

IVORY IN EARLY MODERN CEYLON: A CASE STUDY IN WHAT DOCUMENTS DON'T REVEAL

Martha Chaiklin

University of Pittsburgh
E-mail Chaiklin@pitt.edu

In Sri Lanka elephants are endangered and ivory carving, as an art, is dead. Sri Lanka was once famous for the number and quality of its elephants, whose tusks were carved and exported since ancient times. Although Sri Lanka became, successively, a pivotal outpost for the Portuguese, Dutch and English, details about the Ceylonese ivory trade appear in trade documents only rarely. And yet, if information is not to be found there, does that mean ivory trade did not occur? Trade documents, after all, do not tell the whole story. Smugglers, illegal traders, big game hunters and plantation owners all played a part in the disappearance of elephants and its corollary, the ivory trade. When archival evidence is viewed in combination with physical evidence and the anecdotes of visitors and residents, it becomes evident that ivory remained an integral part of trade and crafts in Ceylon well into the last century.

INTRODUCTION

Every tourist venue in Sri Lanka teems with tusked elephants: carved of wood, formed from brass, in relief on silver trays, etched in lace on centerpieces, outlined in batik, emblazoned on t-shirts, and adorning the covers of tea boxes. Carved and bejeweled ivory elephants were once at the top of this heap. Items of this sort were displayed even at the 1904 St. Louis Worlds Fair.¹ But they have disappeared, due to Sri Lankan conservation efforts and the passage in 1989 of CITES (Convention on International Trade in Endangered Species). Elephants are a prime focus of modern conservation efforts, and as such have been studied and documented extensively. But the same cannot be said of

Generous funding for this research was provided by the American Institute for Sri Lankan Studies. The author would like to convey special thanks to John D. Rogers, William Clarence-Smith and George Souza for reading and commenting on earlier drafts of this paper. An earlier version appears in Nigel Worden, ed., *Contingent Lives: Social Identity and Material Culture in the VOC World*. (Cape Town: Historical Studies Department, 2007.)

¹ By D. F. De Silva & Co. and Abdul Caffor. Kunz 1915, p. 118. D. F. De Silva and Company was founded in 1870 and had showrooms at 7 Chatham Street and 2 Grand Oriental Hotel Arcade in Colombo. N. D. H. Abdul Caffor was a pearl and diamond merchant founded in 1893, and located at 9 & 10 Bristol Buildings York Street, Colombo. They had branches in London and were known for their gemstones rather than for any association with ivory. Wright 1999, pp. 460–63, 466.

ivory in Ceylon. Existing scholarship either has dismissed ivory as scarce and irrelevant, or lumped it together, without distinction, with that of Southern India. Ceylon, successively a pivotal outpost for the Portuguese, Dutch and English, was a significant source for ivory, but the specifics about this trade appear in trade documents only rarely. Shall we then conclude that ivory trade did not occur?

SRI LANKAN ELEPHANTS — A SOURCE OF IVORY?

The spotlight on elephants in Sri Lanka is by no means the creation of a modern commercialized economy. From as early as the sixth century BCE, elephants were used for royal transportation and as beasts of burden. They were pitted against each other in battle or for the amusement of kings.² Elephants even served as executioners in gruesome events which, supposedly, they were trained to prolong by stomping on the extremities of the victim before delivering a final merciful foot to the head.³ When Buddhism was introduced to the island sometime in the third century BCE, the symbolic importance of the elephant, as a possessor of strong character and wisdom, as one of the seven jewels of royal power, and even as Buddha himself, found ready acceptance in local practices. Some even believed that the souls of kings inhabited the bodies of elephants.⁴ Thus elephants are depicted in Sri Lankan art of all periods.

Some scientists regard the Sri Lankan elephant (*elephas maximus zeylanica*) as a distinct subspecies of the Asian Elephant (*elephas maximus maximus*). Characteristic of the elephants of Sri Lanka is a large, bony forehead. These elephants were valued not only domestically, but also abroad. As difficult as the logistics must have been, even in ancient times they were exported to India, a practice mentioned, for example, in the *Travels of Ibn Battuta*, the reminiscences of a Moroccan traveler of the early fourteenth century.⁵ Nearly every European observer, from Diogo do Couto (1542–1616)⁶ through English dispatches of the nineteenth century, note the quality of Ceylonese elephants. What made Ceylonese elephants desirable was their temperament rather than their size, which was on the small side.⁷ As Europeans arrived, elephants were exported by each of the colonial powers in turn: the Portuguese, the Dutch and the English. In the early years of Dutch rule, elephants were considered second only to cinnamon as a significant export.⁸ The Dutch East India Company obtained elephants “as tribute, by payment, and by having

2 D'Oyly 1929, p. 24.

3 See, e.g., Wisumperuma 2003, pp. 6–12.

4 Hensoldt 1894–1895, p. 73.

5 Gibb 1969, p. 95.

6 Ferguson 1908, p. 35. Do Couto says, “Its elephants, of which a good number are bred, are those with the best instinct in the whole of India and because they are notably the most tamable and handsomest they are worth much.”

7 Robert Percival, *An Account of the Island of Ceylon* (1803) (New Delhi: Asian Educational Services, 1990), p. 282. Similarly, Alexander Hamilton calls them “the most docile of any in the World,” Hamilton 1930, vol. 1, p. 190. Sometimes they are mistakenly noted as being valued for their large size. See, e.g., Valentijn 1978, p. 180.

