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SKILL, CRAFT, AND HISTORIES OF INDUSTRIALIZATION IN EUROPE AND
ASIA*

By Maxine Berg

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ABSTRACT It is time to re-examine craft and small scale manufacture within our histories of industrialization, both West and East, and to reflect on the long survival and adaptation of artisanal production even within our globalized world of production and consumption. Historians since the 1950s have addressed craft, skill and labour-intensive production in historical frameworks such as ‘the rise of the factory system,’ ‘proto-industrialization’ and ‘flexible specialization’. More recently they have devised other concepts which include labour and skill-intensive production such as ‘industrious revolution’, ‘the great divergence’, ‘knowledge economies’, ‘East-Asian development paths’ and ‘cycles of production’. This article surveys this historiography of craft and skill in models of industrialization. It then reflects on small scale industrial structures in current globalization, emphasising the continued significance of craft and skill over a long history of global transitions. It gives close examination to one region, Gujarat, and its recent industrial and global history. The article compares industrial production for East India Company trade in the eighteenth century to the recent engagement of the artisans of the Kachchh district of Gujarat in global markets. It draws on the oral histories of seventy-five artisan families to discuss the past and future of craft and skill in the industry of the global economy.

1. Introduction

Today a global story of industry and manufacturing presents us, on the one hand, with China’s huge factory regions where whole cities manufacture buttons or zips, or, on the other, with unregulated clothing factories such as Bangladesh’s, feeding the cheap clothing consumer cultures of the West. When I wrote my first book, *The Machinery Question*, manufacture was perceived as a history of factories and machinery.¹ Its depiction in the early nineteenth century was not so different, but included the role of sweated labour. Cruikshank’s ‘A Tremendous Sacrifice’ showed cheap female labour being ground up in a mill, while women in shopping emporia not so far away declared ‘I don’t know how they can

possibly make them so cheap'. What came before this factory labour was assumed to be craft and artisan manufacture with some household domestic industry.

It is time to re-examine craft and small scale manufacture within our histories of industrialization, both West and East, and to reflect on the long survival and adaptation of artisanal production even within our globalized world of production and consumption. Historians since the 1950s addressed craft, skill and labour-intensive processes within frameworks such as 'the rise of the factory system', 'proto-industrialization', flexible specialization'. More recently they have devised concepts such as industrious revolution, the 'great divergence', knowledge economies, East-Asian development paths and cycles of production. These frameworks have, in some cases, charted stages by which skilled labour arose, flourished, declined and disappeared; in others they have found conditions under which alternatives to large-scale mass production seemed viable for a time; in yet other frameworks we see a role assigned to craft labour undermined,

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yet subsequently to re-emerge in changing market conditions. Whatever the frameworks of our analysis, there is also an empirical point. The crafts and skilled labour have survived over our long world history of industrialization and global transitions. They challenge our models of industrialization; they have survived, as we will see from the oral history accounts in the later part of the paper because they have innovated and adapted to new markets.

The rise of globalization from the 1990s demanded we turn to the resurgence of Asia as a manufacturing power house as we watched manufacturing in Europe and the US decline. It also demanded that we rethink our own histories of industrialization – they were not a separate European miracle, but connected to wider world trade and Asian industry. Existing alongside and connecting with the large-scale factory sectors in East, South and Southeast Asia is an extensive domestic, small-scale and craft sector. This runs against the grain of the modernization theories and theories of industrialization of many of the twentieth-century theories which placed industrialization in the factory system, with an output directed at standard and mass products.

Commented [IA1]: I am not sure whether we should render this as South-East throughout.

In the later twentieth century many historical theories frame debate on this alternation between factories and small-scale production along with the technologies which fostered this. But few have addressed this within a global history framework. Such an approach will also help us to understand present day characteristics of manufacture in the framework of globalization.

Skill, craft, small-scale and labour-intensive processes inform the different histories of industrialization in Europe and Asia. Comparing these theories provides a first stage in raising new questions from global history. Empirical investigation based on historical theories, especially those of proto-industrialization, flexible specialization, and industrious revolution showed multiple paths or outcomes; they became regional theories. Does comparison with histories of Asian industrialization also reveal such multiple and regional outcomes? Can global history frameworks change our perspectives? Can we draw parallels between the impact of globalization now on skilled craft workers and small scale manufacture and the impact of global trade in the past?

Drawing on the methods of global history directed at a 'different scale', 'a different point of view', I consider a region, Gujarat and Kutch, within its global setting.² This region of long-standing skilled artisan manufacture in India contains many such skilled manufacturers today engaging with the new challenges of globalization. Oral histories of these craftspeople allows insight into their sense of place in the long manufacturing history of their region, and also the opportunities they see in the impact of globalization on this place. The regional approach both links us to the deep history of manufacture for global trade in a specific place; it also allows us to engage with the complex experience of globalization on small scale manufacture in the region today.

