Craft and Small Scale Production in the Global Economy: Gujarat and Kachchh in the Eighteenth and Twenty-first Centuries

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Introduction

India's production of fine luxury and craft goods for world markets was discovered and exploited by Europeans in the seventeenth and eighteenth centuries. Textile producers in Gujarat, the Coromandel Coast, and Bengal applied fine craft skills to European designs, colour codes, and textile lengths and widths. Through the intervention of the East India Companies and private traders as well as their intermediaries, brokers and local merchants, weavers, and printers produced the goods to satisfy Western markets just as they had done for Eastern and African markets in the centuries before.

Today Indian craftspeople are engaging in a new phase of production for global markets. They are using traditional techniques of the kind that attracted Western buyers in the seventeenth and eighteenth centuries: hand weaving, hand block printing, and natural dyes. Accessing the niche national and international markets needed to provide a future for these crafts is a major challenge. This article focuses on the artisans, skills and markets in one area of India—the region of Kachchh in northern Gujarat, even now considered a remote part of the new global India.[1] It sets this within a wider context of Gujarat and the earlier and more recent history of its textile industries. Douglas Haynes's recent book, *Small Town Capitalism in Western India* (2012) provides a framework for the study of small-scale industry, and the article will address his subject and methods. The new sources used are a collection of oral histories of craftspeople in a range of industries. These oral histories address skills and training across generations, and how these crafts have adapted and continue to adapt to the demands of national and world markets.

The Local and the Global

Situated in a remote area between Northern Gujarat and Sindh, now modern Pakistan, Kachchh became known to the wider world in the wake of the 2001 earthquake, when NGOs converged on the region. The capital, Bhuj currently has a population of 133,500. The earthquake took 13,000 lives in the city and the surrounding tribal and rural communities.[2] In 1809, Alexander Walker, the British chief

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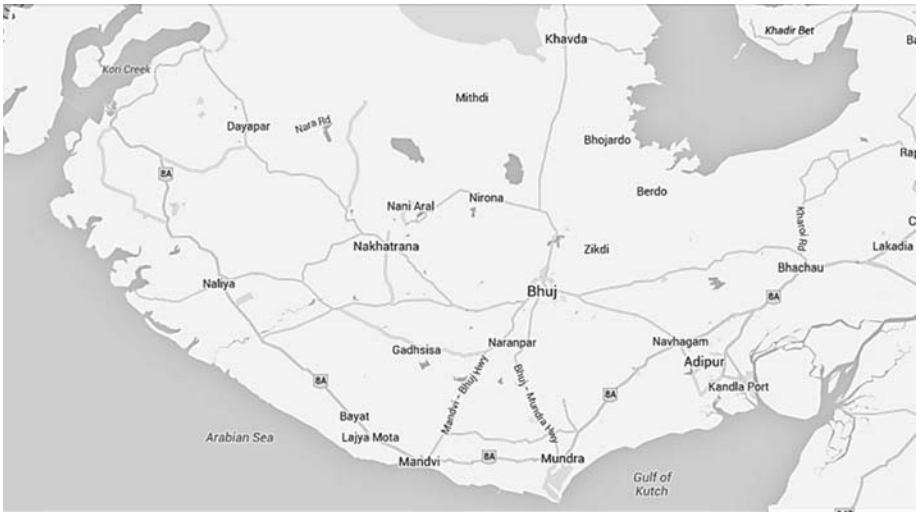
resident at Baroda travelled through Kachchh and described it as a country whose "independence over a series of centuries altho' situated between powerful and ambitious empires, is a sufficient proof that it has yielded nothing to gratify ambition, or to compensate the expense of conquest."[3] Yet this region, together with other parts of Gujarat, produced many of the more than 1200 pieces of printed cotton textiles in the Ashmolean Museum's Newberry Collection. Most of these date from between the tenth and fifteenth centuries, and had been traded up the Red Sea to Egypt and the Middle East, out across the Arabian Sea to East Africa, and down the Malabar Coast and across the Bay of Bengal to present-day Indonesia. Its textiles were soon to fill the cargoes of Portuguese, Dutch, and British ships trading from Diu, Mandvi, and Surat, and bound for European markets. In the late twentieth century, the Indian government began developing the area leading north from Ahmedabad into southern Kachchh as the Kandla Special Economic Zone. Today Kachchh remains a knowledge centre of the crafts, its people responding to the challenges and opportunities opened in the wake of the earthquake and globalisation. The history of textile and other craft production in the region shows a region that connected in its pre-colonial past to world markets; its artisans today are seeking to join global markets, and must adapt the quality of their products, their techniques and skills to the demands of buyers around the world.

Map of Kachchh. Map data © Google, 2013.



The history of Kachchh and its wider regional setting of Gujarat has been closely studied by historians of textiles. Studies by John Irwin and P.R. Schwartz in the 1960s compared the calico printing of the region with that of other areas of India.[4] Curatorial studies of collections of printed textiles also provided broad histories of the trade of these textiles in the western and eastern Indian Ocean world and to Europe. These were led especially by Ruth Barnes, John Guy, and Rosemary Crill.[5] Other more general studies of historical textiles in relation to current products have followed.[6] Eiluned Edwards' excellent, detailed studies of particular groups of

Gujarati artisans and textile processes, from printing and dyeing to embroidery underpin her more general account of the current textile crafts and their historical background.[7] More recent studies have investigated the region's role in larger trade networks and aspects of its cultural anthropology.[8]

More in depth research on this knowledge node and its crafts, setting its current global challenges in relation to its past engagement with world markets, requires new directions in methodologies. Historians and curators have studied the material culture of the region through its textile collections in the Ashmolean, the Victoria and Albert Museum, and various Indian collections.[9] The production processes for these products were, and are, embedded in the skills of the region's artisans. There are few archival or printed records from the pre-colonial period of the experience of these artisans, their organisation of production, their acquisition of skills, or their access to markets. The article will briefly survey what East India Company officials and travellers wrote of these in the eighteenth and early nineteenth centuries, as well as regional gazetteers and census materials from the twentieth century. A new approach to learn about these skills and crafts entails following the practice of some archaeologists in speaking to inhabitants in the region today. Interviews and oral history accounts provide us with artisan perceptions of their markets and technologies now. These can also suggest the kinds of challenges faced by those artisans in the region producing for East India Company markets in the eighteenth century.

Theoretical Background

Recent debate and research on "useful knowledge" and the "knowledge economy" provides a theoretical framework for the study of skilled craftspeople. From Michael Polanyi in 1966 to Richard Sennett in 2008, social scientists have devoted extensive theoretical and empirical research on the "knowledge economy," investigating local skills, craft, and talent—vital components of what Polanyi calls "tacit knowledge."[10] Joel Mokyr in his 2002 book, *The Gifts of Athena*, and most recently in *The Enlightened Economy: An Economic History of Britain, 1700–1850* (2010) brought together tacit and codified knowledge into a concept of "useful knowledge," which, he argued, played a fundamental role in the industrialisation of the West; indeed he saw it as the heart of the "great divergence."[11] The history of this "useful knowledge" is also based in "local knowledge," the special "nodes of craft skill" which the late Larry Epstein followed through early modern Europe.[12] Epstein argued that the European technological system from the late seventeenth century was one in which the technological knowledge of pre-modern craftspeople and engineers was mainly based in experience, and had to be "transferred in the flesh." Historians are now turning to histories of "useful" and "local" knowledge in Asia.[13] Some of India's historians, notably Tirthankar Roy, David Washbrook, and Prasannan Parthasarathi have recently turned to some discussion of "useful knowledge" and skill.[14] We can first examine Parthasarathi's challenge to Mokyr's view that the source of the "great divergence" was Europe's deployment of "useful knowledge ...the unique Western way that created the modern material world."[15] Parthasarathi faces the limitations of India's historical evidence: "a great deal must be deduced about the state of knowledge and skill from descriptions of the objects that were manufactured at these sites of production, many penned by European observers.

