Identifying and characterizing internal or local autonomy is a basic goal in many stories of successful industrialization. In addition, historical judgments about the experience of industrialization are often reflected backward into more distant history. The stories about pre-industrialized economies from around the world, particularly in the early modern world, are shaped by our awareness of what came after, as evidenced by inquiries into proto-industrialization.

Textile industries are fundamental to the experiences and the narratives of industrialization in many regions. The stories of economic, technological and social change within the context of industrialization, proto-industrialization, and de-industrialization are often preoccupied with cloth production and commerce, particularly cotton cloth. Industrialization is about machines and engines applied to production, resulting in changing labor, capital, and commercial structures and relations. In almost every part of the world, one of the first industries where these changes were applied was the textile industry, especially cotton textile industry.

This article is divided into three parts. It begins by briefly outlining and comparing the dominant historical narratives about 18th and 19th century transitions within the textile industries of Japan, Southeast Asia and India. Further, it relates these narratives to the regional economic performance of the textile industries of these regions, comparing both the narratives as well as what seems to have happened. These comparisons provide remarkable

contrasts in both the experiences and the subjective evaluations of historical change and continuity through the process of industrialization. Second, given that broad context, the article examines the historiography of the South Indian textile industry much more closely, identifying recurring, key aspects of a predominant narrative of decline. The third section examines the historical transitions within the structure of the South Indian cotton textile industry from the early modern period through the early processes of industrialization in the 19th century. This analysis reframes the story of industrialization and de-industrialization, and offers a reconsideration of the dominant narrative.

Comparison of Narratives about Textile Industry and Industrialization in Japan, Southeast Asia and India

A broad overview of the respective historical narratives and experiences of the textile industries of 18th and 19th century Japan, Southeast Asia and India provides us with some striking comparisons and contrasts. The purpose of this brief survey is to offer comparative context; it cannot be intensive or exhaustive of any region. A comparative study of these regions merits much more extensive documentation and analysis.

Each of these regional narratives holds its own internal ambiguities and complications. The Japanese narrative celebrates the successful transition from isolation to industrialization. It emphasizes internal agency. Western influence and competition were important, but not dominating or determinative. Japanese industrialization is a success story about technological adoption, entrepreneurship, and rapid internal political, economic and social transformation. Within the textile industry, hybridization of external technologies to internal

social and economic structures as well as the survival of high-culture handicraft production is crucial. Next, current Southeast Asian historical narratives about textile industry emphasize autonomy amidst constant external influence. In Indonesia, Thailand or the Philippines, whether the textile industry was growing or shrinking, regional design motifs and production cultures survived. As a great carrier of Southeast Asian cultural meaning, cloth exemplifies Southeast Asia's selective adoption and adaptation of outside influences as well as the long term survival of its autonomous culture. Finally, the story of the Indian or South Asian textile industry is a persistent narrative of decline – either economic or social – due to European economic intervention, colonial exploitation, and stagnant social structures. The Indian narrative furnishes the archetypical story of de-industrialization. Economic historians of South Asia – even those who emphasize continuity rather than change – are preoccupied with understanding what turned India's early modern wealth into poverty.

At the beginning of the early modern period, Japan interacted openly with East Asian, Southeast Asian and European societies. But in the face of a disastrous invasion of Korea and China and the looming threat of European naval power, the Tokugawa Shogunate closed itself and Japan to foreign influence. Japanese economy and society remained relatively isolated until well into the 19th century. The forced re-engagement of Japan with the world economy is famous. It embraced that contact and engaged western competition. During the Meiji Restoration, Japanese officers, entrepreneurs and laborers rapidly transformed their economy, politics and society.

Japan's opening and transformation into a state with an economy and military that rivaled the West was so rapid that scholars have been prompted to search for preexisting conditions that could have enabled Japan's precipitous rise. Particularly within the textile industry, the importance of precedents for economic growth and change from Tokugawa Japan is constantly emphasized. Complex and regionally diverse networks of merchants, brokers and agents connected rural production with extensive commercial networks.¹ Interestingly, the level of industrial activity in pre-Meiji Japan often had an inverse relationship to rice agriculture – industry thrived in many 'backward' regions.²

During the Meiji period, Japan was active in the adoption and importation of western technology, sending students abroad to identify technologies and techniques. Japan succeeded in its competition, but it maintained its cultural autonomy and its internal agency. The distinctive organization and success of new cotton textile mills in Japan exemplifies this agency. The "hybrid technology" created within the silk reeling industry exhibited both adoption and adaptation of technology. Finally, the continuity of highly specialized, hand loom textile industries such as kimonos also reflects cultural autonomy.³ The ability of local merchants to adapt to changing conditions also had significant effects on the ability of regional industry to survive.⁴ Over the course of the late 19th century Japanese textile industry – handicraft and mechanized – experienced fluctuating fortunes. But Japanese mechanized spinning factories eventually made up the difference and Japan became a net

¹ Masayuki Tanimoto, "The Evolution of Indigenous Cotton Textile Manufacture before and after the Opening of the Ports," *Japanese Yearbook on Business History* 9 (1992), 30-45; Michael Smitka ed., *The Japanese Economy in the Tokugawa Era, 1600-1860* (New York: Garland, 1998), xvii-xviii.

² David L. Howell, "Proto-Industrial Origins of Japanese Capitalism," in *The Japanese Economy in the Tokugawa Era, 1600-1868*, ed. Smitka, Michael (New York: Garland, 1998), 122,4;

³ Tetsuro Nakaoka, et. al., "The Textile History of Nishijin (Kyoto): East Meets West," *Textile History* 19, 2 (1988): 117-8,137.

⁴ Tanimoto, 46, 52-55.

exporter, first of cotton yarn and then finished cloth, eventually taking over much of the Chinese market.⁵

The labor force for Japanese textile mills consisted primarily of teenage girls from peasant villages. They were generally recruited with a contract for two or three years, and their families were given a small advance and regular remittances from their wages.⁶ The mills built dormitories for the young women. Notwithstanding strict, paternalistic rules to guard and control the young women, conditions were poor, and both abuse and absenteeism were common.⁷ In an effort to improve and retain the labor force management tried to reform the conditions in dorms and institute mandatory primary education. They also instituted double shifts in order to improve productivity.⁸ The success of these policies in cotton spinning and weaving mills seems to be born out by their rise as the most productive textile industry in the world early in the 20th century. Later, during the postwar period, Japan and its Western competitors lost this advantage in textile industry, and began to turn to imports from newly industrializing neighbors, particularly in Southeast Asia.⁹ The Japanese narrative of industrialization offers an augmented, hybridized version of the western story.

⁵ Michael Smitka, ed., *The Textile Industry and the Rise of the Japanese Economy* (New York: Garland, 1998), xv-xvi.

⁶ Gary Saxonhouse and Yukihiko Kiyokawa, "Supply and Demand for Quality Workers in Cotton Spinning in Japan and India," in *The Textile Industry and the Rise of the Japanese Economy*, Ed. Michael Smitka (New York: Garland, 1998), 212.

⁷ Newman, 349-350.

⁸ Saxonhouse and Kiyokawa, 204-9.

⁹ Shin-ichi Yonekawa, "The Growth of Cotton Spinning Firms: a Comparative Study," in *The Textile Industry and the Rise of the Japanese Economy*, ed. Michael Smitka (New York: Garland, 1998), 319; Il-Park and Anderson, 165.

Industrialization and development had complex effects, but on balance are characterized positively. Japan and its historians celebrate its success.

In Southeast Asia local textile industry in three major regions flourished from the 18th and 19th centuries: Western Indonesia (Sumatra and Java), Philippines (Iloilo), and upland Thailand. Though production and trade in these regional industries declined, the long term continuity of production methods and motifs signals the success of Southeast Asian culture in the scholarship.

A generation ago, the historical narrative of Southeast Asian argued that Southeast Asia had been perpetually colonized and peripheral. Its culture, economy and politics were always characterized as under the dominance of some other center – India, China, the Muslim world, and finally Europe – from the 1st century through the 20th century. National narratives did not essentially alter this story, though they did recenter the story by offering a teleological story of the proto-nation.

