4 Surat and Bombay

Ivory and commercial networks in western India

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Abstract

The west coast of India and the east coast of Africa were linked through an exchange of cotton textiles for ivory. This trade was instrumental in the rise of Surat as a trading centre. Scholars have debated when the commercial centre of northwest India shifted from Surat to Bombay, with dates ranging from the beginning of the eighteenth century to the beginning of the nineteenth century. This chapter argues that Surat remained an important commercial entrepôt well into the nineteenth century because indigenous patterns of trade and consumption of ivory were tenacious and not easily altered by British attempts to shift activity to Bombay.

Keywords: ivory, Surat, Bombay, trade, bangles, boxwork

In the treasure trove of archaisms resides the term ‘Bombay boxwork’.¹ Although not listed in the *Oxford English Dictionary*, it is nevertheless sprinkled throughout nineteenth-century sources. According to *Hobson-Jobson*, the classic Anglo-Indian dictionary originally published in 1886, it was ‘a well-known manufacture’.² Bombay boxwork is a ‘trade name’ for wooden objects – boxes most famously, but desks, card cases, book stands and other wooden objects too – elaborately overlaid with micro-mosaic made from contrasting woods, horn and ivory, both natural and stained red or green.³ This elaborate marquetry is formed from rods of various materials bound together with glue

1 A ‘Bombay box’, however, is a campaign box – a box with drawers and carrying handles on the sides that rests on a stand. The mail packet to the Bombay Presidency was also called the Bombay Box.

2 Yule and Burnell, *Hobson-Jobson*, p. 104.

3 *The Imperial Gazetteer of India*, The Indian Empire, Vol. III, p. 192, uses this phrase.

Figure 6 Bombay boxwork glovebox c. 1867.

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and then sliced into veneers that are affixed to a wooden base. Motifs are outlined in tin, silver or brass wire.⁴ According to the Anglo-Indian official and craft historian George Birdwood, writing in the late nineteenth century, the technique originated in Shiraz (but it is also associated with Isfahan) in Persia, and was brought to Sindh, and finally to Surat and Bombay, in the late eighteenth century.⁵ Birdwood appears to have underestimated the timing of the transfer, however, as descriptions exist for this type of object in Bombay from the mid-eighteenth century.⁶ Beautiful yet reasonably priced, there was

4 Persian work uses yellow metal while Indian uses silver or tin. Pope and Ackerman, *A Survey of Persian Art from Prehistoric Times to the Present*, p. 2625.

5 See for example, Birdwood, *The Industrial Arts of India*, 2:39-40. Birdwood says it was transmitted from Bombay to Surat, and many other sources appear to have relied on him. By contrast *Hobson-Jobson* says transmission was from Surat to Bombay. If Moses (see note 6 below) is accurate, a Surat-to-Bombay transmission seems more likely, and according to *Report on the Administration of the Bombay Presidency*, p. 122, Surat was the centre of production. Birdwood relied on oral histories taken from artisans in Bombay but does not appear to have done the same in Surat. In Persia it was called *khambat bandi*, literally 'ring bound', in reference to the wires that surround the motif. Thanks to Peter Good for the translation.

6 The earliest reference I have uncovered to date is a description by Moses, *Sketches of India*, pp. 63-64. The estimate of late eighteenth century may stem from the flood of craftsmen who left Sindh in the unrest that preceded the establishment of Talpur rule in 1783. See Kennedy, *Narrative of the Campaign of the Army of the Indus in Sind and Kaubool in 1838-1839*, 1:105-106.

Figure 7 Components of Bombay boxwork. Before 1880.

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great demand for them among Westerners.⁷ In the 1870s at least, hundreds of workmen in Bombay were employed creating these objects.⁸

Today Bombay boxwork has largely disappeared from our consciousness. The craft itself is underrated, based mainly on an assumption that these objects were merely tourist art. That this was not the case is clear from the variety and, often, quality of extant examples and their relationship to architectural and other ornamentation. To contemporaries, this was considered such a representative craft of India that many objects adorned with this technique were sent to the major international exhibitions. A prize medal was even awarded to Atmaram Valeram of Bombay for his box at the Great Exhibition of 1851.⁹ The appreciation of its quality can also be seen in the large, elaborate box produced for Queen Victoria on her Diamond

Some, such as Amin Jaffer, date the technique even earlier, as early as the late sixteenth century, but it is not clear whether the objects he identifies are merely micro-mosaic or specifically this technique. See Jaffer, *Luxury Goods from India*, pp. 19–21, 30–31.

⁷ Mrs Postans, 'Western India in 1838', *The Metropolitan Magazine*, Vol. 8 No. 103 (November 1839), p. 313. Some suggested that the use of materials was wasteful, but as Mrs Postans points out, this technique produces a detailed pattern relatively simply and rapidly.

⁸ *General Report on the Administration of the Bombay Presidency*, p. 375.

⁹ The inlaid items were in high demand at the fair. Rodrigues, 'Art Furniture and Household Decoration in the Nineteenth Century Bombay', p. 3.