2. *Global economic history, industry and the 'great divergence'*

Global history which most directly emerged ten years ago with the debate on the 'great divergence' between China and Europe strikingly avoided the contrasting paths of technology and industry between East and West. Pomeranz's explanation for divergent paths of economic development which he dated from the eighteenth century lay instead in Europe's advantages in resources and geography: coal and the ghost acres of colonial and New World territories.³ More recently, technology, small-scale industry and industrialization have been central to historians debating wage differences between East and West. They have charted the great decline in the share of world manufacturing produced by India and China in the eighteenth century, and its resurgence since the 1980s. Robert Allen has argued that high real wages in the West spurred the way to mechanisation.⁴ Low real wages in India and China, and the high capital costs of mechanisation account for the slow rate at which they have adopted Western technologies of the twenty-first century.⁵ Parthasarathi challenged the evidence for low real wages in India and argued that the key divide between East and West in the eighteenth century was not based on ecology, but on technology. It was not high wages, but the need to out-produce not just the quantity, but the quality of Indian textiles

which prompted the innovative activities of British cotton producers, and subsequently mechanisation and the factory system.⁶

Other histories of an ‘East-Asian development path’ highlighted the space for small-scale and labour intensive technologies, one which accords with the labour and resource endowments of Japan and much of East Asia. Large populations and relatively small amounts of land entail a focus on increasing land productivity. This yields labour-intensive technologies and labour-absorbing institutions in agriculture and proto-industry. Labour-intensive industrialization in Japan was also followed by China in the interwar period and by other South East Asian countries after [the Second World War](#)⁷.

Recent globalization has brought to the fore new consideration of the different trajectories of manufacture in the East and the West. It has also brought new attention to knowledge economies, the role of specific skills and the networks and nodes for fostering these. How did these issues of skill, scale and craft feature in our earlier histories of industrialization, in the West and the East, and how has globalization changed our perspectives?

2. The Transition from Feudalism to Capitalism

The long-standing debate on the transition from feudalism to capitalism sought a clear pathway through stages of economic transition to an ultimate goal of industrialization. Industrialization was associated with modernization, both with high capital intensity and the shift to the factory system. A dynamic capital-intensive and mechanized factory sector contrasted with old unchanging pre-industrial handicrafts. These assumptions about the characteristics of industrialization were common to liberal and Marxist approaches. Rostow and Kuznets, writing their broad comparative studies of economic growth and productivity change, showed little interest in small-scale production and labour-intensive technologies.⁸

Rostow gave priority to high capital investment, leading sectors and rapid and fundamental transitions.⁹ David Landes whose text on European industrialization, *The Unbound Prometheus* dominated historical interpretation from the 1960s through the 1980s, defined industrialization as the transformation of handicraft to modern industry. This meant the factory, a new system of production which created a 'new breed of worker.'¹⁰

The Marxist perspective on the transition to capitalism became a debate on the 'rise of the factory system' and subsequently on the labour process under capitalism.¹¹ The factory system arose, according to these theories, as a means of controlling labour, and extracting the highest labour power and labour productivity. Stephen Marglin's 'What do Bosses Do?' set an agenda focussed on a clear divide between traditional artisan, guild-controlled manufacture or rural labour-intensive domestic manufacture on the one hand and capitalist-controlled factory production on the other.¹² Marxist historians associated the rise of the working class with the rise of the factory.

A turning from the 1970s to what Cannadine termed a 'limits to growth' perspective on the Industrial Revolution also entailed more research on the longer taproots of industrialization, and into the complexities of the transition from feudalism to capitalism. Among these were novel and distinctive features of manufacture as trade expanded. A new debate on 'proto-industrialization' focussed on small-scale domestic industry, the spread of rural manufacture, and especially export-orientated industry. Analysis of mixed agricultural and industrial occupations, of the division of labour, and of advanced putting out systems that yielded a surplus for merchant manufacturers appeared to offer a possible path to industrialization.¹³ While the debate focussed to a great extent on the demographic consequences of different regimes of proto-industry, regional studies revealed no clear results over paths to industrialization.¹⁴

The theories of proto-industrialization like those of the ‘rise of the factory system’ which had gone before were teleological. Indeed after nearly two decades of case studies, Schlumbohm argued, there was nothing definite in research findings up to 2000 to support a history of industrialization as a great line of development from dispersed small scale manufacture to more centralized and mechanized production? ‘Is it more appropriate’ asked Schlumbohm, ‘to speak of a series of cyclical fluctuations between centralized and de-centralized – and between smaller-scale and larger-scale production?’¹⁵

While much research on proto-industrialization was focussed on Europe, the model also prompted historians of China, India and Japan to look at their labour-intensive industrial history in new ways. Most of this research, like that on Europe, however, remained focussed on specific regions within national historical frameworks. India’s experience of colonialism drove some of her historians, such as Frank Perlin to investigate connections between India’s commercial manufacture in the seventeenth and eighteenth centuries to European developments. He compared manufactures in Bengal and the Coromandel coast to those described by Arnöst Klima in Bohemia. In both places Dutch and English merchants penetrated textile regions, controlling markets and production networks, and gaining greater supervisory control over spinners and weavers. He showed us how that phase of protoindustrialization was entangled in large-scale inter-regional connections and world commerce.¹⁶