But for the last generation, the entire scholarship of Southeast Asia has focused on cultural autonomy and internal agency. The revised narrative argues that, yes, Southeast Asia has been connected with the world throughout its history. But that contact did not ever undermine its uniqueness or agency. Southeast Asian cultures, societies and economies selectively adopted and adapted external ideas, techniques and technologies. Its external connections are its strength not its weakness.

The examples of Sumatra and Java, Iloilo, and Thailand each demonstrate the continuing importance of outside influences, but emphasize the cultural autonomy of Southeast Asian culture. In each case, Indian, Muslim and Chinese motifs and influences shaped early modern traditions. The selective adaptation of external motifs and methods transformed them into authentic Southeast Asian cultural expressions. But during the 18th and 19th centuries, local textile production flourished. Declining pepper prices in the late 17th century made Indian import cloths prohibitively expensive. Thus Java and southern Sumatra developed local batik traditions as inexpensive substitutions for South Asian imports through the 18th century. Similarly the western Visayan region of the Philippines experienced a rise in textile production during the 18th century when Chinese mestizo merchants began to export the region's handicraft textiles to a broader Southeast Asian market. This industry built on the long established tradition of textile production in the region dating from at least the 14th century. The industry built on the long established tradition of textile production in the region dating from at least the 14th century.

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¹⁰ S. A. Niessen, *Motifs of Life in Toba Batak Texts and Textiles* (Dordrecht-Holland, Foris Publications, 1985), chapter 6; Lynne Milgram and Penny Van Esterik, ed., *The Transformative Power of Cloth in Southeast Asia* (Toronto: Canadian Council for Southeast Asian Studies, 1994); Robyn Maxwell, *Textiles of Southeast Asia: Tradition, Trade and Transformation* (Melbourne: Oxford University Press Australia, 1990), 149, 239, 299, 353; Mattiebelle Gittinger ed., *To Speak with Cloth: Studies in Indonesian Textiles* (Los Angeles: Museum of Cultural History, 1989) 131-198.

¹¹ Barbara Andaya, "The Cloth Trade in Jambi and Palembang Society during the Seventeenth and Eighteenth Centuries." *Indonesia* 49 (1989): 40-1; Gerrit J. Knaap, *Shallow Waters*, *Rising Tide: Shipping and Trade in Java Around 1775* (Leiden: KITLV Press, 1996), 130-3.

¹² Alfred W. McCoy, "A Queen Dies Slowly: The Rise and Decline of Iloilo City," in *Philippine Social History: Global Trade and Local Transformations*, ed. Alfred McCoy, E.C. de Jesus, (Honolulu: University of Hawaii Press, 1982), 300-2.

Thus, there appears to have been a period of about one hundred years or more from the late 17th to the mid 19th century during which local Southeast Asian textile industry in certain regions flourished and began exporting within Southeast Asia. Chinese merchants, the Bugis, and other Southeast Asian trading diasporas carried these textiles across insular and peninsular Southeast Asia. The transition to cash crop production and the full impact of colonialism and the world market in the mid 19th century signaled the end of this textile boom.¹³ It also seems clear that Indian cotton cloth continued to be the most prominent textiles in the Southeast Asian market until Indian textiles were replaced by Western machine produced cloth at about the same time.¹⁴ Nevertheless, the historiography emphasizes cultural autonomy and the survival of indigenous traditions.

Katherine Bowie's study on upland Thai textile industry describes the complex, specialized networks of production and commerce that existed in the 19th century. Divisions of labor and specialization required significant skills and facilitated a wide range of exchanges and market interactions, linking individuals, communities and distant villages.¹⁵ These exchanges, both on a local scale and through external trade networks, were part of a differentiated society characterized by wealth as well as poverty. Within the textile industry, cultivating, carding, spinning, weaving, dyeing, sewing and trade were performed by

¹³ McCoy, 303-314; Hiroshi Matsuo, *The Development of Javanese Cotton Industry* (Tokyo: The Institute of Developing Economies, 1970), 2-3

¹⁴ Gerrit J. Knaap, *Shallow Waters*, *Rising Tide: Shipping and Trade in Java Around 1775* (Leiden: KITLV Press, 1996), 130-3; Sinnappah Arasaratnam, "The Chulia Muslim Merchants on Southeast Asia, 1650-1800," in *Merchant Networks in the Early Modern World*, ed. Sanjay Subrahmanyam, (Brookfield: Ashgate Publishers, 1997), 159-177.

¹⁵ Bowie, 807-809.

individuals with differing skills and resources. These female artisans connected to extensive trading networks from Burma to Bangkok.¹⁶

Cultural autonomy is particularly potent in the study of textiles in Southeast Asia, because patterned cloths are accepted as carriers of important cultural meaning. Therefore, European colonialism, despite its powerful effects on textile production and trade, is just one more incarnation of foreign influence that does not fundamentally alter the nature of Southeast Asian culture, in this case textile industry. Despite the disruption, the scholarship emphasizes cultural continuity.

The first component of the historical narrative of the economy of India, particularly the textile industry, is that India used to be a rich, highly specialized, differentiated producer and exporter of numerous manufactures. The second component of the narrative is that India's economy declined – either in economic terms or in social terms regarding the independence, agency and activity of its artisan-producers and merchants. But what caused the decline? The two central instigators are first, western economic and political exploitation, particularly British colonialism, and second, internal social structures and technological stagnation. Few historical themes are viewed with as much simultaneous excitement and pessimism as the textile industry in India. Generations of historians have been at pains to argue both that textile industry in South Asia made major contributions to the world economy and that it suffered massive decline in the face of European corporate and colonial exploitation. The nationalist narrative expressed this story nearly a century ago. Even with revisions that

¹⁶ Bowie, 818-9.

roundly criticize the nation as well as the colonial state, the narrative remains fundamentally similar.

There was significant regional and temporal diversity across South Asia with regard to the vicissitudes of the textile industry. In broad terms, the early modern period (1500-1750) is usually described very positively, with South Asia's textile production and exports clothing a large portion of the world. In the early modern period, the most prominent debate is over the relative strength of indigenous versus foreign factors in commerce and industry. Significant debate has centered on the relative economic, political and social vitality of the 18th century – which witnessed both the decline of the Mughals and the rise of British colonialism. Some scholars are quite pessimistic about the early influences of British conquest; while others push the date and manner of decline into the 19th century.

¹⁷ See Sushil Chaudhuri and Michel Morineau, *Merchants, Companies and Trade: Europe and Asia in the Early Modern Era*, (Cambridge: Cambridge University Press, 1999); Sushil Chaudhuri, "International Trade in Bengal Silk and The Comparative Role of Asians and Europeans, c. 1700-1757," *Modern Asian Studies* 29, 2 (1995): 373-386; Sinnappah Arasaratnam, "The Chulia Muslim Merchants on Southeast Asia, 1650-1800," in *Merchant Networks in the Early Modern World*, ed. Sanjay Subrahmanyam, (Brookfield: Ashgate Publishers, 1997) 159-177.

¹⁸ For example: A. K. Sinha, *Transition in Textile Industry: A History of Textile Industry in Bihar, 1783-1833* (Delhi: Capital Publishing House, 1984), 134-153; Ashin Das Gupta, "The Merchants of Surat, c.1700-50," in *Elites of South Asia*, ed. Edmund Leach and S. N. Mukherjee, (Cambridge: Cambridge University Press, 1970), 201-222; Prasannan Parthasarathi, "Weavers, Merchants and States: The South Indian textile industry, 1680-1800," (Ph.D. diss., Harvard University, 1992), 259-262; Hameeda Hossain, "The Alienation of Weavers: Impact of Conflict between Revenue and Commercial Interests of the East India Company, 1750-1800," *The Indian Economic and Social History Review*, 16, 3 (1979): 341, 345.