Jubilee.¹⁰ So-called Sindh-work appealed to Europeans precisely because it was perceived to be more authentic than objects supposedly degraded by their contact with Europeans.¹¹ Another cause for confusion is that this type of work is now generally called *sadeli*. This may or may not have been the original term (for example a work from 1871 calls it *mooltan*)¹² but, according to Sir George Watt, 'the expression was early made to embrace carved wood or ivory boxes' or any combination of the two, 'so long as they are made in Gujarat'.¹³ There are several noteworthy aspects to Watt's statement. First, it is the oldest mention of the term *sadeli* that I have found in Western literature. Second, Bombay is not in Gujarat. Thus, the use of this Indian term has obscured a unique process by presenting a generic category including all kinds of carving and inlay. While Birdwood has been relied on as an authority, contemporary sources give many conflicting accounts about the spread of this technique, with reports indicating variously Bombay, Surat or the Punjab. There is no clear evidence to definitively establish the origins of Bombay boxwork in India, but when compared to ivory trade patterns, the developmental histories of Surat and Bombay and the migration patterns of Parsees (the most likely transmitters from Persia), Surat seems the likely candidate.

The tangled history of Bombay boxwork provides a concrete expression of the wider story of Surat and Bombay, each in its time the most important port on the west coast of India for the East India companies.¹⁴ The designation 'Bombay' for this technique was a result of the decline of Surat and the rise of Bombay, a development that in turn represents the successful imposition of British power over earlier indigenous trading patterns. When exactly this transfer of power occurred is widely debated among scholars, with estimates ranging from the death of Aurangzeb in 1707 to the 1730s to the end of the

10 Wales, *Souvenirs from the Diamond Jubilee of Queen Victoria*, p. 57. It is not clear whether it was ever actually presented. However, the Parsi community of Surat and the cities of Bombay and Surat both presented her with cases of carved or inlaid ivory. For example; *International Exhibition St. Louis, 1904*.

11 Markovits, *The Global World of Indian Merchants*, p. 116. Markovits does not specifically mention *sadeli*, but it was known to have been produced in Hyderabad.

12 Balfour, *The Cyclopaedia of Indian and Eastern and Southern Asia* 1, p. 575. This refers to Multan in the Punjab region of present-day Pakistan. Some scholars, like Louiza Rodrigues, place its origins there. Rodrigues, 'Art Furniture', 1. Yet another name used was 'Bombay mosaic'. See *Review of some of the Principal Acquisitions during the year 1931*, p. 45. It was also produced in Ahmedabad.

13 Watt, *Indian Art at Delhi*, p. 156.

14 Although the city has officially been renamed Mumbai, it is still widely referred to as Bombay and since this name appears in the sources as well, it will be used here.

eighteenth century.¹⁵ Chronological precision is important because the shift from Surat to Bombay represents a milestone for the British Empire. In recent years, scholars have argued persuasively for the continuing importance of Surat. As Ghulam Nadri has noted, the rise of Bombay did not mean the end of Surat.¹⁶ The question as to when Bombay rose and Surat fell depends to a large extent on whether we are looking at political, commercial or military power. In this chapter, I argue that Surat and other port cities proved remarkably resilient even after the arrival of European trading companies like the Dutch and English East India Companies and the rise of colonial entrepôts like Bombay, and that this can be seen clearly in the persistence of indigenous trading patterns oriented around ivory. A key component for Bombay boxwork, ivory is typically ignored or relegated to a list of trade commodities in these ports. This is in part because scholars tend to rely on European sources which do not always reflect local conditions. Yet ivory was a significant reason why the commercial centre of power remained in Surat long after British political and military power had shifted to Bombay, and even after the VOC had collapsed completely. The ivory trade did transfer from Surat to Bombay but it took some two hundred years for the British Empire to triumph over traditional trade patterns.

A tale of two cities

The histories of Surat and Bombay are intertwined, but this story begins in Surat. From the late sixteenth century through to at least the early eighteenth century Surat was, as François Bernier called it, ‘that famous and rich port of the Indies’.¹⁷ It was a vital stop along key trading routes that spanned much of the globe. According to one early scholar, ‘Surat proved to be the gateway to European domination in India’.¹⁸ Although insignificant until the sixteenth century, it surpassed earlier centres like Cambay, which declined largely because extreme silting of the bay made access increasingly

15 See e.g. Rothermund, *Asian Trade and European Expansion* for support for the death of Aurangzeb; Das Gupta *The World of the Indian Ocean Merchant*, for the 1730s.

16 Nadri, ‘Revisiting the “Decline of Surat”’.

17 Bernier, *Travels in the Mogul Empire*, p. 188.

18 Gokale, *Surat in the Seventeenth Century*, p. 147. This opinion is seconded by Metha, *Indian Merchants and Entrepreneurs in Historical Perspective*, p. 33. The Companies never established a presence of similar significance in the region, although ports like eighteenth-century Mandvi in Kachh, for example, were certainly important to indigenous traders and as part of the VOC network that supported their factory in Surat. See Nadri, ‘Exploring the Gulf of Kachh’.

difficult for large oceangoing vessels.¹⁹ The Dutch and English East India Companies arrived in Surat at roughly the same time, the first decade of the seventeenth century, but neither was able to establish stable factories until the 1620s. For the Dutch, Surat was not as politically important on the west coast as Kochi, but it was significant nonetheless as a vital link in trade networks. Because textiles were so important to the inhabitants of the spice-growing regions in Southeast Asia, it was vital for the Companies to establish contacts with high-quality cotton-producing regions like Gujarat where such commodities could be obtained at relatively low prices.²⁰ For the English, Surat was the first foothold for the Company in India, and for nearly a century it was their most important factory and a crucial launch pad for future expansion. Both Companies sought a base specifically in Surat for two main reasons. First, it enabled them to bypass the Portuguese presence in Goa and other locations along the west coast. At the same time, a stronghold on the northwest coast of India could serve to challenge Portuguese supremacy in the Arabian Sea.²¹ As a Mughal port from the late sixteenth century, Surat was neutral, and it was this status that kept it shielded, at least to some extent, from attack.²² At the same time, the Mughal rulers encouraged Europeans because the primary revenue of the city was through customs duties.