8 Tennent 1996, 2, p. 53. Also see De Silva 1990, and Bidermann 2005, 2, pp. 141–66.

them captured on its account.”⁹ By the time the English took over in 1795, however, “the taking of elephants was no longer considered by the Ceylon Government an important branch of revenue.”¹⁰ Nevertheless exports continued throughout the nineteenth century, some of which were intended for zoological gardens and circuses.¹¹

Just as the presence of oysters means that there are pearls, the presence of elephants indicates ivory. Not all oysters contain pearls, but all species are capable of producing them; likewise, not all elephants have tusks, but tuskers exist in all species of elephants. The percentage of Sri Lankan elephants bearing tusks is unusually small. Modern estimates put tuskers at 3–7% of the population, with tusks appearing exclusively in males. There has been much speculation as to why this is the case. Samuel W. Baker, a mid-nineteenth-century resident in Ceylon, postulated, “there are elements wanting in the Ceylon pasturage (which is generally poor) for the formation of . . . ivory.”¹² His contemporary James Emerson Tennent (1804–1869) disparaged a then commonly held belief that African elephants required tusks to dig out water in the sand or in plants, whereas in tropic Ceylon the abundance of water and vegetation made tusks less necessary.¹³ Among modern theories, one suggests that Sri Lankan elephants originally were tuskless, their tusks appearing only after they crossbred with imported elephants.¹⁴ What seems more likely is that the selective culling of elephants with tusks has led to the predominance of the tuskless gene.

The Ceylonese placed higher value on elephants with tusks. Kandyan kings, for example, usually retained only elephants with tusks because tuskers were required for state and religious processions. It is perhaps for this reason that elephants in art, even tourist art, are always depicted with tusks. Robert Knox, an Englishman held captive by the king of Kandy for twenty years during the third quarter of the seventeenth century, claimed never to have seen the Kandyans take any elephants from the wild but “Choice ones with teeth.”¹⁵ Because the Portuguese, Dutch, and English traders received a higher price for tusked elephants, they also attempted to obtain as many tusked elephants as possible.¹⁶ Later, when sport hunting became widespread, a tusker was a desired trophy. Samuel Baker noted:

What a sight for a Ceylon elephant-hunter would be the first view of a herd of African elephants – all tuskers! In Ceylon, a “tusker” is a kind of spectre, to be talked of by a few who have had the good luck to see one. And when he is seen

9 Reimers 1946, p. 85.

10 Bertolacci 1983, p. 162.

11 Webb 2002, pp. 101–02; Clark 1971, p. 135.

12 Baker n.d., p. 125.

13 Tennent 1996, 2, pp. 273–75.

14 This theory was advocated as early as 1901. See Clark 1971, p. 12.

15 Knox 1989, p. 80.

16 The price differential varied over time, with early records claiming double, and later records claiming about 35%. Regardless, it was significant enough to make them more valuable. The Portuguese assessed the tribute at two tuskers or four *aleas* (tuskless males). Pieris 1995, p. 25.

by a good sportsman, it is an evil hour for him – he is followed till he gives up his tusks.¹⁷

This constant pressure on tusked elephants may have led to their decline. Recent studies have noted that in areas of heavy poaching, tusklessness has appeared even in normally tusked male Asian and African elephants.¹⁸

Even tuskless elephants usually have at least a set of smaller protruding teeth called tushes. In females they are small, but males can have tushes half the length of a tusk but only a couple inches in diameter. Though less valuable, tushes are still sufficient for many carving applications.¹⁹ In Europe, for example, they were used for billiard balls because of their lower cost and fine grain. In Ceylon, most of the raw material for carving came from tushes, because the larger tusks were highly valued and often mounted intact.²⁰ The technical term for tushes and tusks of less than 20 lb (as opposed to about 30–70 lb for a full-sized Asian tusk) was *scrivello*.²¹

Indigenous Ivory Traditions

In Sri Lanka ivory was valued for its use in carving from at least as early as the second century CE, but probably much earlier. Descriptions of Lanka in the *Ramayana* make references to ivory-embellished chariots and ivory panels. King Jethatissa II (c. 332) was even known as the “ivory carver king”, and reputedly taught these arts to his subjects. By at least the fifteenth century, ivory working had become important enough to result in the evolution of castes that placed ivory workers fairly high on the social scale, just below farmers. François Valentijn, writing in the early eighteenth century, mentions two distinct castes of ivory artisans, the carvers (*Atdatkatayankarayo*), who ranked high among artisan castes, and the turners (*Liyana vaduvo*), who were lower on the social scale. Turners used lathes to produce round boxes, fan handles and the like.²² In Kandy, gold and silversmiths, painters, and ivory carvers were among the so-called Four Workshops (*Pattal-hatara*) allowed only to work for the king unless granted explicit permission to do otherwise.²³

Although by the early modern period there were several ethnic groups in Ceylon, including Tamils, and the so-called Moors (Muslims) – some of whom were craftsman – ivory

17 Baker n.d., p. 124.

18 See, for example, Whitehouse 2002, pp. 249–54, and “Tuskless elephants evolving in China due to poaching”, *Daily Mirror*, 19 July 2005, p. 4.

19 According to Samuel W. Baker, they “are of so little value that they are not worth extracting from the head.” Baker 1904, pp. 9–10.

20 Tilakasiri 1974, p. 43.

21 In some sources the weight of a *scrivello* is even less. In “The Ivory Trader,” *Living Age* 54 (April, May, June, 1886), pp. 703–04 it is given as 10–15 lb. *The Cyclopedia of Commerce, Mercantile Law, Finance and Commercial Geography* (Edinburgh: Oliver and Boyd, 1843), p. 430, defines it as “the smallest teeth and fragments.” The *Oxford English Dictionary* defines it as 20 lb but the oldest reference cited therein, John Atkins, *A voyage to Guinea, Brasil, and the West Indies 1723–35* (1737), defined it as from 4–15 lb.