The ships, guns, cannons and other commodities that were made in India suggest a sophisticated and dynamic culture of technical knowledge."[16]

Artisans, craft, and skill have played a particular part in India's industrial history. Recent books by Abigail McGowan, *Crafting the Nation in Colonial India* (2009), and Douglas Haynes, *Small Town Capitalism in Western India* (2012), address the political potency of crafts in modern India. The artisan became a political symbol of India's fate under colonialism. For British colonisers the crafts demonstrated India's economic backwardness, but Europeans also collected India's unique and beautiful products in museum collections that orientalised not just the goods, but the artisans themselves. In these discourses artisans were traditional, ossified, and homogenised—subjects to be archived and preserved in museums and art schools.[17]

For nationalists, craft producers represented the remains of the self-sufficient society that they thought India had been before the disruption of colonialism, industrialisation, and the competition of European textiles. Gandhi's *khadi* campaign epitomised the turning of these discourses into a craft critique of empire. These discourses also informed the writing of Indian economic history for generations after independence.[18] Economic historians of India debated the de-industrialisation thesis and the fate of India's artisans from the later 1960s into the 1980s.[19] Comparing the course of artisanal production in Gujarat and Kachchh in its early modern global history and in its recent framework of globalisation allows us to engage in larger debates about industrialisation and India's industrial history over the pre-colonial, colonial, nationalist, and recent global periods.

Gujarat, Kachchh, and Long-distance Trade

Since antiquity, Gujarat has traded its manufactures and especially its textiles to the western Indian Ocean, supplying the East Coast of Africa, and from the Red Sea through to Egypt and the Mediterranean from ancient times, and the earliest archaeological evidence of these fabrics in Egypt dates from the fifth century AD.[20] European trade extended rapidly in the early modern period with the Portuguese occupation of Diu in the sixteenth century, and with the Dutch in Surat and in Mandvi in the seventeenth century, followed by the British from the mid-eighteenth century. Surat by the late seventeenth century provided Europe with indigo, printed cloth, quilts, and fine Mochi embroideries. From the renewal of the monopoly of the English East India Company in 1657, the English ordered large quantities of cloth from Surat: the EIC ordered 57,000 pieces of cloth in 1666, and the following year 165,000 pieces.[21] The Company was already specifying closely the kind of textiles it wanted: "'We desire that the 10,000 pieces of Brawels may be of the finer sorts and if procurable such as come by our ship London, and whereas in our former directions, we ordered that our chints should be ½ red grounds and ½ white, we now desire that 2/3 may be red grounds and 1/3 white, the reds being in most esteem. In the making provisions of the several sorts and quantities of goods, we desire your special care, to the goodness, cheap buying and well sorting of them in all particulars."[22]

Surat was a vibrant centre of trade and manufacture in the early eighteenth century. In 1709, the East India Company traded from Surat over twenty different fab-

ric types in fifty-three different colours, patterns, and lengths.[23] Recent research emphasises the continued strength of trade at the end of the eighteenth century. The English East India Company increased its investments in export goods at Surat after 1765, and there was severe competition among European companies and private traders, both European and Asian. Parts of Gujarat flourished in the eighteenth century, including merchant networks operating from Diu.[24] This was also a period of expansion of European trade with the northern part of Gujarat, the region now known as Kachchh.

The Dutch established a factory at the old Kachchh port of Mandvi in 1750, responding both to their declining commercial fortunes in Surat and to the prospect of a growing trade potential in Kachchh. Merchandise coming out of the Gulf of Kachchh, especially cotton and textiles, was much sought after by Indian Ocean merchants. The English East India Company was already well aware of this in 1710, directing its officials in Surat to give special attention to the trade:

> You likewise say that you have assurances of the Large quantitys from Cutch and Patan of the same Sorts with what you buy in and about Suratt but at easier rates and that you will make advances therein since their People and Vessells trade yearly to your Port. Wee should be glad to find you have success and wee can see no reason to doubt of it if...The Merchants who come to Bombay be civilly treated justly dealt withal quickly dispatch and have other due encouragements, but then neither must yourselves nor let any under you Secretly or openly Squeeze them put hardships on them or engross their Commoditys.[25]

Mandvi in the mid-eighteenth century was a cosmopolitan destination for many Indian Ocean merchants especially interested in cotton and textiles. With the coming of the Dutch in the early eighteenth century, these goods entered into the VOC's extended intra-Asian trade network with markets in Bengal, Malacca, Batavia, and China, and also to the Dutch Republic.[26] The expansion of trade from the region was led both by the Dutch initiative in the region between 1750 and 1758 as well as the pro-merchant policies of the rulers of Kachchh and their "large degree of independence from British interference in their domestic affairs."[27] When making a case for a factory at Mandvi, in addition to the one they kept at Surat, Hendrik Kroonenbergh wrote to Johannes Pecock, the VOC director at Surat: "Cotton grows [in Kachchh] in abundance and is transported, as also the cotton yarn, from there to many places…the textile trade is very opulent and there come yearly many Egyptian, Arab, Congish, and Masqat merchants to trade and to take a cargo of textiles…the inhabitants send not only raw, bleached, and painted, but also printed [textiles] to different places with good profit."[28]

Yet even in the 1820s the town was a by-word for ethnic diversity and an exotic luxury trade, especially from Africa. James Tod explored the town in 1823, and encountered "groups of persons from all countries: the swarthy Ethiop, the Hindki of the Caucasus, the dignified Arabian, the bland Hindu banyan, or consequential Gosén, in his orange-coloured robes, half priest, half merchant."[29] On the streets he found rhinoceros hides being prepared for shields; elephants' teeth; dates, almonds, and pistachios from the Africa and Arabian Seas trade. But cotton, he noticed, was still the staple trade.[30]

Design and architecture in Mandvi and in Bhuj reflect the period of expansive commerce from the mid-eighteenth century into the early-nineteenth century the Dutch presence, and openness to European arts and crafts.[31] Bhuj was also long a "knowledge node" of the crafts including *bandhani* (silk tie dye), *ajrakh* (resist cotton printing), embroidery, batik prints, cotton and wool weaving, lacquerware, enamelling, woodcarving, and silver and gold jewellery work. Local production served the particular demands of the Jat, Ahir, Harijan, and Rabari tribes.[32] The craftsmen of this remote region also supplied both the sumptuary and ordinary dress of the nomadic cattle herders of Banni in northern Kachchh, fine fabrics for the court in Bhuj, and merchants trading from Mandvi to Diu and Surat, and from there to markets in Africa, the Middle East, Europe and South East Asia. Many of its craftsmen came from Sindh, groups invited by the king of Kachchh, Rao Baharmalji I (1586–1631), including dyers, printers, potters and embroiderers. Skills and design derived further influence from the Persian empire.[33] Mochi embroidery, an embroidery was produced for the court and also traded outside the region. Carried out by Mochi craftsmen, low-caste shoemakers using a shoemaker's hook or *ari* for a fine silk chain stitch embroidery on a white cotton ground, these embroideries were made for many generations of the Maharaos of Kachchh, but also traded from Cambay and Surat. From the end of the seventeenth-century prototypes were sent from Europe to India to be copied. The East India Company exported co-ordinating sets of chintz, some from the Coromandel Coast and embroidered hangings; the embroideries were displayed in the domestic settings of both wealthy Europeans and the Mughal courts.[34]

Research in the area now gives some sense of the great difficulty in acquiring these goods for world trade during the early modern period. There was no road system in the region until the Indo-Pakistan wars between 1965 and 1971; prior to this much of the transport was by ox and camel cart, and some buses on very limited roads.[35] The railroad was extended to part of the region at the beginning of the twentieth century, 36.5 miles of track from the coastal town of Tuna to Bhuj; by 1951 this had only doubled to seventy-two miles.[36] Even now the sixty-kilometre road from Bhuj to Mandvi is a slow journey along twisty roads not infrequently interrupted by herds of cattle or goats. Yet in the eighteenth century fine European mirrors, glass, and china ware were brought via Mandvi to the royal court of Rao Lakhpatji at Aina Mahal in Bhuj, and the fine manufactures of Kachchh were exported from Mandvi and other ports on its coast.