Many exports passed through the busy port of Surat, including coir (coconut fibre), coral, iron and lead, but cotton was king. Whether raw or woven, cotton was the most significant export because it could be traded for spices in Southeast Asia.²³ Without cotton, products much in demand in Europe including spices and tea would have required bullion (and often still did), a significant drain on profitability. Thus, for the Dutch, and especially for the English, the northwest coast was an essential site for expansion. The VOC was drawn to Surat because a higher return on spices could be obtained, especially for cloves, than in Coromandel, another textile source. Sales of spices in Mocha generally covered any shortfall.²⁴ This dynamic

19 It did, nevertheless, retain prominence in the early seventeenth century and remained a secondary location for ivory into the eighteenth century. See e.g. British Library India Office Records (hereafter referred to as IOR) IOR G/36/11 1724 ff 20 for records of elephants' teeth brought to Khambat.

20 See Andaya, 'The Cloth Trade in Jambi'.

21 Cavaliero, *Strangers in the Land*, p. 8.

22 It was plundered early on by the Portuguese in 1512, 1530 and 1531, at the height of Portuguese aggression in the immediate area. Randar, Daman and Diu were greater prizes.

23 Even in 2015, Gujarat was the top cotton-producing state in India. Ahmed, 'Gujarat top cotton producing state, harvests 108 lakh bale'. In some periods, China was also important.

24 Israel, *Dutch Primacy in World Trade*, p. 178.

made Surat the lynchpin for VOC trade in the region and a port city second in importance only to Batavia.

In the seventeenth century, the VOC enjoyed more success in Surat than its English rival, in large part because the Dutch had better-developed trading networks. The VOC could supply the market more effectively and as a consequence the organisation had better relations with local middlemen and Mughal officials. By the time the EIC offered any serious competition, the VOC was firmly entrenched. This dynamic fluctuated, but Dutch dominance continued until the last two decades of the existence of the VOC when Coromandel began drawing some of the textile trade.²⁵ The Dutch factory was ultimately ceded to the EIC in 1796 after the Netherlands fell to Napoleon. Although it was returned in 1815, by the time Dutch commerce rebounded, Bombay was well established. Declining Dutch economic and political power in Surat had less to do with greater English effectiveness than the breakdown of the VOC through a decline of intra-Asian trade and supplies of Japanese copper.

In contrast, the EIC in Surat had to contend not just with VOC competition but with the various layers of Mughal bureaucracy as well as local commercial powers. Even in the early eighteenth century when Mughal power was in decline, these frictions caused problems for the EIC.²⁶ With a less reliable supply of products desired in Surat, the EIC was more reliant on imports of bullion. As a result, the EIC competed with other Europeans, which included at times the French, Danish, and Swedish Companies, and legal and illegal private trade, but especially the Dutch. It took almost a century for the British to firmly establish a foothold. By the time this had been accomplished, there were already official efforts to shift British trade to Bombay.

It took decades for Bombay to rival Surat. The English took over the seven islands that comprised Bombay from the Portuguese in 1668, when they were presented to Charles II as part of the dowry of Catherine of Braganza. Difficulties beset the site from the start, as the Portuguese initially refused even to hand over the territory. It was nevertheless officially made the EIC headquarters in 1687. Even though the English had good reason to shift operations from Surat, the move to Bombay did not make it an important commercial or political centre. Bombay was known for its noxious climate, rife with malarial mosquitos, and a territory comprised of islands was not conducive to growth. Despite serious efforts to move trade there as early as

25 Shimada, *The Intra-Asian Trade in Copper by the Dutch East India Company*, p. 107.

26 IOR G/36/10, 26 February 1719.

1718, growth required an expensive land reclamation project, only begun in the mid-eighteenth century, to connect the islands.²⁷ Thus, even in the 1730s, when according to some scholars Surat had already slipped from its position of dominance, Sir Robert Cowan (d. 1737), president and governor of Bombay from 1729 to 1734, complained he could not make inroads into the Surat trade because of fierce local competition.²⁸

Perhaps even more importantly, a wide range of political conditions impeded growth in Bombay. Maratha admiral Kanhoji Angre (1669-1729) and his sons caused considerable disruption to shipping after he took office in 1698 or 1699 and well into the 1730s. On both land and sea, the Marathas continued to be a problem for the EIC for much of the eighteenth century. Mysore, to the south, also caused problems for the English, blocking connections further down the coast. Even in the late eighteenth century, the EIC was not able to bypass the Gujarati weaver contract system and make direct contracts to control production.²⁹ The Portuguese still controlled much of the Indian Ocean until the mid-eighteenth century. Once Bombay was viable, the English became more aggressive. By the time the Dutch Company folded, the English were well placed in Bombay. Lack of control over ivory, however, prevented Bombay from becoming the most important trading centre.