22 Valentijn 1978; Coomaraswamy 2004, pp. 180, 184.

23 Coomaraswamy 1979, p. 55.

carving in Ceylon seems to have been generally restricted to the Sinhalese castes.²⁴ As Ernest Haeckel, a German naturalist who went to Ceylon in 1881, observed:

[The Tamils] bring precious stones, shells, silver filigree, and other ornaments on board to sell; while the Cinghalese deal in cocoa-nuts, bananas, pine-apples, fish and crabs, or in the characteristic products of their own industry such as images of elephants, or of Buddha carved in ivory or ebony . . .²⁵

Sinhalese ivory carvers produced ivory elephants, known as *Perahera* (after the Buddhist festivals that include parades of costumed elephants), and jewelers, who were predominantly Muslim, applied the gems to these items.²⁶ Tourist shops in Colombo in the nineteenth century also seem to have been generally run by Muslims or Tamil traders, who played a historically significant role as international traders to Sri Lanka.²⁷

Ivory was carved with a high degree of skill, using only simple tools such as saws, chisels and rasps.²⁸ Ivory artisans often were accomplished at other arts as well, such as wood carving or painting.²⁹ The products created by these artisans included ivory knife handles, which were a part of male attire,³⁰ combs, bangles, boxes, book covers, compasses and even architectural elements, such as ornamentation around door frames. While ivory tended to be more of a luxury item than not, possession appears to have been common across the social spectrum: ivory combs were a traditional wedding gift, while ivory betel boxes and ivory jewelry have survived in great quantities.³¹

Ivory was also used extensively in Buddhist settings, as covers for texts, fan handles (which were one of the few items Buddhists monks could personally own and were received upon papillary succession) and scent sprayers (*siviliya*). This last item was a masterpiece of ivory turning that consisted of a hollow cylindrical base and a long neck. A secret method, now lost, was used to turn a bottom piece of such thinness it could be compressed by hand to convey the scent up the neck.³² Buddhist images carved of ivory also were produced in some quantity. Although many tourist trinkets with Buddhist images have been created

24 In modern times ivory craftsmen were predominately of the Navandhana caste. Charles Santiapillai, p. 178.

25 Haeckel 1881, p. 75.

26 Martin and Martin 1990.

27 Commented on in Hornaday 1929, p. 240. The curio dealers listed in the "Commercial" description of Colombo in Wright, ed., *Twentieth Century Impressions of Ceylon*, pp. 466–520, also all seem to have names that would support the supposition that they are not Sinhalese.

28 Westerners frequently commented how few tools Ceylonese craftsmen used. See, e.g., Baldaeus 1996, p. 818.

29 Coomasawamy 1979, p. 69; Tilakaseri 1974, p. 43.

30 See, e.g., Valentijn 1978, p. 161.

31 "A betel box of ivory or tortoise-shell mounted with gold was as necessary to a great lady, as a silver tea service is today." P. E. Pieris, *Ceylon and the Hollanders* (1918) (New Delhi: Asian Educational Service, 1999), p. 102. According to Jacob Haafner, these boxes were "used by Christian and mestizo women," J. A. de Moor and P. G. E. I. J. Van Der Velde, *De Werken van Jacob Haafner* (Zutphen: Walburgh Pers, 1997), 3:354 (*Reize in Eenen Palanquin* 1827). Ivory jewelry does not appear to have been restricted by class. Pieris 1983, 2, p. 103.

32 Coomasawamy 1979, p. 187. Already by the 1970s not a single craftsman could make these. Gunasekere 1977, p. 156.

from ivory both in and outside of Sri Lanka, the use of ivory for proper religious images apparently was unique to Sri Lanka, because, being an animal substance, other cultures regarded it as either inappropriate or, more prosaically, simply too difficult and expensive to obtain. Buddhist temples in Ceylon were often repositories for ivory donated by individuals or the king of Kandy himself.³³ Temple craftsmen at times used donated materials to create the images, often leaving them in tusk form.³⁴ Even today, it is still common practice to place mounted elephant tusks on each side of temple doorways. Ivory confiscated from poachers or from elephants that die is generally given to Buddhist temples.³⁵

Ivory was worked in several parts of the island. Father Fernão de Queyroz noted that there were skilled workmen in Matura.³⁶ Similarly, Dutch missionary Philippus Baldeus noted “excellent workmen in ivory” in Jaffna, and Joan Maetsuyker, the Governor General from 1646 to 1650 wrote that, “In Candia [Kandy] and other prominent places there are many artful workmen who make all kinds of splendid things from ivory.”³⁷ Tusks from the central province of Badulla, and other more southern areas were brought on bullock carts (*tavalams*) to Galle, a significant harbor on the southern tip of the island. Velassa was especially renowned for providing ivory.³⁸ These sources suggest the existence of active local demand, developed distribution routes, and highly sophisticated production techniques even during times predating colonialism.