¹⁹ Burton Stein, "Arrested Development: But When and Where?" in *Arrested Development in India: The Historical Dimension*, ed. Clive Dewey (New Delhi: Manohar, 1988), 50-1, 56-7; P. Sudhir and P.

Interestingly, while the 19th century, and especially the high colonial period (1858-1947), is generally characterized as having witnessed significant decline in the handicraft textile industry, there is significant debate about the nature or timing of decline. Scholars have examined the quantitative data – such as numbers of looms, numbers of weavers, pounds of cloth, or value of exports - in order to estimate the condition of the internal market for textiles. 20 For while it seems clear that India exported less textiles during the 19th century, it is not at all clear how internal production and consumption markets responded to British manufactured goods. Some have argued for a relative decline, meaning that the actual size of the industry remained about the same size while the larger economy grew.²¹ Others have seen an absolute decline in the industry's size and vitality.²²

The late 19th century also witnessed the rise of machine textile mills, particularly in Bombay. By the end of the 19th century, scholars generally agree that textile industry in India was radically different than it had been two hundred years earlier. Textile artisans were no longer ubiquitous, independent producers; and the flexible commercial structure of diverse merchants had been dismantled. Proponents of de-industrialization argue that the remnants of the artisan and mercantile communities had been subsumed within an agrarian order that

Swarnalatha, "Textile traders and territorial imperatives: Masulipatnam, 1750-1850," The Indian Economic and Social History Review 29, 2 (1992): 168-9.

²⁰ Michael J. Twomey, "Employment in Nineteenth Century Indian Textiles," Explorations in Economic History 20 (1983): 40-7; Konrad Specker, "De-Industrialisation' in Nineteenth century India: The Textile Industry in the Madras Presidency, 1810-1870," in Arrested Development in India: The Historical Dimension, ed. Clive Dewey (New Delhi: Manohar, 1988), 341.

²¹ Specker, 342.

²² J. Krishnamurty, "Handicrafts in the Indian Economy: A Study of the Handloom Industry from 1800," in Imperialism, Nationalism and Regionalism in Canadian and Modern Indian History, Aprana Basu ed. (New Delhi: Manohar, 1989)138-9; Twomey, 55.

appears to have been more rigid than at any previous period. The growth of mechanized textile industry did not replace the economic size or significance of the previous handicraft industry. In many cases, it does not even seem to have drawn from the same pools of labor. For example, the agrarian migrants who populated the Bombay mills had little connection to the textile tradition that once supplied all of the Indian Ocean.²³ There is significant criticism of the de-Industrialization thesis. Much recent research examines broad continuities in handicraft weaving traditions through the 19th century. In addition, there was significant mixed industrialization, which combined handicraft and power loom production in small factories and workshops.²⁴

Thus the overall structure of the declensionist Indian economic narrative takes shape. Industrialization was characterized as often foreign and often disruptive. Continuity has been preferred, particularly the continuity of the handloom industry. Weavers and merchants are central protagonists of textile industry narratives. The scholarship also decries the failure to fully industrialize. There are historical analyses of industrialization and larger

²³ Richard Newman, "The Recruitment of an Industrial Labour Force through Intermediaries: A Comparative Study of the Cotton Textile Industry," in *Arrested Development in India: The Historical Dimension*, ed. Clive Dewey (New Delhi: Manohar, 1988), 349, 351-2, 356; D. Mazumdar, "Labour Supply in Early Industrialization: the Case of the Bombay Textile Industry," *Economic History Review* 26, 3 (1973): 477-496.

²⁴ Douglas Haynes' work on continuity and change in 19th and 20th century weaving firms in western India is particularly striking. See: Douglas Haynes, "The logic of the artisan firm in a capitalist economy: handloom weavers and technological change in western India, 1880-1947," in *Institutions and Economic Change in South Asia*, eds. Burton Stein and Sanjay Subrahmanyam (Delhi: Oxford University Press), 173-205, especially 195-203; Douglas Haynes, "The Dynamics of Continuity in Indian Domestic Industry: *Jari* Manufacture in Surat, 1900-47," in *Cloth and Commerce: Textiles in Colonial India*, ed. Tirthankar Roy (London: Sage Publications, 1996), 299-325.

Tirthankar Roy also emphasizes continuity amidst change in the modern textile industry.

scale firms in the 19th century. But studies on the continuity and decline of handicrafts are more prominent. There is debate about the period, the nature, and the causes of decline. Was it the late 18th or 19th century or later? Was the decline absolute or only relative to the broader economy? Nevertheless, the story focuses on decline. The most famous narrative argues that de-industrialization resulted from the combined effects of colonial tax policies, imperial malice or ineptitude, mechanized cloth imports, maritime market replacement, and the unwillingness or inability of a conservative caste society to adapt. The story concludes that this brought about large scale agrarianization and impoverishment of diverse, specialized artisan producers. We will specifically examine the declensionist narrative in South India below.

Let us conclude this discussion of historical narratives on textile industry and industrialization with comparisons of the three regions – both in terms of their historical narratives and their historical experiences. The striking contrasts between both the histories and historiographies of these regions highlight the subjective nature of historical narratives and the power of regional or national narratives to shape the evaluation of continuity and change.

Japan's experience of industrialization was a rapid transition, with powerful external influences, prominent internal pre-conditions, and active internal agency regarding adaptation of industrial technologies and organization. The result was both a new mechanized cotton textile industry and hybridization of other textile production techniques.

Japan experienced a significant decline of handicraft textile production. A few high culture

markets remained. But few historians choose to regret the decline in handloom weavers. Instead the new mechanized and hybridized industry is characterized as the best of all worlds. Few historians characterize this transition as a damaging attack by outside, colonial forces.

Arguably, Southeast Asia experienced a more profound decline in indigenous handicraft textile production than South Asia did. But because cloth is a recognized symbol of Southeast Asian cultural meaning, the survival of the cloth, the motifs, and the techniques of their production are celebrated as evidence in support of the predominant narrative of Southeast Asian autonomy amidst outside influence. Interestingly, the rapid industrialization of textile production in Southeast Asia dates to the 20th century and is connected to decline in textile manufacturing in Japan.

Finally, the argument can be made that India has experienced greater continuity of handloom cloth production and commerce than any region of the world. Weavers continued to participate in the mixed mechanized textile industry of through the 19th and into the 20th and 21st centuries in India. Mixed industrialization in India resulted in small and middle sized workshops and factories that contained combinations of hand looms and power looms. There is major continuity in terms of female fashions and handicraft motifs and techniques. In addition, there is a growing global market for Indian handicrafts.²⁵ By what valuation is this decline? It certainly can be characterized in those terms; but in

²⁵ One example comes from Andhra Pradesh: Kanakalatha Mukund and B. Syama Sundari, *Traditional Industry in the New Market Economy: The Cotton Handlooms of Andhra Pradesh* (New Delhi: Sage Publications, 2001), 81-3, 142-5.

comparison to Japan and Southeast Asia, the continuities in South Asian handicraft production are equally striking.

400 years of decline? – The historiography of the South Indian textile industry

A specific analysis of the narratives that shape the historiography of the South Indian textile industry will demonstrate the power of the predominant declensionist narrative in South Asia. Almost without reference to the period under analysis, most scholars' overarching narratives begins with wealth and ends with decline. Historians have noted evidence of decline as early as the 17th century. In fairness few if any of the historians below would accept that the textile industry declined for 400 years. In fact, most scholars agree that the early modern period witnessed significant growth in South Indian textile production and commerce, especially from 1600 to 1750. After that, there is considerable debate about when the industry decline and to what degree. But the overarching narrative of most studies, regardless of the opening or closing dates, remains: early prosperity and concluding decline.

Decline is observed in various terms, from absolute decline in production or commerce to relative decline, to declining production diversity, to declining artisan agency or standards of living. Nevertheless, the declensionist narrative and the pessimism regarding industrialization and de-industrialization are potent from the 17th century through the 19th centuries and to the present. Thus the construct – 400 years of decline.