Ivory in western India

As an import *into* India, ivory has received little attention, but it was vital to trading networks in the early modern period. Moreover, as art historian Ananda Coomaraswamy has commented, 'no other craft would throw more light on the history and migrations of designs in India than this'.³⁰ It was key to the development and ongoing prosperity of both Surat and Bombay, and its history provides us with a better picture of the complex interaction of European and indigenous networks in western India. Nevertheless, the study of ivory is difficult because, although it appears regularly in Company trade documents, the entries are fragmented and scattered. In the early modern period, Europeans could not control points of supply, as ivory was sourced from many different outlets, including European trading companies,

27 IOR G/36/10, 10 August 1718.

28 Marshall, 'Private British Trade in the Indian Ocean before 1800', p. 115.

29 Nightingale, *Trade and Empire in Western India*, p. 150.

30 Coomaraswamy, *The Arts and Crafts of India and Ceylon*, p. 182.

Asian maritime traders and caravans. Nor were Europeans involved in its production because nearly all ivory was shipped as tusks rather than finished goods. Thus, although scholars have recognised that ivory flowed into Surat, they saw little consequence in it beyond the fact that it was one of a series of commodities brought to Gujarat.

The importance of ivory does not undercut the significance of cotton to Gujarat. Rather it was a function of it. Since the Companies did not want to pour their gold, silver and copper bullion into India, a trade commodity in demand in India was needed to exchange for raw cotton and cotton and silk textiles. It was not a direct exchange – the goods still needed to be sold on the market – but specie acquired locally was not a drain on money supplies in Europe. Ivory was in high demand in Gujarat, creating a sort of ouroboros, where cotton textiles were needed to obtain ivory, and ivory was needed to obtain cotton textiles. The symbiotic relationship formed through imports of ivory into India and exports of textiles to Africa is evidenced by a variety of external factors. For example, famines in Africa affected the amount of ivory available in Surat because the disruption to the East African economy denied local ivory middlemen the income to purchase Surati fabrics.³¹ As long as this pattern of supply and demand was fairly constant, the exchange remained profitable for all parties. Even when the tusks were cracked, small or oddly shaped, they could still bring in profit.³²

This connection between eastern Africa and northwestern India is a crucial piece of the story, but it can be swiftly summarised. The Gujarat–East Africa circuit of cotton and ivory was a vital part of Portuguese trade from the sixteenth century. Moreover, Gujarati cotton and textiles were important in other Portuguese trade sites, such as Brazil. It is for this reason that from the sixteenth to the eighteenth centuries, when Portuguese power in East Africa was at its apex, mentions of ivory outstrip even those of slaves in Portuguese records. Indeed, ivory trafficking exceeded human trafficking in export value from East Africa during this period.³³ Portuguese trade to India was primarily through Goa, which had its own ivory industry (albeit one of a very different sort) and secondarily through Diu. However, to obtain the Gujarati textiles in demand in Africa and later Brazil, Portuguese ships offloaded some ivory in Surat. Although the difficulty of obtaining supplies hindered English commerce in ivory until the mid-seventeenth

31 Sheriff, *Slaves, Spices & Ivory in Zanzibar*, pp. 84–85.

32 Maharashtra State Archives (hereafter referred to as MSA) Public Diary No. 8 (1734–35), ff. 238.

33 Beachy, 'The East African Ivory Trade in the Nineteenth Century,' p. 269.

century, the EIC worked actively to expand its trade of ivory in Asia in the seventeenth century in order to challenge Portuguese supremacy.³⁴ The English company's increasing success at finding supplies was a concern for VOC officials, who wanted to know where they were getting it.³⁵ For the Dutch and English Companies, Surat became the locus for ivory trade, whether it was to be worked locally or transshipped within India or other destinations further east like Java, China or Japan. The shift of South Asian trade to the Gulf caused by VOC spice monopolies also worked toward increasing this trade.

Ivory concentrated in Surat from a range of sources. All European trading companies offloaded significant amounts of ivory in the port while Indian traders likewise purchased ivory from Africa or Muscat to bring to Surat, which was also the endpoint for caravans from Persia, Russia, central Asia and points south and west. Ivory was a significant reason that Surat remained a vital commercial centre long after British political and military power had shifted to Bombay, and even after the VOC had collapsed completely. Thus, even after Mughal control ceded in Surat, traders preferred to discharge their cargo there rather than in Bombay as that was where the market was.³⁶ Until the early nineteenth century, about 80 percent of ivory imports into Surat and Bombay remained in India, the remainder going to China and Southeast Asia, with small proportions going to Europe.³⁷ Surat was not only home to ivory traders; it was also where the craftsmen were located. This pattern continued until late in the nineteenth century, when European demand escalated considerably while it remained stagnant in India. Thereafter, as British power increased, the proportion (rather than the amount) that remained in India decreased. Thus, Bombay as an ivory centre expanded because of demands for ivory in England, rather than as a result of the usurpation of the historical networks of Surat.³⁸

34 Bal, *Commercial Relations between India and England*, p. 115; Chaudhuri, *The Trading World of Asia and the English East India Company*, p. 216.

35 In the seventeenth and early eighteenth centuries, it was primarily Guinea and privateering. See e.g. VOC archives, Nationaal Archief in The Hague (hereafter referred to as VOC) 11326, September 1743, abstracts of correspondence expressing concern that the English were obtaining ivory from Africa.