Ceylonese Ivory Abroad

As with Ceylonese elephants, there was a strong external demand for Ceylonese ivory. Even under the Portuguese, the kingdom of Kotte was entitled to sixty elephant tusks annually. The kings of Kandy customarily sent gifts of ivory to other countries.³⁹ According to J. W. Bennett, an officer in the British colonial government, “Ceylon ivory is considered the most valuable for all the purposes of the manufacturer, being whiter, of finer grain, and retaining its whiteness much longer, than any other.”⁴⁰ This opinion was apparently widely held in Europe, which made ivory from Ceylon “much dearer” than other kinds.⁴¹ Art historian Ananda Coomaraswamy argues that this assessment was equally true in Asia: “Ceylon ivory is valued in the East above African on account of its density of texture and

33 D'Oyly 1929, p. 109. Especially Veddah (or Vadda) chiefs.

34 Tennent claims, “Buddhist priests have a passion for collecting tusks.” Tennent 1996, vol. 2, p. 273 n. 3.

35 Interview with Edmund Wilson, Deputy Director of the Department of Wildlife, Colombo, Sri Lanka, July 2006.

36 Father Fernão de Queyroz. *The Temporal and Spiritual Conquest of Ceylon* (Colombo: A. C. Richards, Government Printer, 1930), p. 1135.

37 Coolhaas 1964, pp. 378–79.

38 Bennett 1998, pp. 293, 295, 347. Velassa is Veddah country.

39 Recorded in a tombo in 1599. C. R. De Silva, “Sri Lanka in the Early Sixteenth Century” in K. M. De Silva, *History of Sri Lanka* vol. 2, p. 57. See also, e.g., the diary of Jan Harmensz. Bree, in Ferguson 1998, p. 109.

40 Bennett 1998, pp. 259–60.

41 Souter 1818, p. 107.

delicacy of tint.”⁴² One nineteenth-century writer even claimed that the Ceylonese elephants were priced above others “on account of the superior quality of the ivory.”⁴³ This ranking held until the twentieth century, when, as it was said, “For some unaccountable reason, Ceylon ivory has been for years past becoming shorter and less valuable than the Indian.”⁴⁴

Not only were tusks from Ceylon valued, worked Ceylonese ivory was prized as well. For example, Linschoten judged the Sinhalese to be “very cunning workmen” in ivory.⁴⁵ Baldaeus called Sinhalese ivory carvers “naturally active and ingenious.”⁴⁶ Similar sentiments were echoed by many other Westerners, including Company soldiers Albrecht Herport and François Valentijn, the latter of whom noted, “there are many among them those who are skilled in engraving beautifully in . . . ivory . . . carving it artistically, as I have seen entire cabinets covered with ivory and very ingeniously carved.”⁴⁷ Like these seventeenth- and eighteenth-century writers, in the nineteenth century Joseph Campbell also described these craftsmen as “neat and ingenious workmen, who can imitate anything given them as a pattern.”⁴⁸

Galle was especially famous for producing handicrafts for the export market. The ivory carvers there were reputed to have “quite remarkable skill,” but, in Tennent’s opinion, “owing to their deficiency in design, and the want of proper models, their unaided productions are by no means in accordance with European tastes.”⁴⁹ A generation later, however, George Kunz felt that, “The finest Cinghalese ivory carving is done at . . . Galle.”⁵⁰ For the European (or Europeanized) community things such as bible covers and fans were carved,⁵¹ while for tourists, ivory carved or inlaid boxes were “so well known that the crews and passengers of vessels touching at Galle always purchase them as presents for their friends at home.”⁵² Galle was also a center for furniture production, both for export and for European residents, and some of the furniture made there was inlaid with ivory. For example, Tennent owned a pair of carved ebony, ivory and porcupine quill book troughs made in Galle or the vicinity.⁵³

42 Coomaraswamy 1979, p. 183.

43 Chitty 1989, p. 34.

44 Watt 1903, p. 174. Smaller tusks are usually the result of over-hunting, because the available elephants are younger.

45 Burnell 1970, p. 80.

46 Baldaeus 1996, p. 821. He expresses the same sentiments on p. 818.

47 Valentijn 1978, p. 166.

48 Albrecht Herport, *Reise Nach Java, Formosa, Vorder-Indien Und Ceylon 1659–1668* (Den Haag: Martinus Nijhoff, 1930), p. 133. “Man findet hier wunder kunstliche vnd subtile Arbeiter, dien in Helffenbein, hor Ebenholt, auch in Silber vnd Gold sehr arrtig wüssen zuarbeiten, die doch das vmb ein geringen preiß machen, daß sie kaum ihre Nahrung darbey können haben, deßwegen sie auch nur für arme Tagelöhner gehalten werden.” Valentijn 1978, p. 166. Campbell 1999, p. 96.

49 Tennent 1996, pp. 108–09.

50 Kunz 1915, p. 117. Galle remained a production center for ivory through most of the twentieth century.

51 Examples are illustrated in Wagenaar 1994, p. 82.

52 Campbell 1999, pp. 96–97. See also, e.g., Binning 1857, vol. 1, p. 4; Baker n.d., p. 293; Kattendyke also noted that sailors bought “worked elephants’ teeth” in Galle as souvenirs, Kattendyke 1860, p. 233.

53 See Jones 2006, pp. 36–43.

Jan Huyghen van Linschoten, who worked for the Portuguese in Goa, mentions a Ceylonese ivory cross of fine workmanship brought to Goa in the late sixteenth century:

My master the Archbishop had a crucifixe of Ivorie of an elle long, presented unto him, by one of the inhabitants of the Isle, and by him so cunningly and workmanly wrought, that in the hayre, beard, and face, it seemed to be alive, and in all other parts so neatly wrought and proportioned in lines, that the like can not be done in Europe.⁵⁴

The cross was sent back to the king of Spain, who kept it among his jewels. This high regard for Ceylonese ivory must have been widely held, because carved ivory caskets in particular appear to have been used frequently as diplomatic gifts both by the Sinhalese and Portuguese with connections in Asia during the mid-sixteenth century. These items were produced in the kingdom of Kotte, but show stylistic links to Afro-Portuguese ivories from the Atlantic coast.⁵⁵ Caskets of this sort can be found in museums all over Europe, including one in the Schatzkammer Residenz in Munich, one in the Kunsthistorisches Museum in Vienna, one in the British Museum, nine in the Victoria and Albert and one in the Ashmolean. Several examples remain in Sri Lanka as well. Among them are caskets with abstract floral or geometric patterns, but more commonly they were carved with biblical scenes. For the latter type, prints such as those by Albrecht Dürer provided inspiration. These caskets were not related to indigenous tradition, but more probably made in order to please foreign dignitaries, at times at their behest.