The following discussion of overarching narratives of decline is *not* a critique of the substance of the various scholars' analyses of the structures and changes in textile production and commerce. Indeed, I have chosen scholarship that I have found very useful in my own research. Nevertheless, their work is generally framed within the predominant declenionist narrative. This section is an effort to consciously examine the narrative of decline that forms the context or subtext of our valuations of the changing modern textile industry and the broader Indian economy and society generally.

Vijaya Ramaswamy's insightful analysis of medieval weavers and textile industry in South India concluded with the 17th century. The bulk of her work utilized inscriptions to piece together a fascinating social history of medieval weavers. But her concluding chapters on the rise of the East India Companies are quite pessimistic. The state occupied a prominent position in her work, and she described the Chola and Vijayanagara states as enlightened patrons of weaver prosperity for the sake of state revenue. Thus at one level her pessimism and sense of decline dated from the fall of the Vijayanagara Empire in the later 16th century. But her greatest criticism was reserved for the arrival of the Dutch and English East India Companies, which she credited with limiting weaver creativity and mobility, contributing to the decline of guilds, forcing the production of standardized export cloths, and constructing of proto-colonial black towns dating from early in the 17th century. Ramaswamy concluded:

²⁶ Vijaya Ramaswamy, *Textiles and Weavers in Medieval South India* (Delhi: Oxford University Press, 1985), 35-62, 94-116.

²⁷ Ibid., 150-166, 169-170.

"It must be noted that the East India Company had a demoralizing effect not only on the weavers but on the majority of artisan castes. ... The position of weavers in the seventeenth century reflects what can be regarded as the beginning of an eclipse for South Indian handlooms and weavers which lasted over two hundred years."²⁸

To date the decline of the textile industry to such an early date is remarkable, since in 1600 the South Indian textile industry had not even begun its major period of early modern growth wherein its production and commerce would reach markets in East Asia, Africa, Europe and even the Americas.

Tapan Raychaudhuri examined textile trade in some detail within his analysis of the Dutch Jan Company in the 17th century Coromandel. He noted a clear sense of decline dating from the late 17th century, when disruption in the northern Coromandel convinced the Dutch to shift their procurement from Pulicat in the north to Nagapattinam in the south. ²⁹ J.J. Brennig expressed a more qualified sense of decline in the same period. His analysis of 17th century textile production and trade in the northern Coromandel clearly had a sense of the continuing flourishing of the textile industry into the 18th century. Nevertheless, he viewed the conquest of southern India by the Mughals as marking a major shift, a decline, in the history of textile production and trade in the Krishna-Godavari Deltas.

"From 1686 to 1689 Golconda experienced the consequences of invasion, famine and epidemic. All of these disasters affected the northern Coromandel. ... But

²⁸ Ibid., 166.

²⁹ See conclusion of Tapan Raychaudhuri, *Jan Company in Coromandel, 1605-1690* (The Haugue: Martinnus Nijhoff, 1962).

despite renewed European trade, northern Coromandel's export trade never again reached the levels attained in the first half of the 1680s. ... The Mughal Conquest of Golconda was thus a disaster for the commercial life of northern Coromandel, ending an era of continued expansion derived from the growth in European trade."³⁰

Elsewhere Brennig described the complex interactions between diverse, specialized merchant and weaver communities, emphasizing the agency and power of weavers in these relations. But this agency somehow led him to conclude, pessimistically, that the weakness of mercantile intermediaries blocked the reorganization of the textile industry and "the emergence of even a primitive industrial capitalism." L. Alaev sounded a very similar conclusion in his analysis of artisan production in early modern South India within *The Cambridge Economic History of India*. Alaev described both social continuity and economic growth in production and commerce during the early modern period in South India. But this continuity concluded in a kind of stagnation.³²

The 18th century has also witnessed narratives of marked decline. Sinnappah Arasaratnam expressed repeated pessimism regarding the extension of British colonial power into South India during the 18th century. This expansion was accompanied by monopolistic commercial

³⁰ Joseph Jerome Brennig, "The Textile Trade of Seventeenth-Century Northern Coromandel: a Study of a Pre-Modern Asian Export Industry," (Ph.D. diss., University of Wisconsin—Madison, 1975), 276.

³¹ J.J. Brennig, "Textile Producers and Production in Late Seventeenth-Century Coromandel," *Indian Economic and Social History Review* 23, no. 4 (1986): 353.

³² Tapan Raychaudhuri and Irfan Habib, eds., *The Cambridge Economic History of India, vol 1: c.1200-c.1750* (Cambridge: Cambridge University Press, 1982), 324.

goals (sometimes realized), abuse of South Indian weavers and merchants, and gradual decline of the textile industry.

"As far as the development of the handloom industry is concerned, there is a historical inevitability to the change of the period. ... Under the Company, weavers had virtually become wage workers on terms and conditions over which they had no control."

Kanakalatha Mukund examined textile trade in South India between 1650 and 1750 in some detail in the context of her research on Tamil merchant society. She described great prosperity and activity during the period as well as evidence of a positive transition toward capitalism that brought the "gradual subjection of the producer by the merchant capitalist.³⁴ Unfortunately, this internal capitalist transformation was destroyed after 1725, when textile commerce experienced a marked decline, and Tamil merchants were impoverished and broken.³⁵ She described the efforts of communities of merchant capitalists to achieve social and economic status in the 18th century Coromandel, but concluded:

"The irony was that even as the merchant capitalists were achieving the desired social standing, their economic status which was the foundation of their social goals was already beginning to show the first signs of disintegration." ³⁶

³³ Sinnappah Arasaratnam, "Weavers, Merchants and Company: The Handloom Industry in Southeastern India in 1750-1790." *Indian Economic and Social History Review* 17, no. 3 (1978): 276-7; see also S. Arasaratnam, *Maritime Commerce and English Power: Southeast India, 1750-1800.* New Delhi: Variorum, 1996).

³⁴ Kanakalatha Mukund, *The Trading World of the Tamil Merchant: Evolution of Merchant Capitalism in the Coromandel* (Hyderabad: Orient Longman, 1999), 169.

³⁵ Ibid., 100-2, 141-3.

³⁶ Ibid., 182.

Prasannan Parthasarathi's work makes a compelling argument that the textile industry was the first portion of South Indian society to experience the real power of colonialism during the 18th century, and that it was the harbinger of things to come in the 19th century. His central argument follows. Prior to 1760 weavers enjoyed a powerful bargaining position in negotiations with merchants and brokers; similarly, laborers in artisan and agrarian production enjoyed prosperity and protection in precolonial states, which enriched the entire society. But with the Company's conquest of significant and growing portions of South India, the English Company-state exerted increasing colonial powers on textile weavers and merchants. It drastically weakened the bargaining power of weavers, cut out merchant brokers, mitigated any benefits from labor mobility, and defeated all weaver protest. After 1760 the textile industry declined, which had broad negative social and economic effects. "The rise of English rule in South India meant the demise of a way of life for laborers. The rights which they possessed - in contract, in property, in community - were eroded and eliminated as the Company state had no respect for them. The Company state's [geographic] fixing of laborers, in particular, had devastating consequences."³⁷

"Colonialism in South India had devastating consequences not only for the standard of living of laborers but also for the dynamism of the economy as a whole." 38

³⁷ Prasannan Parthasarathi, *The Transition to a Colonial Economy: Weavers, Merchants and Kings in South India, 1720-1800* (Cambridge: Cambridge University Press, 2001), 147.

³⁸ Ibid., 6.