Eighteenth-Century and Early-Nineteenth-Century Accounts of Kachchh and Gujarat

British and other European travellers left some accounts of the region, its castes and craftspeople in the late eighteenth to mid-nineteenth centuries, but few of these reflected in any depth on the crafts. A remarkable survey of weaving in Surat, the chief's minute to the Commercial Board in 1795, contrasts with the much more limited documentation of Kachchh. The chief's minute found c. 15,800 looms worked by specific weaving groups: Khatri weavers operated 3,663 looms weaving silk and cotton silk mixed piece goods. Another caste, the Kunbi worked 2,683 looms, other castes 5,326, and the Parsis worked 4,105 looms. The Khatris were

the main providers of textiles to the East India Companies.[37] The chief's minute gave a detailed account of the contracting system, and proposals for a new system of direct access to the weavers, seeking greater control over the quality of the goods it bought. It also provided an intensely detailed account of the production process, virtually a census of products, looms and the peoples who worked on each type of cloth.[38]

Western India was already of great interest to European investigators. Gujarat was a widely-recognised source of fine cotton and skilled manufacture. Anton Hove, a Polish doctor and naturalist sent in 1787 by Joseph Banks to investigate cotton cultivation in Gujarat, and to collect plants and seeds, also attempted to gather information on manufacture.[39] Hove travelled to Surat, on to Ahmedabad, Broach (present day Bharuch) and on to Senapur (present day Sinor), describing the wide varieties of fine textiles, and the division of labour in weaving.

Three Scottish East India Company officers went on to report on the history and peoples of Gujarat and Kachchh. Alexander Walker (1764–1831) came to India in 1780 as an EIC cadet and served in Bombay, Malabar, and Mysore. He was sent to Gujarat in 1800; he became political resident at Baroda in 1802, and led a campaign into Kutch in 1809. He kept detailed records of local practices, and collected Arabic, Sanskrit, and Persian manuscripts. By 1809 British influence was firmly established in Gujarat, and attention turned to Kutch in efforts to protect the frontier with Sindh, address fears about French interest in the area, control piracy in the Gulf of Kutch and raiding parties across the Rann, and to negotiate with the factions around the Kutch ruler, the Maharao Rayadhan.[40] Walker wrote an extensive report on the region to his superiors in Bombay in April, 1809, and some months later advised against full military intervention. "The little principality of Kutch under its own Rajas, could never become a rival to the Company, but it might...be a useful barrier against the designs of our enemies with our friendship and alliance."[41]

Though Walker was then dismissive of the region's manufactures, in the years he spent there he gathered materials for a history of Gujarat and notes on the customs, religion, and manners of the peoples, and these included material on Kachchh. He put together some of the materials into a two-volume manuscript, *An Account of Castes and Professions in Guzerat* in 1823. He described this as compiled from notes of conversations with natives who came to him on business, and included short accounts of crafts including weavers, dyers, and printers, gold and silversmiths, ironsmiths, paper makers, and stonecutters.[42]

Walker encouraged another young Scot in the service, James McMurdo to learn Hindustani and Persian. After a period in Mauritius, McMurdo returned to India in 1812, and became the agent for Kachchh affairs. He wrote extensively on the history and the inhabitants of Kathiawar, Sindh, and Kachchh, and by 1816 was appointed resident of the court of the Rao of Kachchh. His account of Kathiawar in 1813 praised "manufactories of cloth of all descriptions much valued by the natives" and "piece goods manufactured for African and Arabian markets."[43] McMurdo died in 1833;[44] another Scotsman followed in 1843, Alexander Forbes, known for *Ras Mala* or *Hindoo Annals of the Province of Goozerat in Western India* (1854). He too wrote little of the manufactures and artisanal skills of the people.[45] The histories and travel accounts of Walker, McMurdo, and Forbes were part of a wider genre of colonial history writing on Kachchh and Gujarat, concerned mainly

with political history, the genealogy of rulers, and some ethnology, especially customs of infanticide and sati.[46]

A closer, though still limited account of the towns, customs and crafts of Kachchh was left by Marianna Postans in 1839 in her *Cutch or Random Sketches*.[47] The wife of an army officer, she spent five years in Kachchh. She noted that the principal manufacture of the region was its cotton cloth, "woven of various colours, and eminently fanciful designs."[48] Her short chapter, "Workmen of Cutch," 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. The diversity of their talents has classed them as brass-founders, embroiderers, armourers, and cunning workmen in gold and silver."[49]

Small Scale Industry in Western India in the Nineteenth and Twentieth Centuries

The early accounts mention the crafts of the region, but provide little detailed insight into the skills of the people or the organisation of their industries. What happened to these vibrant craft and textile regions with their long histories of global trade as they passed through the nineteenth and twentieth centuries? Their histories have been those of colonialism and de-industrialisation in India more broadly. Indeed Postans already in 1839 put it eloquently for the region of Kutch:

> The annals of India present, indeed, a dark page in the history of nations. Her commerce, which was once of sufficient importance and magnitude to excite in the Tyrians, Egyptians, and Venetians, a desire for traffic, is now confined to the export of a few natural productions of comparatively little value; and the produce of her far-famed looms once so highly coveted by the rich and the fair, is exchanged for a manufacture of coarse cloths; whilst the raw cotton which her fields produce is sent to England, to be manufactured into a fabric designed for exportation to the Indian market.[50]

Yet recent studies of the late colonial and nationalist periods have found not just a survival of craft economies, but also a resurgence of small producer capitalism in the interstices of colonial constraints and economic underdevelopment. Tirthankar Roy's study, *Traditional Industry in the Economy of Colonial India* (1999) focuses on the late colonial period, and covers broader areas of India over the period 1870–1930. He found that industry accounted for 15 per cent of the workforce in the mid-nineteenth century, or ten to fifteen million workers; many of these were small producers and craftspeople. Increased commercialisation after the opening of the Suez Canal fostered more production for non-local markets. In the last fifty years 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.[51] Indeed he argued that artisan industry "has not just survived, but shaped the character of industrialization both in colonial and post-colonial India."[52]

Douglas Haynes's *Small Town Capitalism in Western India* focuses on an overlapping, but extended period of 1870 and 1960, and examines the textile economies of Western India and Gujarat in depth. His analysis of the cycles of the craft economy over this long period charts not the great decline of the textile

economy, but a resurgence of small producer manufacture. He makes 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 radically changed a textile economy that by the 1930s was dominated by the disjuncture of large-scale mills and declining handloom manufacture. From the 1940s, the *karkhanas* diversified their output, adopted electric or oil power and power looms, and explored their capacities for flexible specialisation. They sought plant and equipment in Japan and Belgium, built new dye works and developed innovative product lines. At the end of the twentieth century Western India's small weaving towns became large urban agglomerations with millions of looms, although actual cloth manufacture remained concentrated in tight enclaves. Late twentieth-century structures included a wide variety of small and large firms, with skilled artisans working alongside pools of casual labour from non-artisanal backgrounds. An informal economy has been reshaped, Haynes argues, out of long historical change and the politics of labour and industry over the course of the twentieth century.[53]