Another product created in Ceylon and traded in Europe was the ivory fan. Like caskets, these functioned as a diplomatic gift. Between 1541 and 1549, Catherine of Austria (of the House of Hapsburg), queen of Portugal, received five ivory fans from Bhuvaneka Bahu VI, king of Kotte. These fans used in diplomacy are rendered in the same style as fans Buddhist monks used, with flat leaves that unfold into a full circle. Apparently they were much in favor with the Queen, who had them placed on display at state occasions. The only other such fans identified in Europe belonged to Maria of Parma, the Queen's niece.⁵⁶ The establishment of Goa as an ivory producer and diminishing Portuguese influence in Ceylon may explain why ivory objects exported to Europe by the Portuguese declined by the mid-seventeenth century.⁵⁷

Under the Dutch, ivory pipe cases were exported (though not as gifts of diplomacy). From the sixteenth to the twentieth century there was a widely held custom among Dutch men of smoking tobacco in long-stemmed clay pipes. The stems made the pipes very fragile. In Asia, where replacing a pipe or its parts must have been relatively difficult and expensive, cases were made to protect them. Several of these cases, made in Ceylon in a composition of carved ivory panels over a wood base, can be found in present-day European collections.⁵⁸ These and the above examples of Ceylonese ivory found in

54 Burnell 1970, p. 81.

55 See Jaffer and Schawbe 1999, pp. 3–14; Silva 2007, p. 287.

56 Jordan 1999, pp. 32–33.

57 Silva 2007, pp. 279–95.

58 See Jaffer 2002, pp. 50–51.

European collections indicate both a demand for existing items and the ability of Ceylonese craftsmen to create products intended to meet European tastes and desires.

DUTCH IVORY TRADE — OFFICIAL AND UNOFFICIAL

For all periods of colonial rule, trade records about ivory are scant. Just why this should be the case is somewhat of a mystery, as there is little doubt that ivory was an article of trade throughout much of the island's history. The Portuguese began trading relations with Ceylon in 1512, trading in both elephants and ivory.⁵⁹ With regard at least to importation to Europe, many ivory objects were considered *miudezas* (trifles), which could be sent without tax or duty; thus they left little record.⁶⁰ According to Jan Huygen van Linschoten, who served as bookkeeper to the archbishop of Goa from 1583 to 1589 and had access to Portuguese records, Ceylon was the source for “many ivorie bones, and divers Elephantes, which are accounted for the best in all India.”⁶¹ Similarly, Tomé Pires noted that the Portuguese acquired an “abundance” of ivory in Ceylon and then traded it to Bengal, Coromandal and Pulicat for things such as rice and white sandalwood.⁶²

As the Dutch East India Company (VOC) moved into Ceylon in the seventeenth century, they naturally assumed that they would be able to export ivory. There is no doubt they did, as did the British when they seized control of the island in 1796. Robert Knox mentions elephants' teeth among the important products of the country.⁶³ In 1722, François Valentijn listed “elephants and their tusks” as among the “most important goods found here.”⁶⁴ The same can be said for the first fifty years of British rule, when, for example, in the mid-nineteenth century, H. C. Ridder Huysen van Kattendyke, a Captain-Lieutenant in the Dutch navy, noted that, “the principle products of Ceylon are now: coffee, sugar, coconut oil and elephants' teeth.”⁶⁵

Dutch exports of ivory, however, fell short of expectations. In 1661, for example, the former Governor of Ceylon, Joan Maetsuyker, wrote to the Heeren XVII, directors of the Dutch East India Company in the Netherlands, “It is indubitable that there are many elephants on the island Ceylon, and that elephants' teeth must be discoverable here and there in the forests, but we have never heard of a sufficient quantity to trade. It requires further investigation.” Maetsuyker thought that perhaps Sinhalese carvers were using up most of the ivory.⁶⁶ Pieter van Dam, in his history of the Dutch East India Company, said that tusked elephants were sold with their tusks still attached, which reduced the amount of available ivory. Such would indicate that the demand for tusked elephants trumped that

59 In factory books of 1510–1515. Pieris 1983, vol. 2, p. 43, n. 2.

60 See Boyajian 1993.

61 Burnell 1970, pp. 80–81.

62 Pires 1990, p. 86.

63 Knox 1989, p. 105.

64 Valentijn 1978, p. 184.

65 Kattendyke 1860, p. 233.

66 Coolhaas 1960–2007, vol. 3, pp. 378–79.

for ivory.⁶⁷ Yet the VOC did not give up on the idea of ivory as a trade good. In 1670 the Company declared a monopoly on ivory. While ivory was but one item on a list of trade commodities to be monopolized as a part of Company efforts to tighten control of Ceylon trade, its inclusion on this list shows the belief that it was a profitable commodity.⁶⁸ In 1724, the Governor of Ceylon informed the council in Batavia that though existence of tusks was limited, they were much better than could be obtained from Africa or in Siam.⁶⁹ For a number of years, the Heren XVII tried to increase the amount, but the Governor of Ceylon never seemed to be able to obtain enough despite “the great numbers of elephants on Ceylon.”⁷⁰