In an examination of the mid 18th century, Tapan Raychaudhuri identified evidence of continued commercial and productive vitality accompanied by growth in international trade. But as he looked forward toward the late 18th and 19th centuries he saw little evidence of transformations of commercial capital relationships, labor structures or technology. Indeed in comparison to Europe, China and Japan, India lacked adaptation and innovation.³⁹

Potkuchi Swarnalatha wrote a thoroughly researched dissertation on weaver society in the northern Coromandel between 1750 and 1850. Swarnalatha's research analyzed the world of the weaver from numerous perspectives – political, social, productive, and commercial – emphasizing the growing influence of the Company and colonialism on weavers. She concluded that weavers struggled in the face of a wide range of challenges throughout this period, as the Company initiated a wide range of new intrusive managerial and administrative systems, including copdars, senapatis, gumastahs, careerdars, commercial residents, and revenue collectors. Within this context of weaver difficulties, Swarnalatha noted that colonial initiatives were often haphazard and short-lived, with limited long term effects. Weavers responded with organized agitations and survived. Nevertheless, these cumulative challenges had effects. Swarnalatha described a loss of weaver agency:

³⁹ Dharma Kumar, ed., *The Cambridge Economic History of India, vol 2: c.1757-c.1970* (Cambridge: Cambridge University Press, 1983), 7-35.

⁴⁰ Potkuchi Swarnalatha, "The World of the Weaver in the Northern Coromandel, 1750-1850," (Ph.D. diss., University of Hyderabad, June 1991), 193-237.

⁴¹ Ibid., 338-384

"The weavers in the Coromandel were thus affected by a multitude of factors, thereby demonstrating the way in which they were locked into a wider world which, in fact, shaped their destinies."

Swarnalatha dated major decline from the beginning of the 19th century. The South Indian weaver society experienced significant decline in the face of competing and often conflicting colonial bureaucratic measures enacted by the commercial residents and revenue collectors of the English East India Company. Among South Indians, weavers in particular were squeezed between uncoordinated and competing claims of government commercial and revenue officials.⁴³ Even more disastrous was the 1830 cessation of Company trade in the region's cloth, which cut off weavers from Company markets and left many weavers underemployed.⁴⁴ Thus the Company worked against weavers for well over a century, bringing them into increasing subjugation, until the Company disbanded its trade and left weavers bereft of their markets and needed capital.

Oddly enough, it is in scholarship on the 19th century that significant debate on the existence or size of decline arises. Konrad Specker collected a great deal of data on the numbers of weavers and looms in early 19th century South India. He argued that the early 19th century did *not* witness a marked decline in weavers.

⁴² Ibid., 464.

⁴³ P. Sudhir and P. Swarnalatha, "Textile traders and territorial imperatives: Masulipatnam, 1750-1850," *The Indian Economic and Social History Review* 29, 2 (1992): 145-169.

⁴⁴ Swarnalatha, 440-452, 530-533. This conclusion is strongly corroborated by later observers. F.R. Hemingway, *Madras District Gazetteers: Godavari*, vol. 1, (Madras: Government Press, 1915), 103; H.R. Pate, *Madras District Gazetteers: Tinnevelly*, vol 1, (Madras: Government Press, 1917), 215-216.

"The number of looms, in general, tended to increase over the period from 1820 to 1870. ... In quantitative terms there was no 'destruction' of the traditional textile industry. ... To talk about destruction of a flourishing textile industry and about deindustrialization however is too simple to render justice to the complexity of changes that occurred in Indian economic life..."

This is striking because by broad accounts of the merchants and markets for South Indian cloth, the 17th and 18th centuries were clearly periods of growth, whereas the 19th century saw declines in the external demands for South Indian cloth. Clearly the export markets declined, and weavers shifted to producing coarser, cheaper cloths. Nevertheless, the data based on weaver populations is ambiguous enough to call into question the overall decline in weaving. Perhaps it was only a relative decline and not an absolute decline. Dharma Kumar has also expressed an ambiguous set of conclusions about continuity and decline from the late 18th to the 19th century. Kumar cautiously interpreted data showing declining in weavers and looms. Weavers transitioned to producing course cloth; and the unit value of cloth output decline sharply. 46

"But from the second decade in the nineteenth century the Company, faced with competition from British mills and the loss of its monopoly of the Indian trade, began to contract its investment in Indian textiles and its commercial establishments. In addition to the lack of protection from foreign competition from which weavers

⁴⁵ Konrad Specker, "Madras Handlooms in the Nineteenth Century." *The Indian Economic and Social History Review* 26, no. 2 (1989): 164-6.

⁴⁶ Dharma Kumar, ed., *The Cambridge Economic History of India, vol 2: c.1757-c.1970* (Cambridge: Cambridge University Press, 1983), 368-370

all over India suffered, the Madras weaver had an additional and very heavy tax burden to bear in the form of the motarfa tax."

The aggregate of these several studies of textile industry in South India through the 17th, 18th and 19th centuries portrays an ambiguous sense of both wealth and vitality on the one hand and constant decline on the other. In optimistic terms, the reader can identify signs of growth and dynamism throughout the early modern period and up to the 19th century and beyond. Without exception, each of these historians has emphasized the size, scope and vitality of textile production and trade during their period of analysis. Their analyses began with real enthusiasm for the society that produced and marketed cotton cloth in South India.

On the other hand, most authors felt obliged to address the poverty of India by describing decline in the end. Some authors focused heavily on examining decline and explaining its causes; others noted decline as a kind of inevitable epilogue. The point is that the overarching predominant narrative remains the same – India was rich, but then it declined because of colonialism and, perhaps, social stagnation. But how can the industry with the greatest continuity have experienced decline for 400 years? Is that decline? Where is the celebration of internal agency and continuity?

Transitions in the structure of the South Indian textile industry

This final section of the article examines the changing structure of the textile industry in 18th and 19th century South India. The data in this section are based on the detailed analysis of

⁴⁷ Ibid., 369.

textile production in early modern South India in my dissertation.⁴⁸ Unfortunately, the methodology and fine analysis therein cannot be reproduced here, and will require public discussion elsewhere. The purpose of this section is to consider the nature of continuity and change across the complex structure of the textile industry. It concludes by reconsidering the valuations of decline, continuity and de-industrialization.

Research on the textile industry across India has focused heavily on weavers and cloth merchants. The structure of the textile industry is universally described as highly specialized and diversified, with spinning, weaving, washing, dyeing and trade performed by different professional groups. Textile producers and merchants are broadly characterized as largely male, professional, full-time, and specialized. There has long been awareness that spinners were female and constituted a huge proportion of textile laborers, but they occupy a small place in the volume of the historiography. Male, professional weavers and merchants dominate scholarship on textile industry. This stands in stark contrast to regions like Southeast Asia where female part-time labor characterized textile production and even commerce. Recent scholarship on textile industry in India has altered this to emphasize that the family or household is the unit of production.⁴⁹ Household production combined both male and female labor. As we have seen, decline in the textile industry is often characterized in terms of de-industrialization, which forced professional artisans away from commercial-

⁴⁸ Ian C. Wendt, "The Social Fabric: Textile Industry and Community in Early Modern South India" (PhD. Diss., University of Wisconsin – Madison, 2005).

⁴⁹ Parthasarathi, 10-17; Haynes, "The logic of the artisan firm in a capitalist economy: handloom weavers and technological change in western India, 1880-1947," in *Institutions and Economic Change in South Asia*, eds. Burton Stein and Sanjay Subrahmanyam (Delhi: Oxford University Press), 182.

artisan production and into agriculture for which they had few skills and of course little or no land of their own.

My research on the structure of textile production during the late 17th and 18th centuries examines the textile industry in its broadest dimensions, from commercial agriculture to spinning to warping and weaving to cloth finishing to textile markets and trade. By carefully examining the rich archival data on the labor, productivity, input costs, wages and profits for each stage of production and commerce, my research reveals a highly detailed view of textile production. When the textile industry is viewed in its full dimensions, the role of full-time professional artisans – particularly weavers – is demonstrably limited.

Table 1 is a description of the structure of labor and value contributed to the production and trade of common export quality coarse and middling plain textile varieties – like salampuris, long cloths, guinee cloths, muris, bethilles, etc. – with thread counts between 40 and 80 threads per inch. These included both white and single colored cloths. Such cloths dominated textile exports and also reflected a significant portion of internal markets. Very coarse and fine cloths were produced by somewhat different production structures, though they were fundamentally similar. Patterned, printed and painted cloths required significant additional labor and raw materials contributed by dyers, painters and weavers. My analysis of rich primary sources, from both the late 17th and 18th centuries in Dutch and English East India Company archives, has produced very similar production structures across the early modern period.