36 Chaudhuri, *The Trading World*, p. 106.

37 Sheriff, *Slaves, Spices & Ivory in Zanzibar*, pp. 85-86.

38 Ibid.

Bangles before boxes

Why was there such consistent demand for ivory in Surat? Gujarat and Maharashtra (where the provinces Surat and Bombay, respectively, are located) rarely appear in histories of Indian ivory, even though humans have used and worked ivory in the region since at least the Indus Valley civilisations circa 3000 BCE. The ancient peoples of the region even traded ivory to Sumer and Mesopotamia. This trade disappeared in the seventh century for indeterminate reasons. Thereafter there is no record of significant ivory exports from anywhere in India, much less Gujarat, until the nineteenth century, when elephants were systematically exploited by the British. Moreover, Gujarat and Maharashtra have not been home to large populations of elephants in the last millennium. Elephants maintained in that region were used primarily by Mughal officials for ceremonial purposes. Animals like horses, bullocks and camels were used for draft and transportation. Additionally, while Surat is relatively close to the coast, it is not close enough to be a natural location for Indian Ocean trade, an inconvenience only partially offset by the fact that the Tapti River by which the city is located is one of the few Indian rivers that run east to west, providing access to weavers and interior markets. Therefore, geographically, Surat might seem an odd place to become the ivory emporium of India.

The answer to this conundrum lies in local custom, which mandated ivory as an important material of cultural expression. It was not driven by elite patronage as is often the stimulus for art and craft production, but rather by ivory bangles. These bracelets, made of every possible material, are the most widely worn item of jewellery in India, an essential part of any woman's wardrobe. As an animal product, wearing ivory was eschewed by Hindus in some regions, but in Gujarat, as well as surrounding areas like Rajasthan and Sindh, ivory bangles were commonly tied to wedding and marriage rituals, not just by Hindus, but Muslims and Parsees as well. The number, size and decoration of the bracelets varied by region, caste or ethnicity, and by income, as did the customs surrounding them. In the recent past, in Rajasthan and Gujarat, a full set consisted of 52 bangles, 26 on each arm. In general, it was believed that ivory bangles would keep the bride healthy and assure easy childbirth.³⁹ They were often coloured red, an auspicious colour, with madder dye or lac. As a symbol of marriage, wedding bangles had to be new rather than second-hand.⁴⁰ Thus, these

39 Untracht, *Traditional Jewelry of India*, p. 70.

40 Martin with Vigne, 'The Decline and Fall of India's Ivory Industry', p. 8.

Figure 8 Woman wearing ivory-like bangles, Rajasthan, c. 2011.

Photograph by Christopher Michel.

Figure 9 Modern Punjabi-style wedding chura. Resin to look like ivory with lac, 2017.

Photograph by the author.

bangles were often destroyed with the cremation of the body upon death, or smashed on becoming a widow, creating a continuous demand that was not subject to the vagaries of fashion.⁴¹ It was this demand that brought ivory to Surat. Thus, ivory was not a coincidental import into Gujarat that developed as supplies appeared, but rather increased supplies merely allowed use to extend to greater numbers of women.⁴² Western-language sources take scant notice of what must have been a significant industry because it was one that Europeans did not control or directly profit from. Yet bangles were clearly the driving force behind the ivory trade to Surat.

Contemporary reports vary as to the construction method of traditional ivory bangles. Ivory tusks are partially hollow from the root to accommodate tooth pulp and nerve, and solid toward the tip. According to William Milburn, the hollow part of the tusk was used, while nearly a century later Cecil Burns, artist and principal of the Bombay School of Art from 1899 to 1918, describes a lathe method used in Sindh in which graduated bangles are cut from a solid section.⁴³ What methods were used in which regions at what times is a matter for further research, but the method Burns describes appears to have been less common and probably used for more expensive, carved sets. Milburn further noted that the solid pieces could be obtained at

41 See Chaiklin, 'Surat: City of Ivory'.

42 Chaudhuri, *The Trading World*, p. 222.

43 Milburn, *Oriental Commerce*, p. 62. Burns, *Monograph on Ivory Carving*, p. 3. Additionally, according to the *Universal History* of 1749, 'Their artisans show great genius [...] in turning and working in ivory, a staple commodity among them, which they polish with infinite beauty and dexterity'.

bargain prices because the value was in the hollow pieces for bangles.⁴⁴ In either case, a larger tusk is required to produce rings with a diameter large enough to fit over the hand, and in some regions the upper arms or ankles as well. On the average, Asian elephant tusks are smaller and narrower than those of either species of African elephant. Thus, the demand in Surat was not just for ivory, but specifically African ivory. Smaller tusks had little value in this market.⁴⁵ Tusks of appropriate size were actually called 'bangle tusks', while hollow sections from the upper two thirds were called 'bangle ivory' or 'bangle pieces'.⁴⁶ The most desirable tusks fetching the highest prices were medium-sized, not too pointy and relatively straight – over 60 bangles could be cut from these.⁴⁷ However, if we assume that Milburn was correct, there were significant portions of the tusk available for other uses. Moreover, Dutch sources make clear that the demand was not exclusively for African ivory.⁴⁸ Thus, Surat also became known for producing ivory combs, spinning tops, chess pieces, carvings of vegetables, and from perhaps the eighteenth century if not earlier, Bombay boxwork.⁴⁹

Artisans of ivory were almost always located in urban areas, because the materials were too expensive for village craftsmen to purchase. Craftsmen received materials from merchants on spec, and were then paid for labour. While this relationship has not been documented in Western sources, it was the process followed for gold jewellery and similarly luxurious crafts in India, and many other parts of the world too. Ivory craftsmen did not belong to any particular caste or religion.⁵⁰ It was the prosperity of Surat in the late sixteenth and seventeenth centuries that brought ivory artisans

44 Milburn, *Oriental Commerce*, p. 62.

45 See e.g. the report from Laus Deo in Surat in 1609, 'The Prices of Goods in India', 30 August 1609 in Frederic Danvers, Vol. 1, p. 33. 'Elephants teeth that are large and sound (the small being worth nothing)'.