3. Consumer Cultures

The wide spread of proto-industrial manufacture across northwest Europe entailed new labour supplies dependent on a restructuring of the family division of labour. Women and children committed more of their time to the production of manufactured goods for the market, and less for household services and production. This became the ‘industrious

revolution' which Jan de Vries linked to the stimulus of new consumer demand for goods from outside the region. These novelties, luxuries, fashionable and addictive goods changed consumer and household practices, on the one hand yielding a large labour force for labour-intensive handicraft production, and on the other spreading new cultural and social practices from coffee house and tea culture to rapidly-changing dress fashions through the lives of ordinary people. In Northwest Europe such 'industriousness' coincided with a newly available global trade in New World and Asian foodstuffs and luxury goods.¹⁷ In Japan such an industrious revolution occurred without such a wide expansion of foreign trade; indeed many such new consumer goods were internally generated, what Eric Jones called 'clever, inventive commodities'.¹⁸

Much of the historiography of 'industrious revolutions' has focussed on household behaviour and demand, the commercial and capitalist social environment in which people used their goods. A parallel historiography on the supply of new products and fashion goods explored dynamic craft and design-intensive economies. My own work on smaller-scale industries, especially in the metal trades investigated product innovation and new technologies developed to underpin these. A dynamic small-scale and skill-intensive sector developed in the metal trades and many other industries alongside the rise of the factory system in some parts of the textile industry.¹⁹ Equally, the fashion economies developed from the later seventeenth century in the textile and other industries were design-intensive, and developed sectors of enhanced skills. France's workshop and artisan-produced silks, printed cottons and fine woollen goods outcompeted Britain's on quality and fashion.²⁰

4. Flexible Specialization

Some of Europe's and North America's regions, like the Lyon silk region, had strongly-embedded nodes of crafts and skills. These yielded many externalities, and such regions seemed for sociologists and historians of the 1980s to offer an alternative historical path to the large factories and mass production which seemed at the time to have had their day as new technologies offering dispersed units connected by ICT and 'just-in-time solutions' came on stream. Current possibilities then for small-scale units deploying flexible skills stimulated a new historical investigation of potentials offered in the past for small-scale production.

Debate first centred on the persistence of small firms; they were clearly evidence of 'industrial dualism', where craft sectors and small units of production responded to surges of demand or provided the varieties tacked onto main production lines. But, asked Piore, Sabel and Zeitlin, had there once been and indeed was there still a real possibility of a craft alternative to mass production? To answer this question they sought out industrial districts – such as Emilia-Romagna – which appeared to offer an alternative of a dynamic region of many small producers.²¹

Their historical enquiries turned to the Lyon silk and hardware industries; to cutlery and specialty steels in Solingen, Remscheid and Sheffield; to calicoes in Alsace, woollens in Roubaix, textiles in Philadelphia. These small scale producers had used multi-purpose machines and skilled labour to make a changing assortment of semi-customised products. Their eventual decline, these historical sociologists argued, was not due to their model of technological development, but to political, institutional and economic factors.

The backdrop for these histories was a utopian vision during the 1980s of alternative economic development, based in regions, in co-operative institutions and small in scale. The widespread transfers of industrial production back to South East and South Asia, Turkey and

Latin America with the onset of globalization swept away the prospects for many of these vaunted European specialist manufacturing regions. A corresponding sociological investigation also in the 1980s of 'the new international division of labour' found a new phase beyond centralized factory processes in a subdivision of production processes between parts of the developed and less developed world. Transport and communications improvements created the conditions for a new de-centralization of production on an altogether different spatial scale than in the past.²²

5. Skill and Knowledge Economies

The skill nodes and regions highlighted in the debates over flexible specialization led into new questions focussed on 'knowledge economies'. Not just labour, but skills have returned to a central place in discussion of industrialization. Skill and the 'tacit knowledge' underlying it have been central to the concept of 'useful knowledge' as developed by Joel Mokyr.²³ 'Local knowledge' and 'nodes of craft skill' were vital to the artisans that the late Larry Epstein followed across Europe as they carried and reconfigured knowledge sets, and brought technological leadership to new regions of early modern Europe.²⁴

The turning of European historians in recent years to such knowledge economies also raised this as an issue in the divergence debate. Both Epstein and Mokyr claimed that adaptable skills and technological innovation were what the West had and Asia did not. Prasannan Parthasarathi, Tirthankar Roy and David Washbrook debated the extent and direction of an Indian dynamic culture of technical knowledge.²⁵ Sugihara contrasted an East Asian Development path, innovative in its intensive use of labour with resource and energy-saving techniques with the West's capital and resource-intensive path.²⁶ Studies in comparative economic development assessed the rapid manufacturing development in parts of East Asia, South and Southeast Asia, Latin America and Turkey against the historical

backdrop of France's path of economic development in the nineteenth-century, to emphasize niche markets, mid-range technological innovation and manufacturing experience.²⁷

6. *Craft and Small-Scale Manufacture in East Asia and India*

The East-Asian development path, as historicized by Sugihara for Japan, the Lower Yangzi, and other parts of East Asia focuses on resources and energy-saving, labour-intensive adaptations of Western technologies and labour absorption possibilities in different organizational forms of manufacture. This was also a path that described the development of mid-range labour-intensive technologies in South East Asia during the later decades of the twentieth century, technologies described in the new international division of labour.