One of those towns, Surat, went into decline in the early nineteenth century, but from the 1870s industry expanded to meet expanding markets for luxury products in urban India and abroad. New types of silk saris and mixed silk and mercerised cotton versions attracted urban buyers. Markets revived in the Indian Ocean from the Persian Gulf to Burma, Thailand, and China. Surat once again sold silks to the Persian Gulf and the Ottoman Empire. In Surat and other weaving towns highly specialised production was associated with specific weaving communities that developed their own identities within local societies as migrants flowed in. Places became known for the special qualities of their products.[54]

Haynes thus deconstructs the binaries that inform the historiographies of India's de-industrialisation: handloom and power loom, craft and industry, artisanal and factory work, and informal and formal sectors of the economy.[55] Western India's textile history is, furthermore, not one of simple transition from artisan-based production for local markets in the pre-colonial period to one of commercialisation in the nineteenth and globalisation in the late twentieth. Haynes recognises 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.[56]

Haynes's investigation of the industrial cycles and recent economic development of the textile manufacture of Western India relies on many local gazetteers, reports, and industrial surveys. If we look to the early twentieth century, there was no specific report on Kachchh, but reports on Baroda in the 1901 and 1911 censuses of India provide some detail on occupational and industrial structure. The 1901 report showed how proportions in hand weaving in a large textile sector.[57] This report made an attempt to distinguish between workers in factories and those in home industries, but the entries in the schedules were vague. The report in the census of 1911 argued that before the beginning of the twentieth century the old industries of the state were in decline and the new ones had achieved little success: "This state

of things was mainly attributable to the backwardness of the people and their lack of enterprise and want of adaptability to new circumstances. During this present decade [1901–11], the government of Baroda set themselves seriously to the difficult task of stimulating industries within their territory."[58] The report of 1911 provides not only more detailed occupational statistics about those working in factories, but also photographs of individuals from a wide range of caste and occupational groups. It found a substantial increase in the numbers of people working in the textiles and dress industries. "The improvement is mainly due to impetus given to hand and power-loom weaving in the decade and there is yet a bright future for this old and important industry."[59]

Special reports were commissioned on craft and small-scale industry in Gujarat for the 1961 census.[60] This arose out of a study of household industry as a part of India's first Five-Year Plan. The investigation set out to study caste, occupation, social, and economic stratifications, and the limitations of credit and marketing facilities, the domination of custom over contract, and the persistence of traditional tools and design forms. Even sixty years after the 1901 census, it sought information confirming an inability among craftspeople to adopt new lines or adapt to changing circumstances.[61] It proposed a questionnaire that provided details on specialisation and markets of the artisan castes, and especially "how restricted" they were "by the seemingly unalterable laws of social custom."[62] The studies completed of the artisan groups were, however, limited and highly selective. The fourth volume listed thirty-six crafts of Gujarat, and provided images of several Kutch craft products: *bandhani*, embroidery, and penknives. But its detailed studies covered only the ivory work of Mahuva, padlock making at Sarva, scale making (manufacture of small weights and measures) of Savarkundla, the perfumery at Palanpur, and crochet work of Jamnagar.[63]

Kachchh's industries were given more detailed coverage in *The Gazetteer of India: Gujarat State Kutch District* (1971). This showed some limited growth in factories, but most industries, 799 out of 1,000 enterprises worked without any kind of power, and over 67 per cent of workers in manufacturing industries were in household industries.[64] It set out the fine handicrafts of Kachchh. Bandhani (tie and dye textiles) employed four thousand people in Bhuj, Mandvi, Anjar, Mundra, and Naliy. It provided further detail on *ajrakh* printing, practised from generation to generation, with many of its designs developed under Muslim influence. Eight hundred weavers produced over fifteen thousand woollen blankets a year. The *Gazetteer* provided detailed accounts of the penknife, scissors, and nutcracker crafts, showing as many as one hundred artisan households in the trade in Reha, Anjar, Bhuj and Mandvi.[65]

The *Census Reports* and the *Gazetteer* provide data and information on the handicrafts and small scale industries in Kachchh and other parts of Gujarat over parts of the twentieth century, but more fundamentally, they give an idea of the government's attitude towards this kind of manufacture and its artisan groups. The continued significant place of the craft industries in face of large-scale factory development connects with Haynes's analysis of the textile industry across western India.

Oral Histories as Sources

Haynes's *Small Town Capitalism* draws on over two hundred interviews with artisans, workers, merchants, industrialists, and industry experts. He has written on the uses of memory in these interviews, and the differing ways workers, employers, and trade unionists view the past. He raises questions about the past as a way of bringing out critical positions, especially among workers, on the industrial relations of the *karkhanas* that emerged from the 1960s. Recollections of past work relations drew on metaphors connected to the family, both among employers and workers.[66]

Interviews among handicrafts people now who are seeking to adapt to and join world markets can provide views on past local markets and information on how these newer world markets have emerged in the recent period. They also provide a perspective on the challenges faced by their ancestors in the area as Europeans began purchasing their products in the pre-colonial period. Such interviews can also provide both information and the views held by these artisans of their training and skills and their transmission from one generation and one group to another.

Interviews and oral histories thus provide a way to connect the globalised world that crafts and small industries now inhabit with that of the Indian Ocean and global trade in luxury goods in the eighteenth century. Interviews and oral histories take us into the methods of archaeologists, some of whom see themselves practicing "ethno-archaeology," while others simply seek another way of accessing local material cultures and technologies.[67] Historians of science have likewise reconstructed laboratory experiments and equipment of nineteenth-century science in a present-practice model to gain insight into the materials and tacit (or unspoken)and codified (or written) processes of the past.[68]

The crafts and small producer sectors of Kachchh are a part of a new story of global history and craft production. Liebl and Roy's assessment for India as a whole in 2003 found a large, dynamic handicrafts sector employing approximately nine million people. While these are making solid gains under freer markets, they need sophisticated adaptation to new consumers.[69] The state and NGOs have played a part, especially since the 1980s in building infrastructure, information exchange, and business aid as well as in developing a programme of national craftsman awards and support for travel to international exhibitions. Producers in Kachchh, as in other parts of India, faced a decline in traditional domestic markets.[70] Some NGOs supporting handicrafts were there before the 2001 earthquake, and their presence has increased since then. Among the more notable are Khamir, Shrujan, and Kala Raksha, which provide training, design and marketing support for artisans. Artisans are now seeking further design training and support, working with the National Institute of Design in Ahmedabad and the National Institute of Fashion and Design in Delhi. There is a formalisation of practices, design, and knowledge in the NGOs, schools and international trade, but unwritten knowledge is not necessarily incorporated into these new contexts.[71] There is some limited access to international outlets, such as Maiwa Handprints Ltd. in Vancouver, Canada.[72] Such world markets reached through dealers, international exhibitions and tourism, as well as high fashion national markets underpin the new optimism. The interviews and their summaries this article now draws on derive from a small project, "An Oral History of the Crafts in Kachchh." With the help of India-based assistants Mr. Mohmedhusain

Khatri and Dr. Chhaya Goswami Bhatt, the author interviewed seventy-five artisans and their families from many textile and other crafts in Bhuj, Mandvi, Mundra, and their surrounding villages. The interviews were collected in Gujarati and Kachchhi, and deposited on a website; publically accessible summaries were made in English.[73]

The interviews show deeply-embedded craft communities, some going back many generations, but several with fluid work histories, with some generations or parts of families leaving the craft, and subsequently returning. Many tell migration stories from other parts of Gujarat, from Rajasthan, and from Sindh. They show a number of people who come from farming backgrounds, or who continue to combine their work as artisans with farming or coolie work. They show us high levels of specialisation and division of labour, and adaptation to new materials and technologies. High success rates in international markets for some contrast with extreme struggles for survival among others. Even within the most successful businesses crafts people receive low wages and there are many instances of work on highly subdivided processes. The resilience of this craft node relies on its local and its global markets. Providing for the sumptuary demands of local tribes is, however, no longer enough, for rural people are migrating to cities where they increasingly buy mass-produced goods. Producing the quality luxury goods adapted to the designs of world trade provides the only possible competitive edge. Among the most successful of these artisans, all well-integrated with international markets, are the *ajrakh* printing artisans from the villages of Ajrakhpur and Damadka near Bhuj, a group of woollen and cotton weavers from the villages of Sarli and Bhujodi, and high-end *bandhani* manufacture in Bhuj.