Table 1. The structure of the early modern South Indian textile industry (1650-1800)⁵⁰

Industry Process	Participants	Gender	Labor	Percentage of	Percentage of	Percentage of
			Characterization	Total Laborers	Total Labor	Total Value
Commercial	Landed Cultivators			27-33%	24-30%	20-23%
Agriculture	Landless Laborers					
Plowing, Sowing		Male	Seasonal			
Weeding		Male and female	Seasonal			
Harvesting		Male and female	Seasonal			
Cotton Cleaning	Landed Cultivators	Female	Seasonal			2-3%
	Landless Laborers					
Cotton Transport	Cotton Merchants	Male	Seasonal	>1%	>1%	1-5%
	Pastoral Merchant-					
	Transporters					
Cotton Markets	Cotton Merchants	Male		>1%	>1%	1-4%
	Spinners	Female				
Spinning	Diverse Spinners	Female	Generally	50-60%	45-53%	38-43%
		(some male)	Part- time			
Thread Markets	Spinners	,		>1%	>1%	1-4%
	Weavers					
	Few Merchants					
Weaving	Weaver Households					
Warping		Female	Part-time	4-5%	7-11%	4-5%
Weaving labor		Male	Full-time	4-5%	9-11%	9-14%
Weaving profit						4-7%
Total Weaving hhld				8-10%	16-22%	18-26%
Finishing						
Washing/ Dyeing	Washer Households	Male and female	Full-time	1-1 1/20/0	1%	3-4%
Textile Markets	Cloth Merchants,			1%	>1%	5%+
	Brokers,					
	Head Weavers, Some					
	Weavers, Diverse					
	Consumers					

⁵⁰ Data summarized from Ian C. Wendt, "The Social Fabric: Textile Industry and Community in early modern South India" (Ph.D. diss., University of Wisconsin-Madison, 2005). Refer particularly to Tables 5.1, 5.2, 5.3, 5.4, pp.327-340.

Table 2. Summary of the structure of the early modern South Indian textile industry

	Percentage of Total	Percentage of Total	Percentage of Total
	Laborers	Labor	Value
Agrarian Household Labor	77+%	69+%	60-70%
Part-time or Seasonal Labor	80+%	75+%	65-75%
Professional, Full-time Labor	8-10%	12-15%	20+%
Commercial Household Labor	1-3%	1-2%	8+%
Female Labor	60+%	60+%	50-57%
Male Labor	35+%	35+%	43-50%

Agrarian and female labor constituted the majority of total laborers, total labor volume, and even total value added on virtually all plain cloths in the early modern period. These kinds of labor were largely part-time or seasonal, non-professional labor. Spinners in particular contributed the largest single portion of all labor and value to plain cloths $-\sim55\%$ of total laborers & $\sim40\%$ of the total labor percentage. Agrarian households which included cotton cultivators, cleaners, and most spinners constituted about 75% of all laborers and more than 65% of total labor percentage. Female labor composed up to 65% of all laborers and about 60% of total labor percentage in the textile industry as a whole. Interestingly this structure closely correlates to the structure of textile industry in late 18th century Bengal reported by the British in 1783. ⁵¹

By contrast weaving households composed just 10% of all textile industry households and contributed 20% of the total labor. All professional laborers, including weavers, washers, dyers and merchants composed only 12% of all households and 22% of the total labor.

⁵¹ K.N. Chaudhuri, "The Structure of Indian Industry in the Seventeenth and Eighteenth Centuries," *The Indian Economic and Social History Review* 9, nos. 2-3 (June-Sept 1974): 162-3.

In producing households, female producers – who picked, cleaned and spun cotton into thread, prepared the warp for the loom, and assisted in washing and dyeing – contributed between one third and one half of cash household income in all but the richest households.⁵² Because the textile industry was highly monetized and commercial, it enabled women in artisan and agrarian households to earn cash and contribute directly to household income across a wide segment of the early modern South Indian economy.

How does this alter our historical narrative about continuity and change, decline and de-industrialization? To answer that question we must first answer the basic question of how the structure of this textile industry changed over the course of the 19th century. Admittedly, my research on the 19th or early 20th century is much less detailed than the early modern period. Nevertheless, this knowledge of the early modern structure allows us to make some fundamental conclusions about the changes wrought by industrialization in South India. During the 19th century, the diffusion of mechanized processes for cotton cleaning, spinning, warping, weaving and dyeing was partial, halting and gradual.⁵³ But late 19th century and early 20th century sources clearly document the gradual spread and adoption of mechanized processes for cotton cleaning and spinning. Railway transport of cotton and the diffusion of cotton gins gradually replaced virtually all hand cotton cleaning. It is unclear how many spinners lost work. But decline in spinning was much more marked than decline of looms

⁵² See Wendt, "The Social Fabric," Table 5.5, 342.

English East India Company, Reports and Documents Connected with the Proceedings of the East India Company in Regard to the Culture and Manufacture of Cotton-wool, Raw Silk and Indigo in India (London: 1836), 238-247; Talboys Wheeler, Hand-book to the Cotton Cultivation in the Madras Presidency (Madras: Higginbotham and Pharoah and Co., 1862), 37, 57, 94-95.

and weavers. In 1906 the Coimbatore District Manual reported that cotton cleaners and spinners constituted barely 20% of total textile production, a significant fall from early modern levels.⁵⁴ Based on surveys of weavers during the 1890s, it is clear that many weavers in the Madras Presidency were using machine spun yarn from Madras, Madurai, Coimbatore, Bombay and elsewhere.⁵⁵ Weaver numbers showed significant continuity throughout the 19th century. Weavers were constantly observed as the most important non-agrarian segment of the economy in the late 19th century, though their economic and social circumstances had often fallen markedly.⁵⁶

Cotton cleaning and spinning were largely agrarian and female labor. Thus the result of 19th century industrialization was the gradual replacement of female and agrarian laborers. Even within the weaving process, warping machines were in use in large weaving centers in South India long before mechanized weaving became a factor.⁵⁷ Once again, female labor was replaced first.

At the stage of cloth finishing, late 19th century weavers also described the adoption of synthetic aniline dyes and the purchase of synthetically dyed thread. Synthetic dyes had

⁵⁴ F.A. Nicholson, *Madras District Manuals: Coimbatore*, vol. 2, (Madras: Government Press, 1906), 162.

⁵⁵ Edgar Thurston, Monograph on the Cotton Fabric Industry of the Madras Presidency (Madras: Government Press 1897), 8; W. Francis, Madras District Gazetteers: South Arcot (Madras: Government Press, 1906), 156; Nicholson, Coimbatore Manual, 160-162; C.F. Brackenbury, Madras District Gazetteers: Cuddapah, vol. 1, (Madras: Government Press, 1915), 61, 109; Pate, Tinnevelly Gazetteer, 162-163, 211-213.

⁵⁶ F.R. Hemingway, *Madras District Gazetteers: Tanjore*, vol. 1, (Madras: Government Press, 1906), 122-3; W. Francis, *Madras District Gazetteers: Bellary*, vol. 1, (Madras: Government Press, 1916), 110.

⁵⁷ F.J. Richards, *Madras District Gazetteers: Salem*, vol. 1 part 1, (Madras: Government Press, 1918), 267-268.

become of comparable quality to vegetable dyes, and they were cheaper and simpler to use. Synthetic dyes were imported from Europe, particularly Germany.⁵⁸ This additional level of industrialization served to limit the range of specialization in the industry by eliminating many dyeing activities as a separate specialized stage of production.