Some economic historians have seen these innovative labour-intensive processes as temporary expedients. Summed up by Robert Allen, they describe a history of increasing employment relative to capital in a low-wage economy to cut costs. And the real industrialization of Japan took place in the steel mills and automobile factories whose exports to the US soon led to the collapse of the US steel and car industries.²⁸

The historiography of small scale manufacture in India's economic history stands apart from this East Asian historiography of labour-intensive development paths and dual economies. For much of the debate on craft and small-scale industry in India's history arises out of the framework of the history of colonialism. Craft has been a key issue of national identity, and lies at the heart of a longstanding debate on India's 'de-industrialization.' Abigail McGowan's, *Crafting the Nation in Colonial India* (2009) and Douglas Haynes' *Small Town Capitalism in Western India* (2012) outline how artisans became a political symbol of India's fate under colonialism. British colonizers perceived them as indicators of India's economic backwardness. The British and other Europeans also collected India's unique and beautiful products for museum collections that orientalised not just the goods, but

the artisans themselves. The discourses ossified and homogenized widely geographically dispersed and very distinctive groups of artisans.²⁹

Equally, the nationalists in their turn, saw craft producers as a trope for the self-sufficient society that they thought India had once been before the disruption of colonialism and industrialization. These historical perspectives were as utopian as were those of the flexible specialists; in this case the artisan and her craft represented autonomy. The discourses also informed the writing of Indian economic history for the generations after Independence as economic historians of India debated the de-industrialization thesis.³⁰

The strongest statements on the decline of artisan and small-scale industry in India were offered by A.K. Bagchi in his paper, 'De-industrialization in Gangetic Bihar 1809-1901', where he compared data on craft employment in some Bihar districts in Buchanan's surveys of the 1820s with data in the 1901 Census. He found a contraction of the craft population of these districts from 18.6% to 8.5%. Irfan Habib's extended review of the *Cambridge Economic History of India* added to this that as early as 1837 Indian textile cloth exports had been eliminated, and English imports had replaced c. 6 per cent of Indian cloth production.³¹ Parthasarathi drawing on Sujit Sarkar places the strong consensus in much Indian history over the great decline in Indian handicraft production with the context of the Left-Nationalist-Marxist consensus in Indian middle class intellectual life over this period.³²

Recent research has certainly challenged this consensus; small producers have continued as a major feature of industrial production right across India over the whole period from 1870. Tirthankar Roy's study, *Traditional Industry in the Economy of Colonial India* (1999) focused on the late colonial period, and covered broader areas of India over the period 1870-1930. In the period since 1947 small-scale industrial production increased its share of waged employment; indeed there was staggering growth in the towns and informal industrial

labour in the crafts he studied: handloom weaving, gold thread, brassware, leather, glassware and carpets.³³ Roy concluded that artisan industry 'has not just survived, but shaped the character of industrialization both in colonial and post-colonial India.'³⁴

Some of India's historians writing in the 1980s were already challenging the extent and finality of the decline of craft industry. Raj Chandavarkar's 'Industrialization in India before 1947' argued that though there was general agreement on the decline of handicraft industries from the nineteenth century, this decline was uneven, and handloom weaving expanded in areas such as Tamil Nadu from the later nineteenth century. Indeed forms of industry that seemed traditional survived and adapted. Some non-factory forms to be found in the jute industry showed dynamism and innovation between the 1830s and 1880s.³⁵ It was only with this discussion that debate moved on from assumptions of a technologically-static craft sector undermined by colonialism, or facing extinction in face of new factory mechanized processes. Chandavarkar investigated processes of diversification in cotton textiles, and investment strategies as a hedge in uncertainties of trade. There were many common features between the formal and the informal sectors. They often produced similar products, made use of labour-intensive techniques and responded to market fluctuations to set output levels.³⁶

Chandavarkar writing in the early 1990s of the rise of the factory system in Bombay contrasted what he saw as a Marxist analysis of the rise of the working class in Britain as a trajectory from small peasant to factory proletarian with the complexities of India. India's history of differentiation of the peasantry, the expansion, decline and stabilization of artisanal industry interconnected with the emergence of factory production.³⁷ His analysis of dynamism in the informal sector and rigidities and undercapitalization in the factory sector in early twentieth-century India ran parallel to new histories of European industrialization focussing on the alternative pathways of flexible specialization. The regions of Europe that

were crucial for flexible pathways and local knowledge economies had their parallels in India, as conveyed in Chandavarkar's 1990s history of Bombay's industry, and Douglas Haynes' recent study of Surat and Gujarat.

7. Bombay and Gujarat

What Chandavarkar found for Bombay and Haynes for Gujarat was a history of cycles of industrial production, production passing into and out of factories, workshops and domestic production as world and domestic markets changed. Investment strategies kept all these organizational forms in play. Early twentieth-century Bombay held little distinction between formal and informal sectors of industry. Smaller enterprises in some industries were more capital-intensive than the cotton factories which used a great deal of labour-intensive technology. The interwar years saw a steady expansion of small industrial units; indeed a whole range of these serviced the textile industry. Engineering, dyeing and printing processes using chemical works, leather works supplying bands and belts for machines, and woodworking factories manufacturing spindles and bobbins underpinned the textile factories. There was, furthermore, a whole host of 'craft industries' and artisanal workshops, handloom-weaving, silkweaving, dyeing and printing, wire, tinsel and kincob workers, brassworkers, blacksmiths and potters, goldsmiths and jewellers.³⁸