46 The earliest instance I have found for 'bangle tusk' is in *The British Trade and Export World*, Vol. 23. But it was probably in use much earlier than that. 'Bangle ivory' is found in Milburn from 1813 and later. It is specifically defined as the hollow part in Consul Webster, 'The Sheffield Cutlery Industry', in *Commercial Relations of the United States – Reports from the Consuls of the United States on the Commerce, Manufacture, etc. of their Consular Districts*, No. 25, pp. 46–49, at p. 49. Some sources call this 'cutch ivory'. See e.g. M'Culloch, *A Dictionary, Practical, Theoretical, and Historical of Commerce and Commercial Navigation*, p. 792.

47 Burton, *The Lake Regions of Central Africa*, p. 540; Untracht, *Traditional Jewelry*, p. 170.

48 E.g. VOC 11326 No. 186. A letter complaining that no elephant's teeth were available in Surat because the ships had not arrived in Batavia on time. These ships would most likely have had Siamese or Burmese ivory.

49 Burns, *Monograph*, p. 10.

50 Coomaraswamy, *The Indian Craftsman*, p. 8. Coomaraswamy did not specifically reference ivory craftsmen but wrote generally of urban craftsmen.

to the port.⁵¹ Although some interpretations have Surat in decline by the early eighteenth century as Mughal control deteriorated, the number of craftsmen actually surged in Surat after the fall of Ahmedabad, where many Mughal elites resided, to Maratha forces in 1757.⁵² A quarter century later this contingent was swelled by Sindhi craftsmen escaping chaos there. This influx of skilled craftsmen may well have contributed to the spread of Bombay boxwork. This merchant–craftsman relationship drew ivory to Surat, underpinning its continued centrality. Well into the nineteenth century, even if English ships offloaded in Bombay, the ivory still had to be brought to Surat, because that is where the craftsmen resided.⁵³

The shifting of the market

The importance of ivory to shipping patterns on the northwestern coast of India thus lay in part in the locality of craft networks, but it was also connected to supply. Surat was an open market for much of the early modern period. Indigenous ship owners and merchants, caravan traders, private merchants and even Company servants conducting private trade on their own account all brought ivory to Surat. From there, they exchanged their goods for ivory and returned. Unlike textiles, nutmeg, cloves or coffee, for which production could be controlled to some extent, ivory supply was reliant on what came to market. Supplies were erratic, often obtained through transshipment, and were frequently part of poorly documented private trade.

In the early seventeenth century, the Dutch were much better placed to source ivory as the EIC had few strongholds anywhere, much less on ivory trade routes, where the Portuguese and Dutch had preceded them. Thus, despite the shifting of political power to Bombay, very little ivory was offloaded there. This is evident in the *Europa* incident of 1728 which involved the governor of Bombay, Sir Robert Cowan. He allowed the *Europa*, a Portuguese vessel, to offload cargo, including ivory, in Bombay. Although Cowan called the allegations that he had a personal financial interest in the private trade of this cargo ‘false and malicious aspersions’, he was nevertheless dismissed from Company service for so conspicuously violating EIC rules against

51 See e.g. *The Modern Part of a Universal History*, Vol. 10, p. 224.

52 Forbes, *Oriental Letters*, p. 258.

53 MSA Committee Custom Revision Diary 1/187 1817, ff. 3.

direct competition with the products it traded.⁵⁴ Cowan denied receiving anything off the ship except a present of 'six hams, eight dozen of French & Oporto wine & a pound of snuff' from the commander.⁵⁵ Nevertheless, Cowan's very decision to offload ivory in Bombay was suspicious given the market was in Surat, and was most likely made in an unsuccessful attempt to avoid drawing attention to his illicit private trading activities.

Trade patterns set in place in the sixteenth century were not easily disrupted. The merchants knew the system in Surat and early attempts to change the balance of power were not successful. This is evident in the case of English agent Bhimji Parekh (1610-1686). In 1669, he persuaded a large group of merchants (8,000 according to some sources) to leave Surat for Bombay, where he had been on English business, because of heavier taxation of non-Muslims in Surat as compared to Bombay. It was a premature move for Bombay and even the English did not support this migration because they feared Mughal repercussions, so they returned to Surat.⁵⁶ Similar episodes occurred well into the eighteenth century. For example, the EIC tried to lure Surati goldsmiths to Bombay to mint coins in 1749 and they refused because they thought it might damage their reputation as elite craftsmen if they went to the newer port.⁵⁷ Thus, plans to shift trade to Bombay were not easily accomplished despite the best efforts of the English company. Even in the 1760s, EIC Company servant John Henry Grose described Surat as 'the centre of the Indian trade'.⁵⁸

It was not until Mughal power declined that Bombay finally emerged as a viable alternative.⁵⁹ The breakdown of the Mughal system caused some merchants to seek greener pastures in Bombay.⁶⁰ One significant shift involved the migration of shipbuilders that began in the mid-eighteenth century. However, this remained a slow process. Certainly, many factors worked against Surat, including the further silting of the river and several disastrous fires, yet even these difficulties proved not enough to alter trade patterns. The British were ultimately unable to change trade patterns on their own. The government art school established in Bombay in 1857 with the idea of adapting Indian crafts for commercial markets was not successful for this reason. The art school in

54 Prakash, 'English Private Trade in the Western Indian Ocean'; Forrest, *Selections from the Letters, Dispatches and Other State Papers Preserved in the Bombay Secretariat* (Bombay: Government Central Press, 1887), p. xl.