Many of the Kachchh artisans particularly seek international markets, international exhibitions and craft fairs, and external expertise. Weavers, *bandhani* makers, and *ajrakh* printers are expanding their businesses through their outside contacts and tourism in the region. The weavers of Bhujodi and Sarli recounted their own stories of connecting with these markets. Maghibai Khimoo Manodhiya in Bhujodi, a sixty-year-old widow with no education now helps her son and his family. She recounted the transfer to more up-market production. Previously, the family did a lot of work for the Rabari tribal peoples: "the woven fabric sold cheaply and the labour gained low profits." But they have since developed their expertise in *mashru* (weft of cotton and warp of silk) weaving, and "make very expensive things, and make a profit."[74]

Kantilal Samatbhai Vankar, a forty-two-year-old weaver in Sarli and his seventy-five-year-old father, Samatbhai Karsanbhai Vankar also told of their entry into international markets. Samatbhai Karsanbhai remembered selling his goods as a pedlar, and providing for the local demands and traditional motifs of the Patel community. But in the mid 1960s a woman, Prabhaben Shah, originally from Mandvi but then settled in Mumbai, exhibited a soft texture shawl made by the family and received an export order. She told the weavers to change their weave "from rough to soft, and from thick to thin." She then worked with a group of weavers on improving weaving, dyeing, and embroidery for five or six years, and the new industry did well between 1980 and the mid-1990s.

The weavers in the area were later challenged by the power-loom industry of Punjab, which "copied their designs and flooded the market." The number of hand-

looms in the village and its environs fell to about seven hundred. But the weavers responded by extending links to wider national and international markets. They targeted exhibition organisers, designers, and buyers who also visited them. Samatbhai believes that "700 handlooms can be saved only if they partner with foreign importers." His son Kantilal adds that the Punjab challenge raised the stakes. The family responded by introducing new styles of weaving, and pushing for business. Three brothers and a nephew joined the business, the nephew received some higher education and design training. A two-year foreign contract in 1994 was followed by opportunities with businesses in Malaysia, Brazil, Milan, Paris, London, Colombo, and Singapore. A recent four-year connection with Fab India has challenged them to meet strict quality controls.[75]

The remarkable success story of the *ajrakh* printers also shows a sharp transition from reliance on local markets to entry into new national and international markets. Ismail Khatri recounts how his family provided a range of textiles for the many communities and castes of Kachchh: "The Khatri community since time immemorial was briskly engaged in satisfying the basic necessities of clothing the people of Kachchh." They even used their textiles as a sort of currency to exchange for different necessities. But in the years just before and after the earthquake of 2001, the family moved to a higher-quality product. They had to face shifting local demand away from hand-woven and printed cottons towards modern synthetics. But national and international markets showed that "high quality products could yield a 50 percent profit." Canada's Maiwa and India's Fab India have provided the lucrative markets but posed demanding quality standards.[76] Ismail Khatri initially found Fab India's "specific requirements too demanding," but he has come to accept them and the "commercial tie has become successful."[77]

The other major beneficiaries of opportunities in international markets are the *bandhani* makers. Those in Mandvi—Abdul Gani Chakria Khatri and Kasimbhai Khatri Khedayiwala—want to expand in response to tourism and a general upturn in their business. In Bhuj, Abdul Jabbar Khatri and his brother Abdulla have moved into the high-end of *bandhani* production, adapting design input from the National Institute of Design, moving into the use of natural dyes, selling in international craft fairs, and recently developing ties with Canada's Maiwa.[78]

National markets and tourism offer less buoyant markets, but nevertheless have greatly improved the lives of artisans in batik printing, leatherwork, and embroidery. Shakeel Ahmed Mohammed Qasim Khatri, a thirty-year-old batik printer in Mundra improved his designs after a course with the NGO Kala Raksha, and has found his best markets in Ahmedabad. He puts his failure to enter foreign markets down to his difficulty in adapting his technological processes to the use of natural dyes.[79] Leatherworker Umara Kana Marwada, now forty-five, used to "move village to village as a pedlar, making leather shoes for Muslims." But now he goes to fairs in Mumbai and Delhi seeking out tourists as his best potential customers. Tourism has also considerably increased the incomes of some of the embroiderers. Those in Dhordo used to work on their embroidery until midnight to earn fifty rupees a day, but now they work for NGOs such as Shrujan, and concentrate on more complex pieces. Safiya Muttwa, aged thirty-two is "visited by many tourists," and has had fifteen girls working under her.[80]

Training and techniques were vital to entry into the crafts. These have become if

anything, more important in recent decades as artisans have needed to meet the exacting standards of national and international markets. This has included adapting to the use of natural dyes, incorporating new designs, learning from design centres, and focusing on highly skilled production. The more successful artisans now are better educated, often including at least one family member with higher education in commerce.

One of the weavers interviewed in Sarli, sixty-two-year-old Danabhai Samatbhai Bhadru, followed his father into weaving, and four generations of the family before this. He has two sons now in the craft. Educated to level five or six, he developed an expertise in weaving shawls, and gained a national merit certificate in 2005. He remembered the early use of basic hand technologies, but highlighted the popularity of the *fatka* shawls or hand-flung shuttle among Kachchhi weavers during the past forty years. It had yielded great increases in productivity.[81]

The Bhujodi weaver Ramjibhai Visram Siju took a year to learn to weave after he left school at level eight. He followed his father and grandfather into the craft, the only one of five brothers to do so. He pointed out the differences between workshop and home weaving; at home the women helped set the yarn and fill the bobbins. He has a workshop with four pit looms, and he employs two assistants to do the bobbin filling.

Shamjibhai Visram Siju, aged thirty-six from Bhujodi, provided a family life story of struggles with low-caste status, but he was educated and adapted to new technologies and designs, responding to market opportunities. He is one of six brothers, four of whom are educated to degree level, and they employ sixty families. In former times, their work was weaving blankets for the Rabari tribes. As weavers they were considered low-caste, hindered by untouchability because some of the weavers of their community had done leatherwork. When the weavers delivered their cloth they "left it on the floor, where it was first purified with sprinkled water." Before Indian independence, the weavers bartered their cloth in return for three farms to grow grain for their own consumption.

Urbanisation and labour supply also affected the industry during this period. Handloom weaving required the active support of women in the household; more families moved to the towns and "town-based women of the new generation did not know how to fill the bobbins." The men still in the villages, with their markets challenged were forced to move to the mills and become labourers. This family and other weavers have recovered their position by focussing on higher-end products for national and international markets. Shamjibhai's father educated his sons, and encouraged them to follow the family business. They now concentrate on markets arising from exhibitions and close contacts with designers and buyers.