The cotton industry, especially its factory sector expanded and contracted with domestic and international markets. The boom in mill building from the 1870s was stimulated by Chinese demand for yarn. From 1890-1914 new fluctuations arose from the growth of the industry in Ahmedabad and the new challenge of Japanese exports to China.³⁹ But the swadeshi campaign did increase consumption of Indian cloth. Tariffs in the early 1930s provided a niche to enable some mills to diversify into higher counts of yarn and finer varieties of piece goods.⁴⁰ At the end of the 1930s the industry was facing overproduction,

but the war brought new demand, and removed Japanese cottons as a threat for a time. Between 1940 and 1952 the Bombay mills made a big shift to fine counts and varieties, and diversified into bleaching, dyeing and printing.⁴¹

Bombay's story of flexibility and adaptation was based on old business strategies of responding to market fluctuations by expanding or retrenching on labour, or reducing wages. Manufacturers continued with the investment strategies they had started in the nineteenth century of spreading risk and diversifying business interests.⁴² Bombay's story of diversifying over scale and quality of production finds its parallel in Haynes's recent study of Surat and the small textile towns of Gujarat.

Douglas Haynes, in his *Small Town Capitalism in Western India* (2012) researched in depth the textile economies of Western India and Gujarat over the period 1870 to 1960. He analysed cycles of small scale industry over this long period, arguing a case for the rise of 'weaver capitalism' in small manufacturing centres; the old handloom towns renewed their cloth manufacture with small producers using electric power. A small-scale power loom industry in *karkhanas* or workshops with multiple looms from the 1940s diversified output and adopted electric or oil powered looms.

At the end of the twentieth century Western India's small weaving towns became large urban agglomerations with structures that included a wide variety of small and large firms, and skilled artisans working alongside pools of casual labour.⁴³ Both Chandavarkar in the case of Bombay and Haynes for Surat and Gujarat take us well beyond the binaries that inform the historiographies of India's de-industrialization: handloom and powerloom, craft and industry, artisan and factory work, and informal and formal sectors of the economy.⁴⁴ The factory textile industry of Bombay and Ahmedabad that disappeared, did not, as we have seen, mean the end of the textile industry. Haynes recognized that the cycles of small

producer capitalism he charts over the nineteenth and twentieth centuries had deep historical roots in a wide Indian Ocean and global trade, and versions of the mixed workshop and family economy embedded in networks of middlemen and sub-contractors in eighteenth-century Surat and other textile towns of Gujarat.⁴⁵

Cycles of production provide one context in which small scale manufacture re-emerges and even flourishes. The new international division of labour and globalization provided further opportunities for such expansion. For craft and small workshop manufacture globalization in particular has provided new scope, and especially lucrative Western and Middle Eastern markets. Liebl and Roy's assessment for India as a whole in 2003 found a large dynamic handicrafts sector, employing approximately 9 million, and gaining under freer markets, but needing sophisticated adaptation to new consumers.⁴⁶

*8. Craft and Skilled Labour in Kachchh (Kutch)*⁴⁷

The closest comparison to this recent expansion of small industrial production is the period when these industries provided for the East India Company trade to Europe. I, therefore, turn to a section of the paper focussed on one region, Kachchh, where the crafts face globalization today, and which had such a trade to Europe in the seventeenth and eighteenth centuries. A focus on a region such as this connects the historian to the regional frameworks of earlier models of industrialization and small scale industry such as proto-industrialization and flexible specialization. It connects also to issues arising out of 'the local' and the 'global'. A local focus allows insight into the heterogeneities arising out of global connections.⁴⁸ More significantly for a study of manufacture, a focus on a region or locale allows the detailed research on production, and the impact that global connections and wider world trade have on the people there.⁴⁹

Turning to the early history of Kutch we find little written account of its manufactures and their adaptation to Western trade, but examples remain today in museum collections and country houses. The Newberry Collection of 1200 pieces of printed cotton textiles in the Ashmolean Museum attests to an extensive world trade in printed cotton textiles from wider Gujarat, including Kutch, going back to the tenth century.⁵⁰ Fine mochi embroidery was made for generations of the Maharajas of Kutch and it was also traded from Cambay and Surat. Prototypes were sent from Europe to India to be copied for embroidered hangings that would co-ordinate with chintz fabric sets brought from the Coromandel Coast.⁵¹ The English East India Company traded over 20 different fabric types from Surat in 1708 in 53 different colours, patterns and lengths. The Company was already well aware of the textiles of Kutch by 1710, and directed its officials in Surat to give special attention to the trade.⁵²

Few British East India Company officials or travellers wrote about the manufactures of the region, though several among them described the varieties of peoples, and in some cases provided an outline of the castes, including some of the crafts.⁵³ One amongst these, Marianna Postans, the wife of an army officer who spent five years in Kachchh, noted in the 1830s the cotton cloth 'woven of various colours, and eminently fanciful designs', and she praised craft abilities of 'imitation' and the 'fame their beautiful work has acquired, both in England, where it is now well known, and also in all parts of India.'⁵⁴

The crafts of Kutch and wider Gujarat readily adapted to its markets among a wide range of indigenous tribes people, and to those for its court in Bhuj especially from the early seventeenth century; they also adapted to the diverse tastes of wider world markets. The rich legacy of those crafts has remained today. As in other parts of India, producers have faced a decline in traditional domestic markets with the new competition of factory-made goods, synthetic fabrics, screen-printed prints and mass-produced bandhani or tie dye. The state and NGOs have played a part, especially since the 1980s in supporting what they see as India's

distinctive craft tradition: building infrastructure, business aid and programmes of national craftsman awards and support for travel to international exhibitions. The crafts did survive over the nineteenth and twentieth centuries, serving then more localized markets. But above all the crafts and small producer sectors of Kachchh are now part of a new story of globalization, one however, which connects with that earlier story of craft production and global history in the region.