55 MSA Public Diary 7 ff 234.

56 Gokhale, *Surat*, pp. 119-122.

57 Barendse, *Arabian Seas 1700-1763*, 1: 888.

58 Grose, *A Voyage to the East Indies*, p. 71.

59 White, *Competition and Collaboration*, p. 23.

60 VOC 11326 Letter 19 ff 186 for an example.

Bombay and similar schools in Madras and Calcutta were in European centres of government and commerce but they were not where the craftsmen were.⁶¹

For Bombay to emerge ahead of its rivals it was necessary to create a new circuit of cotton and ivory, but the city did not become a significant source for cotton thread until Bombay Spinning and Weaving was founded 1854, and industrial-scale weaving did not commence until about 1860.⁶² Only when the American civil war cut off supplies of American cotton and machine-woven textiles did Bombay begin to create its own ivory and textile ouroboros.⁶³ As textile production moved there and transportation costs declined, Bombay became an industrial centre that drew more and more people into its orbit. This created a new market for a small coterie of bangle craftsmen who shifted there to supply bangles to Gujarati and Rajasthani migrants.⁶⁴

As this account suggests, Surat remained important commercially even as it lost political power. It was the main destination for ivory from Zanzibar well into the nineteenth century.⁶⁵ Even a reduction of customs in Bombay about 1817, from 5 percent in Surat, to 3½ percent in Bombay, was not sufficient to bring about change.⁶⁶ However, sourcing from Zanzibar shifted the balance of power. When Portuguese Mozambique was the main source, this ivory was brought to Surat by Indian traders who acquired it in Africa or Muscat, or caravans which brought it overland. As the English took control of Zanzibar over the course of the nineteenth century, they gradually routed supply into Bombay.⁶⁷ Other ivory procurement sources such as Melinde (Kenya) also fell under English control. However, rival Portuguese trade continued as before to Surat as there was no benefit for them to move into the English stronghold.⁶⁸

Surat down but not out

Craftsmen follow their patrons. The population of Bombay grew with migrants and Westerners, and the number of craftsmen grew along with

61 Rarapor, 'John Lockwood Kipling & the Arts and Crafts Movement in India', p. 14.

62 Goody, *The East in the West*, p. 133.

63 Presholdt, *Domesticating the World*, p. 79.

64 Martin with Vigne, 'India's Ivory Industry', p. 17. They wrote of five craftsmen in 1978 but one can assume that this is the tail end of a trend rather than the beginning.

65 See Smee, 'Proceedings at Zanzibar'; Bird, 'Commercial and Geographical View of Eastern Africa', p. 114.

66 MSA Committee Custom Revision Diary 1/187 1817, ff. 3.

67 Sheriff, *Slaves, Spices and Ivory*, p. 84.

68 Bauss, 'Textiles, Bullion and other Trades of Goa', p. 281.

it. As Victorian travel writer Mrs Eliot Montauban noted, 'For beautiful specimens of ivory, inlaid with silver mosaic, made into the most captivating work boxes, elegant baskets and seducing little nicknacks [sic] of all shapes and sizes and for every variety of purpose, the fame of Bombay has spread far and wide.'⁶⁹ However, her observation should not be taken as a denial of the importance of Surati ivory. She was not making comparisons, nor does she note the production of bangles or combs or other non-Westernised objects. Although these things were almost certainly produced there, Bombay does not appear to have ever become the significant production centre that Surat was at its peak. Bombay was better known in the West because many of its craftsmen catered to European markets or Westerners in India.⁷⁰ It was a colonial centre rather than a commercial hub underpinned by indigenous demand or royal patronage. The objects that were produced there tended to be for export or for resident Westerners. This meant that something decorative like Bombay boxwork could flourish, but high-quality art production, which required patronage, or bulk production like bangles did not completely shift because the main markets for those items were in Gujarat and other regions north.

Other forces worked in combination to undermine Surat's role as an ivory entrepôt. The abolition of the slave trade reduced the need for Gujarati textiles. At the same time, European demand for cotton from Gujarat fell because the quality of English textiles improved.⁷¹ The ouroboros was further eroded in the second half of the nineteenth century due to a surge in ivory demand in Europe and America, in part because mass production techniques had been developed for ivory. The functionality of ivory was put to wide use in everything from knife handles to billiard balls and piano keys. It is around this time that the phrase 'Bombay ivory' came into use in the West. The term evolved from the practice of ships' papers listing commodities by the port from which the vessel cleared.⁷² Within India, the same phrase referred to imported ivory.⁷³ These shifting patterns of ivory demand led to a direct competition for ivory supplies, to the extent that an American consular report from Zanzibar claimed, 'Bombay ivory

69 Montauban, *A Year and a Day in the East*, p. 50.

70 Roy, *Traditional Industry in the Economy of Colonial India*, p. 25.

71 *Imperial Gazetteer*, p. 176.

72 Holtzappel, *Turning and Mechanical Manipulation*, p. 142.

73 Palit, *Sketches of Indian Economics*, p. 294. According to the author, this referred to hard ivory, which would have excluded East African ivory. However, the demand for East African ivory was largely on the west coast of India.

[...] comprises everything that is not suitable for other markets'.⁷⁴ In other words, better quality tusks were being redirected to other markets. Declining demand for Indian cotton and increased global demand for ivory altered the kinds of ivory going to India.