Although the evidence detailing Dutch trade in ivory is sparse, there is no doubt it existed. When Anthonij Paviljoen left a memoir for his successor in 1665, he wrote, “Some profit is also derived from elephant tusks, ebony, wax, honey, indigo, black branch coral, tortoise shell margosa oil, &c. but these do not amount to much and are not of great importance.”⁷¹ Similarly, in 1762, the English sent an unsuccessful embassy led by John Pybus to the king of Kandy in order to obtain trading privileges. In his report to George Pigot, Governor at Madras, Pybus discussed exports under the Dutch: “Wax, Elephants Teeth, Wild Cardamums are likewise sometimes to be procured, but in such small quantities as scarcely deserve being noticed here.”⁷² The amount of trade cannot account for the scant documentation, because there is better documentation on many of the other commodities listed such as ebony, indigo and cardamom. In 1703, moreover, the Heeren XVII specifically put in a request for ivory. And in 1738 the Governor General of the East Indies cautioned against substituting ivory from the Cape or Ceylon for Siamese ivory, implying that such practices had occurred in the past and that supplies were available.⁷³

There are a number of possible explanations as to why the documentary trail is so indistinct. One is that the Dutch factory records in Sri Lanka have suffered considerably over the years, both from climate and from initial negligence by the English. Most notably, at the end of the eighteenth century the records of the *dessave* burned. The *dessave* was an office unique to Ceylon, based on a traditional Sinhalese post but filled by a European. The *dessave* was responsible for local affairs, which included the administration of matters related to elephants. Because profits from the sale of elephants were in fact considered “revenues derived from the country”,⁷⁴ it is quite possible that much of the information on ivory was kept in *dessave* records. In fact, the *dessave* was supposed to receive a tribute of eight tusks a year from the Vanniars.⁷⁵ Revenues for cinnamon did not appear in local records, but only

67 van Dam 1932, Second Book, Part II, p. 319.

68 The Dutch only attempted to monopolize profitable products, because there were expenses associated with maintaining a monopoly.

69 Sri Lankan National Archives 1/795. Hereafter abbreviated as SNLA.

70 SNLA 1/808, 1/809.

71 Pieters 1908, p. 115.

72 Raven-Hart 2001, p. 18.

73 Coolhaas, vol. 6 (1976), p. 253; vol. 10 (2004), p. 164.

74 Pieters 1910, p. 11.

75 D'Oyly 1929, p. 110.

in the profits from the Netherlands.⁷⁶ While cinnamon was an exception to the rule of local profitability reportage, it is possible that ivory was another such exception.

A further possibility is that much of the trade in ivory was illegal, conducted clandestinely as deceptive bookkeeping, private trade, or smuggling by either notoriously underpaid Company employees or independent traders. Private trade was when Company servants traded on their own account in absolute violation of Company rules. Company servants could be, and sometimes were, bribed. A relatively low-volume, high-profit item like ivory, carved or uncarved, was ideal for private trade. In other VOC factories, there is evidence of misrepresentation of ivory sales prices, and it is possible that similar practices were carried out in Ceylon, which would facilitate private trade.⁷⁷

Smuggling was an ongoing nuisance to all the colonial powers. While the island of Ceylon, from ancient times, had been connected with numerous trading networks of Asia, with the arrival of the Europeans trading patterns were altered considerably. The Europeans (especially the Dutch) generally attempted to restrict the number of ports and to reduce the number of foreign traders. Neither Portuguese nor Dutch attempts to monopolize trade in Ceylon were ever very effective; rather, they essentially were ignored. The Dutch attempted to clamp down on smuggling by reissuing restrictive measures in 1734 but these seemed to have had little effect. Although ships were dispatched to cruise the area in the straits, this tactic was equally ineffective because smugglers used smaller ships and operated at river mouths. Spy networks and increasingly harsh penalties did little to deter smuggling.⁷⁸

Ships from all the European nations traded in Colombo and Galle throughout the eighteenth century. Despite various attempts by the Dutch to place strict limitations on foreign ships, there was never any time when the vessels of other nations did not call. Portuguese merchants traveling from Goa would stop at Galle on their way to Macao to purchase goods for the Chinese market, including ivory.⁷⁹ While some of this trade was legal or at least tacitly permitted, some was willfully illegal. Galle was a notorious stopping point for smugglers.⁸⁰ Local traders also docked there, and when they were caught smuggling ivory it was impounded and shipped to Europe.⁸¹ In the early eighteenth century, the Dutch colonial government established control posts off the Jaffna peninsula (such as that at Mullaitivu) in order to combat the smuggling of elephant tusks, among other things, to South India.⁸² In 1716, Governor Hendrick Becker specifically cautioned his successor about ivory smuggling from Jaffna, suggesting the area be closely guarded to maintain the Company monopoly.⁸³ Both Dutch officials and modern scholars suspected that

76 Arasaratnam 1995, p. 402.

77 There is evidence of under-reporting of profits in other parts of the Dutch East India Company trading empire. In Japan, prices of ivory were reduced in the company books. See Hendrik Doeff, *Herinneringen uit Japan* (Haarlem: Froncois Bohn, 1833), p. 63.