In a region such as Kachchh with its long history of craft production, it is possible to investigate its current globalized context as well as its history through interviews and oral histories among the crafts people now. Such interviews were conducted among the manufacturers and workers of Gujarat and Surat by Douglas Haynes as a source base for his recent history of the region.⁵⁵ Interviews and oral histories also take us into the methods of archaeologists; they are a way of accessing local material cultures and technologies, not just for the present day, but for the past. Archaeologists have used analogical reasoning, observing and interrogating living communities in the regions where they seek to reconstruct material cultures of pre-historic production centres. Other archaeologists practice a method of 'experimental archaeology', reconstructing technologies from site findings. Likewise, historians of science have reworked historical experiments to understand the 'tacit' aspect of the experimental process. Such methods of talking to crafts people today and observing current industrial practices help us to gain insight into the challenges faced in the past, even a past going back to that of the East India Companies.⁵⁶

I have, therefore, led a project to collect the oral histories of a number of craftspeople and their families. Working with two assistants, Mohmedhusain Khatri and Dr. Chhaya Goswami Bhatt over the past year, we have collected approximately seventy-five sets of interviews, deposited these on a website, and summarized them in written English. The web

resource is both a source for historians' research, and a public record of the family histories of the region's skilled workforce, and one to which they can continue to add.⁵⁷

I will draw on the interviews to show the strong perspective provided by the prospect of new and especially international markets, and what needs to be done to access these. Most recount challenges they have experienced of labour supply, the division of labour and new and older technologies. Many conveyed the deep history of their crafts in the region going back many generations, or they had learned their skills from parents and grandparents.

The ajrakh printing artisans from the villages of Damadka and Ajrakhpur, Abdul Jabbar Khatri and Ismail Khatri claim ancestors in the trade going back nine to ten generations, and arriving then in Kutch from Sindh.⁵⁸ The bellmaker, Kanji Devji Maheshwari spoke of his work as an early medieval craft also originating in Sindh.⁵⁹ Haroon Ibrahim Maniyar, from a family of bangle makers, and now aged 83, cited seven generations of his family in the craft. His father, grandfather and great grandfather made their livings in the trade, and now so too do his sons. Rameez Imtiyaz Maniyar, another of the bangle makers set out his family tree going back six generations.⁶⁰ The quilt makers had also migrated from Sindh, settling first in Banni, then in other parts of Kutch. The family of Ramji Devraj Marwada had practiced the craft for over a hundred years.⁶¹ The batik workers too looked back to a long ancestry. Shakeel Ahmed Mohammed Qasim Khatri, aged 30 is in the fifth generation of his family's work in the trade.⁶² The weaver from Sarli, Danabhai Samatbhai Bhadru, had a family history of four generations in the trade; so too did the leather workers, Patthubhai and Umara Kana Marwada.⁶³

All of those claiming these generations in the trades learned their crafts from parents, in-laws and uncles and aunts. Julekha Hussain Khatri, a highly-skilled bandhani worker watched her maternal grandparents doing very fine work, and started to learn from them.

This was a generation when men of the Khatri community also did tying work, and her grandfather, Osman Hasam was famous for bahdhara work.⁶⁴ Likewise, Maghibai Manodiya a sixty-year old weaver in Bhojodi learned his craft from his parents and maternal in-laws.⁶⁵ The batik printer, Shakeel Qasim Khatri learned batik printing from his father and maternal and paternal uncles. The bell maker, Sale Mohammed Jacob now in his sixties was also trained by his father and grandfather.⁶⁶

Practices of mixing agricultural and craft work and of peddling goods are very familiar to European historians of proto-industrialization. The older crafts people in Kachchh today remember peddling their goods. The weaver, Samatbhai Karsanbhai Vankar, aged 75, and father of the now highly successful Kantilal Vankar, remembered days as peddlers selling their goods.⁶⁷ The leather worker, Umara Kana Marwada Kharat peddled leather shoes for Muslims village to village, and the banglemakers sold bangles house to house and village to village at 10 rupees a pair. After six days on the move, carrying one bag of bangles and the other with food and other goods for their subsistence the bangle makers could earn 400 rupees.⁶⁸