The six brothers run their family business through division of labour; one brother focuses on financial management, another on general management and coordination; another does handloom weaving; the eldest brother takes charge of community activities; another manages work distributed outside; and the youngest, still in training, manages the workshops. Shamjibhai firmly believes that the survival of the industry will depend on high expertise to match international standards, and close partnership with foreign importers.[82] Those working for Shamjibhai Siju started to weave from the ages of fourteen or fifteen, taking about two years to learn the several stages of bobbin filling, yarn setting, weaving, and washing the shawls.

Weavers working at home were expected to participate in the social functions of the weaving community and were thus less productive.[83]

Skills, training, and the division of labour have played different parts in the Khatri family of *ajrakh* printers in Ajrakhpur and Damadka. Ismail Khatri remembered that his father and mother did all the printing, dyeing, washing, and drying themselves, and as their three sons grew old enough they helped with everything, including keeping the house because they had no sister.[84] Those now working in Ismail Khatri's workshop in Ajrakhpur work mainly on one process unless they are family members who will need to learn all stages of production in preparation for the day when they may own their own workshop.[85] The block printer Imtiaz Arab Khatri, aged twenty, started his apprenticeship at the age of twelve, learned the work within a number of months, and has been printing ever since.[86] Babubhai Haddu Parmar, aged fifty, a washer employed in Ismail Khatri's workshop, has worked as a cloth washer for twenty-five to thirty years. He is the most senior washer and has trained many other washers through their month-long apprenticeship. He described with pride how the washing through various vats takes off excess colour; then the boiling "makes all the hidden colours sparkle to the surface."[87]

Ismail Khatri's brother, Abduljabbar Khatri, runs the old family workshop in Dhamadka. Labour recruitment in recent years has become a problem, as workers are attracted to the nearby factories. Those who have worked for him for the past five to fifteen years have shared their tasks: "those who wash also know how to dye and even print...Of the printers, they are well-trained in dealing with colour thickness and fine printing."[88] Bhimjibhai Vaniya, aged twenty-four is a printer, but also works at washing and boiling the cloth. Ranchodbhai Harijan, aged thirty-two, over the past fifteen years has worked right across a number of production processes: washing, spinning, drying, indigo dyeing and *pothai*, or painting with a brush.[89] One of the workers, Usman Musa, aged thirty tells a special story. He is a Jat, a member of one of the nomadic tribal groups, and used to work as a *maldhari*, or one who raised camels. His father and grandfather did this before him. Camel grazing has been much reduced in recent years, and many *maldharis* have taken up jobs as truck drivers, factory labourers, and watchmen. But the Jats have long been closely connected as customers to the *ajrakh* printers. After apprenticing for a year in the Dhamadka workshop, Usman Musa has worked during the past five across the stages of production: washing, spinning, drying, dyeing, and printing.[90]

Skills and training have also underpinned an important Kachchh industry, *bandhani*, or tie and dye. This is now chiefly a by-employment for women. Local markets for high-quality goods are sustained by the place of *bandhani* in the marriage textiles of many communities throughout Gujarat.[91] New metropolitan and international markets in North America, Europe, and Japan rely on higher skills adapted to new designs. One such craftswomen who works for Abdul Jabbar Khatri's firm, Sidr Craft, in Bhuj, is Julekha Hussain Khatri, who started *bandhani* working from the age of about fourteen. At the age of forty-two, she is one of the most skilled in Bhuj, but points out that her "sixty year old mother, Raumat Jacab at Dhamadka is faster than her." Her mother is particularly skilled, for she learned dyeing (usually a male preserve), and is an expert block printer. Julekha Khatri now teaches others and outsources her work. Her earnings support her household and her six children, and she is helped by her husband and children. She tells of an

earlier period when men of the Khatri community did *bandhani*, and of those who were expert at "*bharti*," feeling within the cloth to decide on motifs, shapes and designs.[92]

Another skilled worker in Mandvi, Neelam Khanna, is a *bandh* counter. Educated to a high level, attaining the second year of a commerce degree, she took this job as the household breadwinner after the death of her father. Her job is skilled; she takes fifteen minutes to count one thousand *kadi* (or chains of four ties each), but above all it is a job of trust. She keeps track of her counting in a notebook, and her tag carrying her name endorses the crafts person's work and the piece wages she will receive. She is trusted by both contractors and workers, and has many contracts from Mandvi, Bhuj, and Gandhiham.[93]

Though most of the interviews conducted were with men of the various artisanal communities, many of these discussed the important part played by women in the production and distribution of their goods. Other *bandhani* workers interviewed in Mandvi came in from farming areas nearby. Hanifa and Jamila Sumra of Nagalpur interspersed their *bandhani* making with their farm work, weeding, harvesting, and picking cotton. They follow "tying as a habit; habit does not allow them to sit empty-handed."[94]

Though weaving is mostly a male occupation, it is heavily reliant on the women of the household who do all the preparatory work. Danabhai Samatbhai Bhadru estimates that they contribute fifty per cent of the work, doing the washing, drying, making the colours, warping, and filling the bobbins.[95] Samatbhai Karsanbhai Vankar, aged seventy-five, from Sarli said he "had a lot of help from his wife (now deceased) over his long years as an artisan, peddling his goods to the local tribal communities."[96] A number of the women in the weaving communities now do embroidery, mirror, and other decorative work on hand-woven shawls.[97] One of these women, Ramiben Waljibhai Wankar, aged forty-eight, has taken a prominent part in the family weaving business. With no children, she travelled with her husband to exhibitions and fairs to sell their handwoven goods. In addition to decorative work she fills the bobbins and moves the shuttle. She runs the daily life of a large weaving enterprise receiving many visitors, and speaks passionately about how hard the women work; "but it is their own work so they do it willingly." After five generations of poverty, combining weaving with farm labour, the family is now well off.[98]

Bellmakers, too, accord women a prominent part in the production process. Kanji Devji Maheshwari and Luhar Janmamad Sale Mohammed of Zura explained a three-stage production process. Bellmakers in the first stage worked in small workshops using scrap iron that they beat into sheets at a forge. At the second stage, women did nearly half the work, making a clay coating to bind all the metals: "it is like a roti to cover the bell." The bell was then heated in a furnace. The men then created the distinctive echo and musical note of the bell by beating it with a hammer.[99]

A traditional women's craft, quilt making, has been turned by one family in Hodko into a major export production enterprise led by the men. Women traditionally made fifteen to twenty quilts for their wedding trousseaus, and Ramji Devraj Marwada saw the market potential of this. Together with his brothers and some tailors he does the work of designing, cutting, machine stitching, and lining. The

work of hand stitching and finishing is then outsourced to 250 women with the accumulated skills in the Muslim communities of local villages. The enterprise, now with three workshops, focuses on design and quality, and sells in international exhibitions and wholesale to trading partners in Ahmedabad, Bangalore, and Mumbai. The family tells a story of successful integration of the women's skills in hand stitching and adaptation to new patterns and markets.[100]

External connections and adapting to new markets outside the local region have brought profits and an optimistic outlook to the most successful of these craftspeople. Many artisans, however, face struggles and failure. The family of Shakeel Ahmed Mohammed Qasim Khatri have been batik craftspeople in Mundra for five generations. They have taken part in design courses run by one of the NGOs, and supplied the wholesaler Kantibhai and Fab India, but they have not accessed foreign markets because those markets now demand natural dyes, and as Shakeel Khatri explains, "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."[101]