In addition, all of these forms of industrialization – railway transport of cotton, mechanized cotton cleaning and spinning (and warping), and the import of synthetic dyes – served to sever the repeated ties between agrarian and artisan communities. Agrarian laborers were eliminated from the textile industry. Cotton transport and trade shifted from rural markets to urban centralized distribution along a rail infrastructure. Instead of buying thread from agrarian spinners, weavers bought it from urban markets or received it from merchants as an advance. Instead of purchasing vegetable dyes from commercial crop producers, weavers and dyers purchased mineral dyes in urban markets.

Therefore, rather than the agrarianization of the major portion of the professional textile industry (as described in de-industrialization), the 19th century processes of industrialization in South India brought about the masculinization/ de-feminization, urbanization/ deagrarianization, the professionalization and the elimination of much seasonal and part-time labor in the modern textile industry. Indeed, the characterizations of the handicraft textile industry as male, professional and full-time seem to date more from the late 19th and early 20th centuries than from any previous time.

⁵⁸ Edwin Holder, Monograph on Dyes & Dyeing in the Madras Presidency (Madras: Government Press, 1896), 1; Edgar Thurston, Monograph on the Cotton Fabric, 4-8.

In conclusion, our failure to understand the true shape and size of the textile industry has led us to mischaracterize the results of industrialization. The textile industry did not disappear and push weavers into agriculture en mass. Rather, the textile industry eliminated the labor of female and agrarian laborers. This transition affected a much larger number of households and laborers than the relative decline in weavers or looms. We do not yet know how these large numbers of female and agrarian producers responded. But it may have had profound consequences on the modern Indian economy.

Was this de-industrialization? I would argue that it was not. The larger demographic processes within the textile industry as a whole seem more consistent with industrialization and mechanization processes in many parts of the world. Certainly imperial economic exploitation exacerbated its negative effects while limiting other forms of growth. But to reiterate, this transition was a process of de-agrarianization and urbanization of production relations, not the agrarianization of professional artisans. This research contributes to a scholarship that recognizes that industrialization in South Asia was a complex process that resulted in mixed handicraft-machine industries that are in many ways unique to the history of South Asia.

Was this decline? Industrialization is a complex process everywhere in the world. It was and continues to be a disruptive transition in terms of labor, productivity, economic organization, capital accumulation, and technological diffusion. We have seen that the historiographies of different regions of the world have subjectively evaluated industrialization in many ways. Should we judge the diminution of handicraft weaver or

spinner or cotton cleaner labor in India to be fundamentally negative? Should we laud the continuity of handloom weaving and handicraft motifs and techniques that survive into the 21st century? To answer these questions is to make value judgments about the nature of continuity and change. Clearly many artisan and trading professionals and their households experienced loss of labor and income through the processes of 19th century industrialization in South Asia. The loss of labor and wages was much more marked for part-time, female and agrarian textile producers like cotton cleaners or spinners. Yet, in comparison to handicraft textile traditions elsewhere in Asia, the continuities in India are remarkable. Most important, perhaps, is the need to remember the agency of all of these producers and merchants. They struggled, sometimes painfully, and lost much. But their communities and their textile traditions have survived, which suggests that their labor, protests and continuing adaptations had real power.

Bibliography

India

- Arasaratnam, Sinnappah. "Weavers, Merchants and Company: The Handloom Industry in Southeastern India in 1750-1790." *Indian Economic and Social History Review* 17, no. 3 (1978): 257-281.
- Arasaratnam, Sinnappah. Maritime Commerce and English Power: Southeast India, 1750-1800. New Delhi: Variorum, 1996.
- Bayly, C. A. "The Origins of Swadeshi (Home Industry): Cloth and Indian Society, 1700-1930." In The Social Life of Things. Commodities in Cultural Perspective, ed. Arjun Appadurai, 285-321. Cambridge: 1986.
- Brennig, Joseph Jerome. "Textile Producers and Production in Late Seventeenth-Century Coromandel." *Indian Economic and Social History Review* 23, no. 4 (1986): 333-356.
- Brennig, Joseph Jerome. "The Textile Trade of Seventeenth-Century Northern Coromandel: a Study of a Pre-Modern Asian Export Industry." Ph.D. diss., University of Wisconsin—Madison, 1975.
- Chandra, Shoma. "Textile Production in Bengal: A Case Study of Dinajpur: 1793-1813," Bengal Past and Present 110, 1-2 (1991): 50-74.
- Chaudhuri, K.N. "The Structure of Indian Industry in the Seventeenth and Eighteenth Centuries." *The Indian Economic and Social History Review* 9, nos. 2-3 (June-Sept 1974): 127-182.
- Chaudhuri, Sushil and Michel Morineau. *Merchants, Companies and Trade: Europe and Asia in the Early Modern Era.* Cambridge: Cambridge University Press, 1999.
- Chaudhuri, Sushil. "International Trade in Bengal Silk and The Comparative Role of Asians and Europeans, c. 1700-1757." *Modern Asian Studies* 29, 2 (1995): 373-386.
- Das Gupta, Ashin. "The Merchants of Surat, c.1700-50." In *Elites of South Asia*, ed. Edmund Leach and S. N. Mukherjee, 201-222. Cambridge: Cambridge University Press, 1970
- Desai, Meghnad. "Demand for Cotton Textiles in Nineteenth Century India," *The Indian Economic and Social History Review* 8, 4 (1971-1972): 337-361.
- Dewey, Clive, ed. Arrested Development in India: The Historical Dimension. New Delhi: Manohar, 1988.
- Hossain, Hameeda. "The Alienation of Weavers: Impact of Conflict between Revenue and Commercial Interests of the East India Company, 1750-1800," *The Indian Economic and Social History Review*, 16, 3 (1979): 323-345.
- Krishnamurty, J. "Handicrafts in the Indian Economy: A Study of the Handloom Industry from 1800," In *Imperialism, Nationalism and Regionalism in Canadian and Modern Indian History*, Aprana Basu ed., 133-145. New Delhi: Manohar, 1989.

- Kumar, Dharma, ed. *The Cambridge Economic History of India, vol 2: c.1757-c.1970.* Cambridge: Cambridge University Press, 1983.
- Mazumdar, D. "Labour Supply in Early Industrialization: the Case of the Bombay Textile Industry," *Economic History Review* 26, 3 (1973): 477-496.
- Mukund, Kanakalatha. The Trading World of the Tamil Merchant: Evolution of Merchant Capitalism in the Coromandel. Hyderabad: Orient Longman, 1999.
- Mukund, Kanakalatha and B. Syama Sundari. *Traditional Industry in the New Market Economy:* The Cotton Handlooms of Andhra Pradesh. New Delhi: Sage Publications, 2001.
- Parthasarathi, Prasannan. The Transition to a Colonial Economy: Weavers, Merchants and Kings in South India, 1720-1800. Cambridge: Cambridge University Press, 2001.
- Parthasarathi, Prasannan. "Merchants and the Rise of Colonialism," in *Institutions and Economic Change in South Asia*. Ed. Burton Stein and Sanjay Subrahmanyam. Delhi: Oxford University Press, 1996
- Pearson, M. N. and I. B. Watson ed. "Asia and Europe. Commerce, Colonialism and Cultures: Essays in honour of Sinnappah Arasaratnam," in *South Asia: Journal of South Asian Studies* 19 (Special Issue 1996).
- Perlin, Frank. "Proto-industrialization and Pre-colonial South Asia." *Past and Present* 98 (1983): 30-95.
- Prakash, Om. "On Estimating the Employment Implications of European Trade for the Eighteenth Century Bengal Textile Industry—A Reply." *Modern Asian Studies* 27, 2 (1993): 341-356.
- Ramaswamy, Vijaya. Textiles and Weavers in Medieval South India. Delhi: Oxford University Press, 1985.
- Ramaswamy, Vijaya. "The Genesis and Historical Role of the Masterweavers in South Indian Textile Production." *Journal of Economic and Social History of the Orient* 28 (1983): 294-325.
- Raychaudhuri, Tapan and Irfan Habib, eds. *The Cambridge Economic History of India, vol 1:* c.1200-c.1750. Cambridge: Cambridge University Press, 1982.
- Raychaudhuri, Tapan. *Jan Company in Coromandel 1605-1690*. The Hague: Martinus Nijhoff, 1962.
- Raychaudhuri, Tapan. "Some Patterns of Economic Organization and Activity in Seventeenth Century India." *International Conference on Economic History*. (Paris: Mouton and Co., 1962): 751-760.
- Roy, Tirthankar. *Traditional Industry in the Economy of Colonial India*. Cambridge: Cambridge University Press, 1999.
- Roy, Tirthankar, ed. *Cloth and Commerce: Textiles in Colonial India*. London: Sage Publications Ltd., 1996.
- Sinha, A. K. Transition in Textile Industry: A History of Textile Industry in Bihar, 1783-1833. Delhi: Capital Publishing House, 1984.
- Specker, Konrad. "Madras Handlooms in the Nineteenth Century." *The Indian Economic and Social History Review* 26, no. 2 (1989): 131-166.