Many practising these crafts also still combine their work with agriculture in much the same way as practiced by the proto-industrial workforces of early modern Europe; others have lost their land, and find their survival much more precarious. Farm workers seek work with craftsmen such as the ajrakh printers when the farming season is over; that is for eight months of the year, or they seek work in the crafts as former camel grazing land is bought up.⁶⁹ Sisters Hanifa and Jamila Khanna came in to Mandvi from an outlying village to bring their completed bandhani work into the putting out shop of the merchant manufacturer. They combine tying with agricultural and domestic labour; 'weeding, harvesting and picking cotton'. It takes them five days to complete a piece of work for which they might earn 1500-1800 rupees a month. They describe their work as like a habit; they never sit empty-

handed.⁷⁰ Bandhani is like the hand spinning of early modern Europe. It is widely practiced by the women of farming families, and those other craftspeople; the batik workers and the cutlers among them. The cutler from Mota Reha, Abdul Rashid, described the precarious state of the cutlers' villages; in the last generation they had small farms or did farm labour to make up their earnings. 'Now there are no farms left', and he 'supports his four children hand to mouth.'⁷¹

Newly-emerging national and international markets in the past ten years have transformed prospects for some craftspeople. They have seized opportunities to adapt designs and techniques, and to draw on the rich heritage of skilled labour in the region. Among the most successful are the families of the ajrakh printing artisans in Ajrakhpur and Dhamadka, Ismail, Razzaque and Abdul Jabbar Khatri and the high quality bandhani makers of Bhuj, Jabbar and Abdulla Khatri. They have both developed designs and technology to meet the tastes of Western markets. They have accessed international buyers, craft exhibitions and lucrative markets among tourists visiting the region. The Vancouver firm Maiwa and Fab India buy 30-35 per cent of the output of these printed fabrics of this family of ajrakh producers. They have developed new designs attractive to elite Indian and to Western markets, and make these in a range of fabrics. Ismail Khatri argued that focussing on a high quality product brought a better future for the business.⁷² Both Abdul Jabbar and Ismail Khatri spoke of their history of transferring from the use of chemical to natural dyes. Maiwa insisted on natural dyes, and helped to finance workshops and training. Both have had problems adapting to the urgent demands of Fab India, but are developing successful commercial ties.⁷³

Jabbar Khatri, a very successful bandhani producer in Bhuj, leading the family firm Sidr Craft, has recently developed a connection with Maiwa. Now 34, he learned the craft from his mother as a way of earning extra money while at school. He then built up a business

supplying cotton dupattas and sarees for the local market, and later expanding this to a national level, selling to dealers in Delhi, Mumbai and Ahmadabad. He was curious about his community's craft, and sought ways of reviving it to a new standard. He attended design workshops run by the National Institute of Design at different occasions over a five year period, and developed contacts with designers. One of these connected him with an American company that brought a contract for dupattas, scarves and stoles for the fashion market in 2002. He produced for the NGO, Khameer, and received a UNESCO seal of excellence. He has sold regularly since then at the Santa Fe folk art festival. He has not only developed designs to use the most highly skilled and intense bandhani, but in the past two years has turned to the use of natural dyes to meet the demands of Maiwa.⁷⁴

Both firms employ a range of skilled workers, many of whom have worked for them for many years. Sugrabai Khatri has worked for Jabbar Khatri for six years, and does her work in the interstices of the domestic duties of bringing up five daughters in a relatively poor household. She can earn 2,000 rupees a month as against others who can earn 5,000 rupees working throughout the day.⁷⁵ Julekha Khatri also uses her earnings from fine bandhani to support her three sons and three daughters. Her domestic demands also limit the amount she can do, and she both trains other women and outsources her work.⁷⁶

The weavers of Sarli and Bhojodi have also made great gains from new international and national markets. Kantilal Samatbhai Vankar got his first foreign contract in 1994, and now sells his cloth to Malaysia, Brazil, Milan, Paris, London, Colombo and Singapore. The bulk of his orders arise from exhibitions. He sees the only prospect for the seven hundred handlooms in these villages in partnerships with foreign importers. The weavers need expertise to match international standards; they find great challenges in meeting the strict quality controls of Fab India, and responding to large bulk orders with tight time constraints.⁷⁷

The quilt maker, Ramji Devraj Marwada and four of his five brothers saw the opportunity in the work of the women of the village of Hodko. The women of the village traditionally made fifteen to twenty quilts for their wedding trousseaus. The brothers saw the market potential in this, and turned these skills to quilt making for export and for Fab India. They used design catalogues written by an American and natural dyed fabrics, focussing on design and quality, and selling through exhibitions such as that in Santa Fe and wholesale to partners in Ahmedabad, Bangalore and Bombay.⁷⁸ Surprising crafts such as the bellmakers of Zura, from the Lohar, or ironmaking caste, for generations met the local demand of cattle herding communities, producing bells of different pitches for different tribes and communities, but access to international exhibitions opened a new set of lucrative customers in the Danish dairy industry.⁷⁹

The quality demands of those international markets have thwarted some such as the batik printers. Shakeel Ahmed Qasim Khatri from Mundra did the design courses at the NGO Kalaraksha, and engaged four members of his family in making, marketing and supervising other workers. But he has been unable to adapt the batik wax processes to natural dyes, and because of this cannot access those lucrative foreign markets.⁸⁰ All those who have accessed these international markets have worked to improve the quality of their products. The weavers of Bhojodi adopted the hand fly shuttle to increase their productivity, and improved their markets by shifting during the 1960s to a softer weave; but power loom cloth from the Punjab flooded their markets in the 1990s; they again had to further improve the fineness of their fabrics, and embroidered affects. The ajrakh printers made the difficult transition back from chemical to natural dyes, as more recently have the bandhani makers at Sidr Craft in Bhuj. The batik printers, despite their design initiative, have not achieved that crucial technical transition back to the use of natural dyes. In the words of Shakeel Khatri, ‘the chemical-based paraffin wax reacts to the acetic natural dye substances such as alum.