This displacement of early modern trading patterns is apparent in the observations of Charles Frederick Holder, a curator at the American Museum of Natural History and author of *The Ivory King*, that in the 1880s in the warehouses of F. Grote & Company of New York one could 'find numbers of rings of ivory that [were] awaiting shipment back to Bombay, where they will be sold as bangles or bracelets to Hindoo [sic] women'.⁷⁵ In other words, the solid portions of tusk, valued higher in the West, were retained, while only the hollow portions were sent back to India. American incursion into this market was most likely the result of increased American (and French) trade directly to Zanzibar.⁷⁶ Transport costs had dropped enough to make these new routes viable. Thus, from the 1870s until about 1915, Bombay was the third largest ivory market in the world.⁷⁷

Yet even as British power pulled ivory to Bombay, it remained fundamentally a place of transshipment until perhaps 1850 or 1860. Private traders continued to bring ivory to Surat, either directly or after it had been offloaded in Bombay, throughout the tenure of the EIC. As the nineteenth century progressed, ivory was still brought to Surat, but less and less by European traders. In the end, Surat never entirely disappeared as an important link in a wider trading network until sometime in the twentieth century, because it remained a producer of textiles and bangle manufacturing centre. Cecil L. Burns noted in 1900 that Surat was still trading bangles and other small items to Bombay.⁷⁸ By 1913, all ivory carving was in decay in the region, supporting only some 554 people in the whole of the Bombay Presidency.⁷⁹ Changing lifestyles and declining

74 Letter of the Secretary of State transmitting a report on the Commercial Relations of the United States with Foreign Nations for the Year Ended September 30, 1865, p. 506. This report also says that ivory for bangles is called 'cutch ivory'.

75 Holder, *The Ivory King*, p. 221. This company was established in 1847. They were located at 114 E. 14th Street and lasted at least until 1899.

76 Bird, 'Commercial and Geographical View of Eastern Africa', p. 117; Postans, 'Some account of the present state of the trade', p. 170.

77 Martin with Vigne, 'India's Ivory Industry', p. 6. The other major markets were in London and Antwerp.

78 Burns, *Monograph*, p. 9.

79 *A Review of the Administration of the Presidency*, p. 151. Only 120 remained in Gujarat in 1978 and 3000 in Kerala. Martin with Vigne, 'Indian Ivory', pp. 16, 20.

supplies led to greater attrition. Women stopped destroying their bangles, or began to replace them with cheaper celluloid imitations from Germany or Japan. A government-sponsored survey conducted by G.P. Fernandes in 1926, a date significantly later than the period under examination here, is one of the earliest detailed examinations in the region. Noting ivory production in a variety of areas and its decay, he lists Ahmedabad and Surat as the only places of significance for ivory carving in the Bombay Presidency.⁸⁰ Fernandes found a mere 25 to 50 ivory artisans in Surat (and about an equal number in Ahmedabad), of whom only half knew the art of Bombay boxwork, which was inaccurately described as inlay.⁸¹ He maintained that 'This art is now dying out, and something must be done to preserve it.' Fernandes further stated that the market was in Bombay and that the value was 200-300 percent above the intrinsic cost of materials. They did better than the artists making things such as bangles, buttons, rings, combs and stick handles, ear ornaments and chains. The output of the latter was estimated at only 5 percent above cost because competition with London for raw materials had driven the cost of materials up. Fernandes makes it evident that ivory only went to Surat via Bombay.⁸²

Conclusion

Ivory was much more than just another profitable import into western India. It underpinned both early modern European and indigenous trading patterns and was driven by specific local demand for bangles. Ivory was not always profitable (although losses were usually insignificant) but it was a means through which Europeans could gain access to regional trading networks.⁸³ More important, ivory shows us that an overemphasis on European – especially Dutch and English East India Companies – documents and perspectives can cause us to miss important clues to wider trading patterns. Looking at the history of this commodity shows us that Surat

80 Ahmedabad is not discussed in this chapter because the artisans there had direct patronage from elites.

81 He lists twenty-five artisans who did Bombay boxwork under sandalwood carving, and fifty artisans of 'ivory and tortoiseshell', so it is difficult to know exactly how and what he was counting.

82 Martin with Vigne 'India's Ivory Industry', p. 8; Burns, *Monograph*, pp. 9-10.

83 VOC 11328 ff. 49-52 for a breakdown of profits and losses for the eighteenth century through 1759.

Figure 10 Boxmakers of Bombay, c. 1873.

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remained important as a commercial and production centre into the nineteenth century, well after its presumed demise, because it was linked to indigenous trading patterns and cultural traditions. Bombay only supplanted Surat when technology and imperialism altered the composition of these networks.

Bombay boxwork is no longer produced in Surat or Bombay. Ivory has been restricted in India since 1972, and the passage of CITES, the Convention on International Trade in Endangered Species of Wild Fauna and Flora, in 1989 ended all exports. These measures marked the end of a declining market, which had been undercut by global demand and the spread of plastics. The custom of wedding bangles continues even today with ivory-coloured plastics, encased in red to look like the traditional bangles that spread through all social classes in the region. Like Bombay boxwork, the trade in ivory travelled with its craftsmen and consumers from Surat to Bombay and into oblivion. Bombay boxwork may be a dead term, but its existence as a term, rather than as Gujarati, Sindhi or Shirazi boxwork, is not just because ivory was traded to these regions but because it represented the successful imposition of new networks onto old ones.

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