- Stein, Burton and Sanjay Subrahmanyam, eds. *Institutions and Economic Change in South Asia*. Delhi: Oxford University Press, 1996.
- Subramanyam, Sanjay. "Rural Industry and Commercial Agriculture in Late Seventeenth Century South-eastern India." *Past and Present* 126 (1990): 76-114.
- Subrahmanyam, Sanjay and C.A. Bayly, "Portfolio Capitalists and the political economy of early modern India," *The Indian Economic and Social History Review* 25, 4 (1988), 401-24.
- Sudhir, P. and P. Swarnalatha. "Textile traders and territorial imperatives: Masulipatnam, 1750-1850," *The Indian Economic and Social History Review* 29, 2 (1992): 145-169.
- Swarnalatha, Potukuchi. "The World of the Weaver in the Northern Coromandel, 1750-1850." Ph.D. diss., University of Hyderabad, June 1991.
- Twomey, Michael J. "Employment in Nineteenth Century Indian Textiles," *Explorations in Economic History* 20 (1983): 37-57.
- Washbrook, David. "Land and Labour in Late Eighteenth Century South India: The Golden Age of the Pariah?" In *Dalit Movements and the Meanings of Labour in India*, ed. Peter Robb, 68-86. Delhi: Oxford University Press, 1993.
- Wendt, Ian C. "The Social Fabric: Textile Industry and Community in Early Modern South India." PhD. Diss., University of Wisconsin Madison, 2005.

Japan

- Hayami, Akira, et. al., ed. *Economic History of Japan, vol 1., Emergence of Economic Society in Japan, 1600-1859.* New York: Oxford University Press, 2004.
- Howell, David L. "Proto-Industrial Origins of Japanese Capitalism," in *The Japanese Economy in the Tokugawa Era, 1600-1868*, ed. Smitka, Michael, (113-130). New York: Garland, 1998.
- Nakaoka, Tetsuro, et. al. "The Textile History of Nishijin (Kyoto): East Meets West," *Textile History* 19, 2 (1988): 117-42.
- Smitka, Michael, ed. *The Japanese Economy in the Tokugawa Era, 1600-1868*. New York: Garland, 1998.
- Smitka, Michael, ed. The Textile Industry and the Rise of the Japanese Economy. New York: Garland, 1998.
- Tanimoto, Masayuki. "The Evolution of Indigenous Cotton Textile Manufacture before and after the Opening of the Ports," *Japanese Yearbook on Business History* 9 (1992): 29-56.
- Toby, Ronald P. "Both a Borrower and a Lender Be: From Village Moneylender to Rural Banker in the Tempo Era," in *The Japanese Economy in the Tokugawa Era, 1600-1868*, ed. Smitka, Michael, (325-354). New York: Garland, 1998.
- Uchida, Hoshimi. "Narrow Cotton Stripes and their Substitutes: Fashion, Technical Progress and Manufacturing Organization in Japanese Popular Clothing, 1850-1920," *Textile History* 19, 2 (1988): 159-70.

Southeast Asia

- Andaya, Barbara Watson. To Live As Brothers: Southeast Sumatra in the Seventeenth and Eighteenth Centuries. Honolulu: University of Hawaii Press, 1993.
- Andaya, Barbara Watson. "The Cloth Trade in Jambi and Palembang Society during the Seventeenth and Eighteenth Centuries." *Indonesia* 49 (1989): 27-46.
- Arasaratnam, Sinnappah. "The Chulia Muslim Merchants on Southeast Asia, 1650-1800." In *Merchant Networks in the Early Modern World*, ed. Sanjay Subrahmanyam, 159-177. Brookfield: Ashgate Publishers, 1997.
- Bowie, Katherine A. "Unraveling the Myth of the Subsistence Economy: Textile Production in Nineteenth Century Northern Thailand," *The Journal of Asian Studies* 51, 4 (1992): 797-823.
- Conway, Susan. Thai Textiles. London: British Museum Press, 1992.
- Gillow, John. Traditional Indonesian Textiles. London: Thames and Hudson, 1992.
- Gittinger, Mattiebelle and H. Leedom Lefferts, jr. *Textiles and the Tai Experience in Southeast Asia*. Washington, D.C.: The Textile Museum, 1992.
- Gittinger, Mattiebelle, ed. *To Speak with Cloth: Studies in Indonesian Textiles.* Los Angeles: Museum of Cultural History, 1989.
- Hall, Kenneth R. "The Textile Industry in Southeast Asia, 1400-1800." *Journal of the Economic and Social History of the Orient* 39, 2 (1996): 88-135.
- Hamilton, Roy W., ed. From the Rainbow's Varied Hue: Textiles of the Southern Philippines. Los Angeles: UCLA Fowler Museum of Cultural History, 1998.
- Hammes, Carrie. Traditional Javanese Batiks: Their Symbolism and Relationship to Javanese Culture. Madison: University of Wisconsin—Madison, 1979.
- Hauser-Schäublin, Britta, Marie-Louise Nabholz-Kartaschoff and Urs Ramseyer. *Balinese Textiles*. London: British Museum Press, 1991.
- Kerlogue, Fiona. "The Early English Textile Trade in South-East Asia: The East India Company Factory and the Textile Trade in Jambi, Sumatra, 1615-1682," *Textile History* 28, 2 (1997): 149-160.
- Knaap, Gerrit J. Shallow Waters, Rising Tide: Shipping and Trade in Java Around 1775. Leiden: KITLV Press, 1996.
- Leur, J. C. van. *Indonesian Trade and Society*. The Hague: W. van Hoeve Ltd., 1955.
- Matsuo, Hiroshi. *The Development of Javanese Cotton Industry*. Tokyo: The Institute of Developing Economies, 1970.
- Maxwell, Robyn. Textiles of Southeast Asia: Tradition, Trade and Transformation. Melbourne: Oxford University Press Australia, 1990.
- McCoy, Alfred W. and Ed. C. de Jesus, ed. *Philippine Social History: Global Trade and Local Transformations*. Honolulu: University of Hawaii Press, 1982.

- Milgram, Lynne and Penny Van Esterik, ed. *The Transformative Power of Cloth in Southeast Asia*. Toronto: Canadian Council for Southeast Asian Studies, 1994.
- Nabholz-Kartaschoff, Marie-Louise. "The Same—Yet Not The Same: Similarities and Differences in Some Textile Techniques and Textile Products from India and Bali," *Textile History* 30, 1 (1999): 46-68.
- Niessen, S. A. *Motifs of Life in Toba Batak Texts and Textiles*. Dordrecht-Holland, Foris Publications, 1985.
- Reid, Anthony, ed. The Last Stand of Asian Autonomies. New York: St. Martin's Press, 1997.
- Reid, Anthony, Southeast Asia in the Age of Commerce: 1450-1680, 2 vols. New Haven: Yale University Press, 1988.
- Tarling, Nicholas, ed. *The Cambridge History of Southeast Asia*, vol. 1, part 1 & 2. Cambridge: Cambridge University Press, 1999.