Among those experiencing much greater difficulty are those with virtually no access to these markets, such as the cutlers of Mota Reha who have also worked for generations in their trade. They sell their knives through agents who take them to local markets throughout Gujarat. The retired cutler, Osman Abdulla Bhatti, now eighty-six, and Abdul Rashid, who has made wooden handles for knives for thirty-five years, both describe a division of labour among the village artisans; brass knife handles are forged by one group; wooden handles made by another; blades are sharpened by others; polishing and engraving are done by yet another artisan or group, and all in separate small workshops. Osman Bhatti used to travel the long distance to Anjar himself to sell his products to a wholesaler; now wholesalers come to purchase in bulk, leaving the artisans very low profit. His seven sons and two grandsons are now doing the work. The earlier brisk knife-making business in the village of one hundred shops has fallen to eight to ten shops. In the last generation many had small farms or did farm labour to make up earnings. Abdul Rashid points out that "now there are no farms left," and he "supports his four children hand to mouth."[102]

Conclusion

Interviews and oral histories among the craftspeople of Kachchh today describe 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 globalised markets. The region provides a special setting for investigating the impact of globalisation and new technologies on embedded craft skills. These have brought opportunities in the face of declining domestic markets. 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 with many parallels to those of today. We can suggest that craftwork, then as now was a divided process involving merchants and master

craftsmen/designers and a range of specialised labourers, most uneducated and with no access to the capital that might raise them in time to master craftsmen themselves. The descriptions we do have left by eighteenth-century travellers convey as much. The historical parallel we see is a remote part of the world with highly localised skills and knowledge continued in this and closely adjacent areas from ancient times. This was an area that was also intensely connected through its ports to global trade networks in the pre-colonial period. Through these trade networks localised knowledge embedded in fine craft products had an enduring impact on the material cultures of widely diverse parts of the globe. The survival and in some cases the re-emergence of those crafts today are closely linked to the recent re-opening of the region to global markets. The crafts in the region have been part of the wider framework of India's historiography of industrialisation and de-industrialisation. They are a significant part of the history and cycles of production of small-scale industry in India.

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Introduction to the FOGLIP (Food Globalisation in Prehistory) Project, Cambridge (Principal Investigator: Professor Martin Jones), www.foglip.mcdonald.cam.ac.uk/index.html.

Maiwa Handprints Ltd. http://www.maiwa.com/home/documentaries/.

Raza, R. C. "Young, Marianne (1811–1897)." *Oxford Dictionary of National Biography Online*, www.oxforddnb.com/view/article/48646, accessed 3 January, 2013.

Notes

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1 Kachchh was known as Kutch or Cutch in the pre-colonial, colonial, and recent post-colonial period. Kachchh is the current formal name for this region of Gujarat. Kutch was the former name, and this title is still in wide usage. Both titles are used in this article depending on chronological usage.
2 Tyabji, *Bhuj*, 9–16.
3 Alexander Walker Papers, The National Library of Scotland [NLS] manuscripts collection.
4 Irwin and Schwartz, *Indo-European Textile History*.
5 Barnes, *Indian Block-Printed Textiles*; Guy, *Woven Cargoes*; Crill, *Chintz*; Crill, *Textiles from India*; Barnes, Cohen and Crill, *Trade, Temple and Court*.
6 Shah, *Masters of the Cloth*.
7 Edwards, "Contemporary Production and Transmission"; Edwards, "Textiles and Dress"; Edwards, *Textiles and Dress*.
8 Berg, "In Pursuit of Luxury"; Riello, "Asian Knowledge and Calioco Printing"; Nadri, *Eighteenth-Century Gujarat*; Machado, "Awash in a Sea of Cloth"; Simpson, "Making Sense of the History of Kutch."
9 Barnes, *Indian Block-Printed Textiles*; Crill, *Chintz*; Barnes, Cohen, and Crill, *Trade, Temple and Court*; Crill, *Textiles from India*; Edwards, *Textiles and Dress*.
10 Polanyi, *The Tacit Dimension*; Mokyr, *The Enlightened Economy*; Sennett, *The Craftsman*.
11 Mokyr, *The Gifts of Athena*; Mokyr, *The Enlightened Economy*.
12 Epstein, "Craft Guilds, Apprenticeship and Technological Change."
13 See P. K. O'Brien's ERC project: "Useful and Reliable Knowledge in Global Histories of Material Progress in the East and the West," http://www.lse.ac.uk/economichistory/research/urkew/abouturkew.aspx; O'Brien, "Historical Foundations." Berg, "Useful Knowledge" introduces the recent historiography of science, and investigates key industrial travellers in India.
14 Roy, "Knowledge and Divergence"; Washbrook, "India in the Early Modern World Economy"; Parthasarathi, *Why Europe Grew Rich and Asia Did Not*.
15 Mokyr, *The Gifts of Athena*, 297.
16 Parthasarthi, *Why Europe Grew Rich*, 187.
17 McGowan, *Crafting the Nation*; Dutta, *The Bureaucracy of Beauty*, 136–44. Also see the discussion of displaying and collecting Indian craft skills in silk manufacture in international exhibitions from the mid-nineteenth century in "Exhibiting India," in King, *Silk and Empire*, chap. 6.
18 Also see Parthasarathi, "Historical Issues of De-industrialization." This discusses the debate in relation to the chronologies of India's industrial change over the eighteenth to the twentieth centuries.
19 See Morris, "Nineteenth-Century Indian Economic History"; Raychaudhuri, "Nineteenth Century Indian Economic History?"; Bagchi, "De-industrialization in India"; Simmons, "De-industrialization."
20 Machado, "Awash in a Sea of Cloth"; Barnes, *Indian Block-Printed Textiles*.
21 Singh, *Surat and its Trade*, 139.
22 British Library [BL], India Office Records [IOR], East India Company Letter Book, 1666–8: 178, cited in Singh, *Surat and its Trade*, 140.
23 BL, IOR, E/3/96, pp. 500–19, Order List of the English East India Company, letter to Surat dated 11 March 1709. Derived from *Europe's Asian Centuries* EIC trade database, unpublished.
24 Nadri, *Eighteenth-Century Gujarat*, 125; Nadri, "Exploring the Gulf of Kachh"; Machado, "Awash in a Sea of Cloth."
25 BL, IOR, E/3/96, pp. 722–47, Order List of the English East India Company, letter to Bombay dated 28 March 1710.
26 Nadri, "Exploring the Gulf of Kachh," 462, 466, 468–9, 478–9.
27 Ibid., 473. Also see Markovits, "Indian Merchant Networks," esp. 899.
28 Letter from H. Kroonenbergh to J. Pecock, Director of the Dutch factory at Surat, February 1751 (VOC 2786), cited in Nadri, "Exploring the Gulf of Kachh," 461.
29 Tod, *Travels in Western India*, 449. Hindki is the name given to an ethnic group that inhabits Afghanistan and Pakistan; the term is also loosely used by the Pathans to refer to speakers of Punjabi and its dialects.
30 Ibid., 453.
31 Rushbrook Williams, *The Black Hills*, 136–47; Tyabji, *Bhuj*, 34–5.
32 London, *The Arts of Kutch*.
33 Edwards, *Textiles and Dress*, 28–30;

Edwards, "Contemporary Production and Transmission," 170.

34 See, for example, the Ashburnham hangings at the Victorian & Albert Museum, London and other embroideries at Hardwick Hall. Crill, *Indian Embroidery*, 8; Crill, *Textiles from India*; Edwards, *Textiles and Dress*, 162–9.

35 Edwards, "Contemporary Production and Transmission," 170–1.

36 Hunter et al., *Imperial Gazetteer*; Hughes, *Indian Locomotives*.

37 Nadri, *Eighteenth-Century Gujarat*, 26; BL, IOR, H/438, Walter Ewart's Account of Surat, February 1797; BL, IOR G/36, Surat Factory Records Vol. 73: The Commercial Board—The Chief's Minute, 15 September 1795.