78 S. Arasaratnam 1995, "The Consolidation of Dutch Power in the Maritime Regions 1658–1867," p. 239.

79 Arasaratnam 1995, p. 413.

80 Bruijn 1987, 1, p. 133.

81 Coolhaas, vol. 6, p. 444.

82 Nelson and De Silva 2004, p. 102.

83 Anthonisz 1914, p. 16.

the king of Kandy was actively involved in smuggling as a means to subvert Dutch authority.⁸⁴

Dutch relations with the kingdom of Kandy were always problematic. When looking at the history of Sri Lanka under the Dutch, it is important to remember that the island was not entirely under their control. After the Portuguese arrived in 1518 “warfare was almost continual.”⁸⁵ Summarized broadly, three main kingdoms existed: Kotte, Kandy and Jaffna. Torn by factionalism and succession disputes, Kotte was subjugated by the Portuguese at the end of the sixteenth century; Jaffna came under Dutch control when the Portuguese were expelled in 1658; and Kandy remained a separate kingdom until the British crushed it in 1815. Relations between Kandy and the Dutch never stabilized, in part because Kandy was not interested in cooperating with Dutch ideals of monopoly. In 1751, Governor Julius Stein van Gollennesse outlined Dutch-Kandyan relations as follows: “I am of the opinion that they prefer the Dutch Company above all European nations . . . but it appears clear to me that they would much rather have us leave the island entirely to have a free trade carried on in their land.” Gollennesse blamed the Kandyans for protecting Muslim smugglers who undermined Company trade.⁸⁶

Kandy was significant both as a source of tusks and for ivory carving. The king of Kandy valued tusks, and received them each year as tribute from those not under his direct rule, as well as from the Dutch. Tusks not put to use were stored in his treasure house.⁸⁷ Little information exists regarding how many of the tusks were stockpiled and how many were used, but when the British captured Kandy in 1815, they confiscated 289 tusks from this site, weighing a total of 5,951½ lb.⁸⁸ A “curious” ebony cabinet inlaid with ivory was also found among his possessions.⁸⁹ In order to access royal ivory supplies, the Dutch first signed a treaty with Rajasinha, king of Kandy, in May of 1638. In Article Nine of this treaty, the Dutch requested that the king sell ivory only to them.⁹⁰ In August of that same year, Dutch colonial officials, in a gesture that perhaps indicates an awareness that elephants were traditionally the domain of the king, successfully submitted a petition to Rajasinha that allowed Rajasinha to maintain the monopoly on ivory. It requested that the king provide a purchasing price.⁹¹ The negotiations ultimately resulted in an agreement to sell, but it did not establish a fixed price.⁹² In later negotiations the Dutch tried to monopolize ivory but the Kandyans would have none of it. Finally, a revolt in 1761 allowed the Dutch colonial government to extract a treaty from the Kandyans in which Kandyan export ivory would be sold exclusively to the Company at pre-determined prices.⁹³

84 See e.g. Riemers 1946, p. 16.

85 De Queyroz, *Temporal and Spiritual Conquest*, p. 1192.

86 Arasartnam 1974, pp. 45, 47.

87 Knox 1989, p. 154.

88 Bennett 1998, p. 259.

89 Codrington 1995, p. 262.

90 Reimers 1927, p. 44. The same language appears in article 12 of the May Treaty, *ibid.*, p. 56.

91 Pieris 1929, pp. 57–59. Interestingly, this is the same strategy suggested by de Queyroz in *Temporal and Spiritual Conquest*, vol. 2, p. 1159.

92 Coolhaas 1960, vol. 1, p. 722.

93 De Silva 1995, 1, p. 6.

Very few specific, quantitative records of ivory have been discovered in the National Archives in Sri Lanka. Perhaps the most significant was in the annex of the Annual Compendium of 1752, which contained a cargo list that specified the following ivory exports:

January	<i>Westhoren</i>	to Batavia	1 $\frac{1}{8}$ lb and two pieces
April	<i>Cornelia</i>	“	25 $\frac{1}{2}$ lb
	<i>Mij Schellege</i>	“	25 $\frac{1}{2}$ lb and four pieces ⁹⁴

While it may seem odd that ivory appears once, only one other similar document, dating from 1758, was found in these annexes.⁹⁵ If supplies were irregular, it would not be unusual to miss a year. A mention of 244 tusks was also found in an account book of 1788.⁹⁶ Dutch East India Company archives outside of Sri Lanka might bear more fruit, but the official sources in Sri Lanka are sparse enough to suggest that with regard to ivory unofficial trade was more significant than the official trade channels.

Obtaining Ivory

Just how ivory was obtained in Sri Lanka is not entirely clear. J. W. Bennett, a civil servant in the English government, wrote that, “Elephant tusks have been occasionally found in the jungle, but whether it be done by the animals themselves, or, for concealment, by the natives, is hitherto hypothetical.”⁹⁷ Traveler Jacob Haafner also tells of passing “the entire carcass of an elephant, which lay near the path,” adding that, “The animal must have been long dead; it had however, beautiful teeth . . .”⁹⁸ Another raconteur asserts that elephants “in flight will fall upon their tusks, their own impetus and weight snapping them off close to the sockets.”⁹⁹ It was believed by the Sinhalese that the pain from caries (a bacteria-driven bone disorder) caused elephants to break off their own tusks in order to ease their anguish.¹⁰⁰ Another strong possibility was periodic epizootics.¹⁰¹

Because elephants were so highly valued as draft animals and in contexts of religious ceremonies, they generally were not hunted for sport. In Kandy elephants were the king's monopoly, so hunting was expressly forbidden. The slaughter of tusked elephants was considered to be among “the most heinous offenses.”¹⁰² Such strict prohibition does not mean, of course, that hunting never occurred. In 1683, for example, Christopher Schwitzer, a German employee of the Company, went elephant hunting in Kandy.