The herbal colours absorb the wax in the fabric, and it becomes impossible to remove the wax.⁸¹

The place of these crafts and small industries in the Kachchh region of Gujarat convey an aspect of globalization that falls outside our models of industrialization. The deep roots of these crafts in a long global history of external trade provide historical parallels in the challenges faced by these craftsmen today. Even more striking is the survival of this node of craft skill through the many phases of Indian de-industrialization and industrialization over the course of the later nineteenth and twentieth centuries. As we have seen, globalization and the external markets it has brought for fine craft, high design and high quality products has rapidly advanced the lives of those families able to seize the opportunities offered. Others, unable to do so are at some extremes struggling for survival, and at others expanding on low-wage labour. Jabbar Khatri's Sidr Craft enterprise has expanded from very small scale production for the local market to high design goods in natural dyes for fashion outlets, international craft fairs and international buyers such as Maiwa. On the other side the fine cutlers of Mota Reha have watched their historic trade decline from one hundred shops in the village to eight or ten. Wholesalers purchase their knives in bulk, leaving minimal profit, and a hand to mouth existence for the uneducated workforce.⁸²

Conclusion:

Interviews and oral histories among the craftspeople of Kachchh today convey to us a world of high quality goods produced within strong craft communities and providing both goods for local sumptuary and everyday use in the region as well as products for globalized markets. The region provides a unique setting for investigating the impact of globalization and new technologies on embedded craft skills. The deep history of this craft economy also makes it a place for the use of analogies between the present and the past. The things carried

out of the region as fine art objects by merchants and the East India Company into Europe's domestic interiors and later museums were most likely made in small village workshops or in outwork or proto-industrial settings. .

What will the future hold for these people? Will they go the way of some of Europe's protoindustrial workforces into the factory, for example into the chemical factories setting up nearby? Or will they go to cheap garment factories such as those of Bangladesh, or will its young people leave for Mumbai's streets? Or will the variety and quality they can produce contribute to enlarged global markets which seek differentiation as well as standardized goods? We do not yet know.

But thus far, these crafts have survived over our long world history of industrialization, and of India's colonial, national and global transitions. They challenge our models of industrialization; they have survived because they have innovated and adapted to new markets. And they have been supported by family groups and communities strongly conscious of their long craft histories. They form part of the history of cycles of production and of small scale industry in India. The region's highly localized skills over a long history from the early modern world to the present provide a distinctive opportunity to compare the craft products and their manufacture traded to the West through the East India Company trade to those trading in the world's globalized markets today.

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⁴³ D. Haynes, *Small Town Capitalism in Western India: Artisans, Merchants, and the Making of the Informal Economy, 1870-1960* (Cambridge, 2012), 265, 272-7, 311.

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⁴⁶ M. Liebl and T. Roy, "Handmade in India: Preliminary Analysis of Crafts Producers and Crafts Production." *Economic and Political Weekly* 37 (27 December 2003), 5366-76.

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Interview with Abdul Jabbar Khatri, Dhamadka, 8 Nov., 2012.

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- ⁵⁹ Interview with Kanji Devji Maheshwari, Zura, 26 May, 2012
- ⁶⁰ Interviews with Haroon Ibrahim Maniyar and Rameez Imtiyaz Maniyar, 25 May, 2012.
- ⁶¹ Interview with Ramji Devraj Marwada, Hodko,
- ⁶² Interview with Shakeel Ahmed Mohammed Qasim Khatri, Mundra, 28 May, 2012
- ⁶³ Interviews with Danabhai Samatbhai Bhadr, Sarli, 27 May, 2012; Patthubhai, Sumrasar, Umara Kana Marwada,
- ⁶⁴ Interview with Julekha Hussain Khatri, Bhuj, 26 May, 2012
- ⁶⁵ Interview with Maghibai Khimoo Manodhiya, Bhujodi, 30 May, 2012
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- ⁶⁷ Interview with Samatbhai Vankar, Sarli, 27 May, 2012.
- ⁶⁸ Interview with Umara Kana Marwada Kharet,..no date or place; and Haroon Ibrahim Maniyar, Bhuj, 25 May, 2012
- ⁶⁹ Interview with Abdul Jabbar Khatri and Usman Musa, Dhamadka, 8 Nov., 2012.
- ⁷⁰ Interview with Hanifa Yusuf Sumra and Jamila Ramju Sumra, Mandvi, 16 Feb. 2012
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- ⁷² Interview with Ismail Khatri.
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- ⁷⁴ Interview with Jabbar Mohammad Hussain Khatri, Bhuj, 20 Feb., 2012.
- ⁷⁵ Interview with Sugrabai Mohhamed Farooq Khatri, Bhuj, 9 Nov., 2012.
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