38 See BL, IOR, G/36, Surat Factory Records 73, Surat Proceedings 11 September 1795: The Commercial Board—The Chief's Minute, 453–4. Detailed discussion based on the Enquiry can be found in Nadri, *Eighteenth-Century Gujarat*, 146; Subramanian, *Indigenous Capital*; Subramanian, "The Political Economy of Textiles."

39 A revised and edited version of the Journal kept by Hove on his expedition was published as *Tours for Scientific and Economic Research made in Guzerat, Kattiawar, and the Conkuns in 1787–88 by Dr. Hove* (Bombay: Selections from Records of the Bombay Government, no. 16, 1855). Passages used here where possible are from the extracts to Hove's journal in the India Office Records collection in the British Library , BL, IOR, H/374, "Extracts from Dr. Hove's Journal," 591–665. The *Report on Baroda* in the Census of 1911 cited Hove's travels in the region in 1788, p. 335. See Berg, "Useful Knowledge."

40 Maharao Rayadhan III (1763-1813) was the ruler of Kutch 1778-86, and again from the 5th-13th of October, 1813. Williams, *The Black Hills*, 182–8.

41 NLS, Walker Papers, Ms. 13841: "Letter to Francis Warden, Chief Secretary to the Government, 25 April, 1809," 494, 513, 514.

42 NLS, Walker Papers, Ms. 13861–3: "An Account of Castes and Professions in Guzerat," with two draft volumes, compiled c. 1823.

43 McMurdo, "Remarks on the Province of Kattiwar," 283.

44 Bird, "Biographical Sketch of James McMurdo," 123–7.

45 Kapadia, "Alexander Forbes," 53.

46 Simpson, "Making Sense of the History of Kutch."

47 Postans, *Cutch*. On Postans see Raza, "Young, Marianne (1811–1897)."

48 Postans, *Cutch*, 14.

49 Ibid., 173.

50 Ibid., 257–8.

51 Roy, *Traditional Industry*, 3–6, 232–5.

52 Ibid., 7.

53 Haynes, *Small Town Capitalism*, 265, 272–7, 311.

54 Ibid., 83–92.

55 Ibid., 3–5.

56 Ibid., 24–36.

57 Dalal, *Census of India, 1901*, 618.

58 Desai, *Census of India, 1911*, 339.

59 Ibid., 335.

60 Trivedi, *Census of India*.

61 Ibid., p. xi.

62 Ibid., p. xi.

63 Ibid., front pages.

64 *Gazeteer of India*, 233, 236–7.

65 Ibid., 249–50.

66 Haynes, "Just like a Family," 149, 155, 157.

67 Lane, "Present to Past," 402–24, 404–5, 417; David and Kramer, *Ethnoarchaeology in Action*, 9–11, 31; Marcus, "Ethnography in/of the World System," 95–117; Martin Jones, FOGLIP Project, http://foglip.mcdonald.cam.ac.uk/. Also see Jones et.al, "Food Globalization."

68 Sibum, "Reworking the Mechanical Value of Heat," 73–106.

69 Liebl and Roy, "Handmade in India."

70 Edwards, *Textiles and Dress*, 126–7.

71 Interviews with Abdullah Khatri and Mohmedhusain Khatri, 3 July 2011.

72 Interview with Charlotte Kwon, the Director, July 2012. Maiwa Handprints Ltd. is a shop and wider commercial outlet in Vancouver, Canada which sells mainly Indian craft products for Western markets. Connected with it is the Maiwa Foundation, established in 1997 to help to fund practicing and re-emerging artisans in the craft sector. See www.maiwa.com.

73 See www.warwick.ac.uk/go/eac/oralhistory project. Artisans in the region were sought out and selected by Mohmedhusain Khatri, local resident of Bhuj. Chhaya Goswami Bhatt summarised the interviews into English; these were revised and loaded onto the website by Tim Davies. Goswami, Khatri, and Berg conducted the interviews. Full ethical approval was gained from the University of Warwick and the European Research Council for the recordings, their deposit on a website, and the use of artisans' names and photographs on the website and in publica-

tions based on this.

74 Interview with Maghibai Khimoo Manodhiya and Babu Manodhiya, Bhujodi, 30 May 2012.

75 Interview with Samatbhai Karsanbhai Vankar and Kantilal Samatbhai Vankar, Sarli, 26 May 2012.

76 See http://www.maiwa.com/artisans/index.html for information on Maiwa's work with artisans, and http://www.fabindia.com/ for information on Fab India. Archana Shah's Bandhej is another fashion house that also works closely with artisans. See http://www.bandhej.com/aboutus.aspx. For an article on Archana Shah of Bandhej, "Threads of Passion," see http://newindianexpress.com/magazine/article1520186.ece.

77 Interview with Ismail Khatri, Ajrakhpur, 15 February 2012.

78 Interview with Mohmedhusain Khatri, 2 July 2010.

79 Interview with Shakeel Ahmed Mohammed Qasim Khatri, Mundra, 28 May 2012.

80 Interviews with Safiyabai and Hoorbai Mamad of the Muṭṭwa community, and Bayiyabai Umra Kharet, Dhordo, 29 May 2012.

81 Interview with Danabhai Samatbhai Bhadru, Sarli, 27 May 2012.

82 Interview with Shamjibhai Visram Siju, Bhujodi, 27 May 2012.

83 Interviews with Rajesh Harji Siji, Jepar Jitendra Ramjibhai, and Hitesh Khengarbhai Kharet, Bhujodi, 27 May 2012.

84 Interview with Ismail Khatri, Ajrakhpur, 15 February 2012.

85 Interview with Junaid Abdul Rehman Khatri, nephew of Ismail Khatri, 15 February 2012.

86 Interview with Imtiaz Arab Khatri, Ajrakhpur, 15 February 2012.

87 Interview with Babubhai Haddu Parmar, Ajarakhpur, 15 February 2012.

88 Interview with Abdul Jabbar Mohammed Khatri, Dhamadka, 8 November 2012.

89 Interviews with Bhimjibhai Vastabhai Vaniya, Shankar Meriya, and Ranchodbhai Vajabhai, Dhamadka, 11 November 2012.

90 Interview with Usman Musa, Dhamadka, 8 November 2012.

91 Edwards, *Textiles and Dress*, 121.

92 Interview with Julekha Hussain Khatri, Bhuj, 26 May 2012.

93 Interview with Neelam Khanna, Mandvi, 16 February 2012.

94 Interview with Hanifa Yusuf Sumra and Jamila Ramju Sumra, Mandvi, 16 February 2012.

95 Interviews with Danabhai Samatbhai Bhadru, Sarli, 27 May 2012, and Maghibai Khimoo Manodhiya, Bhujodi, 30 May 2012.

96 Interview with Samatbhai Karsanbhai Vankar, Sarli, 27 May 2012.

97 Interview with Ramjibhai Visram Siju, Bhujodi, 30 May 2012.

98 Interview with Ramiben Waljibhai Wankar, Sarli, 27 May 2012.

99 Interview with Kanji Devji Maheshwari, and Luhar Janmamad Sale Mohammed, Zura, 26 May 2012.

100 Interview with Ramji Devraj, Karsan Devraj, and Hansbai Devraj Marwada, Hodko, 29 May 2012.

101 Interview with Shakeel Ahmed Mohammed Qasim Khatri, Mundra, 28 May 2012.

102 Interviews with Abdul Rashid and Osman Abdulla Bhatti, Mota Reha, 17 February 2012.