94 SLNA 1/2758

95 SLNA 1/2766.

96 SLNA 1/3481.

97 Bennett 1998, p. 260.

98 Haafner 1995, p. 21. In the 1870s naturalist William Hornaday, who was collecting specimens, managed to find several skeletons in the jungle. He comments that the locals were too lazy to take the teeth to sell in Galle; see Hornaday 1929, p. 276.

99 Sirt 1991, p. 196.

100 Kunz 1915, p. 223.

101 See Dijk 2007, p. 242, n. 243.

102 D'Oyly 1929, p. 53.

Although he shot an elephant, it escaped. The next morning, however, the elephant was found dead, and he was forced to lie that the elephant had pursued him because, he explained, “it is strictly forbidden to shoot any elephants unless a man is in danger of his Life.” Significantly, Schwitzer did not get in trouble, but the Company took possession of the tusks.¹⁰³ Other indications of poaching can be found in the memoirs of Governor Hendrik Brower who noted, “it would be impossible to obtain so many of these animals [elephants] in our land, because they . . . are perhaps killed for the sake of the tusks.”¹⁰⁴

An exception to the no-hunting rule appears to have been the Veddah (Vadda) people of the Batticaloa region in the eastern provinces of the island. The Veddah are a non-Sinhalese, non-Tamil group who comprised only a small portion of the population.¹⁰⁵ Later anthropologists classified them into groups such as “rock”, “village” and “coastal”, referring in part to their level of assimilation, but even very early observers such as Robert Knox noted that some groups had assimilated into Sinhalese culture more than others.¹⁰⁶ The so-called rock Veddah, who resided in the jungle, were known to have hunted elephants, “both for their own protection and on account of the ivory, so valuable to them as an article of barter.”¹⁰⁷ In more distant areas the practice does not appear to have been restricted to Veddah. For example, in Nurwerakalawe, if a stranger killed an elephant, they were given the right to one tusk, but the other had to be given to the local village. Within the village the chief would appropriate the ivory, usually for his own use.¹⁰⁸

Among the Veddah, archery was the most widely observed method of hunting; one of the most coveted articles ivory was traded for was the arrowhead.¹⁰⁹ The bow was drawn either by hand or the feet, and armed with broad, iron-tipped arrows fletched with red peacock wing feathers.¹¹⁰ The hunters would aim for the fleshy part under the front leg in order first to disable the elephant.¹¹¹ Another traditional method for capturing elephants used in Sri Lanka until comparatively recent times was noosing. Evidence that the Veddah employed this technique is that one important Veddah spirit, Rerangala Yaka, was famed for this ability. Still, the technique generally is associated with the Tamils and Muslims.¹¹² There were two variations. In one version of noosing, the hunter would chase after the elephant, and after slipping the leather noose (*atmaddoo*, or hand snare)

103 Fayle 1929, pp. 252–53.

104 Anthonisz 1914, p. 24.

105 According to Haeckel, they were the smallest ethnic group, at 2,000, only half the estimated 4,000 Europeans and well under the 1.5 million Sinhalese; Haeckel 1881, p. 91. An estimate from 1856 was only 364; see Bailey 1863, p. 282.

106 Knox 1989, p. 189.

107 Bailey 1863, p. 288.

108 D'Oyly 1929, p. 109.

109 Sirt 1991, p. 217.

110 Campbell claims poison was used, but there does not seem to be any other mention of poison; Campbell 1999, p. 57, Baker 1904, p. 110. Many writers claim they were poor shots.

111 Bailey 1863, p. 288.

112 Seligmann and Seligmann 1911, p. 163. He actually is invoked to prevent sickness because he died at a great age.

around a hind leg, would immediately tie it around a tree. Once ensnared, the elephant would crash to the ground. In the second, (called *gasmaddoo*, or tree snare) the noose was left on the ground, and pulled when the elephant stepped into it.¹¹³ Noosing was more widely practiced in the north.¹¹⁴ Sinhalese practice utilized nooses that were made as a form of taxation by the Rodiya, a low caste.¹¹⁵ In fact, in the eighteenth century the Dutch outlawed noosing because it often resulted in severe injuries to the elephant. The ban did not put an end to the practice, however.

The Veddah traded ivory, along with other products of the forest such as deer meat, honey and beeswax to other residents of Ceylon for cloth and arrowheads. Trade did not occur in the marketplace. Rather, the Veddah paid in kind outside the smith or merchant's house with "a leaf cut in the form they will have their Arrows made," or other notation.¹¹⁶ Although not subjects of the king of Kandy, the Veddah were required to supply elephant tusks as part of their tribute to him.¹¹⁷ As a result, Knox wrote, in order to initiate trade "they will acknowledg his Officers and will bring to them *Elephants-Teeth*".¹¹⁸ The Veddah thus were responsible for a steady stream of ivory into the marketplace.

The most common method used to obtain elephants was a sort of roundup known as an elephant "hunt" (in Dutch, *jacht*). Although the primary purpose of this elephant hunt was not to obtain ivory, it would certainly have provided another source of ivory due to the inevitable deaths it caused. The practice supposedly originated in India, but had been carried out in Ceylon long before the Dutch arrived. It was sometimes organized by the king of Kandy, and sometimes by the colonial powers, usually in the central and south parts of the island. The elephants were chased into a large, fenced-in enclosure, a kraal. Kraals were considered better than noosing because, in the latter practice, elephants often become crippled as they fought against the restraints.¹¹⁹ These hunts were organized by the *dessave*. The particulars varied according to time and place, but elephants so captured would then be led out one-by-one to be tamed for work and trade. Tuskers were always desirable because they obtained higher prices, so every effort would have been made to capture and retain them. When captured, pipes and drums accompanied them as they were led to the stables.¹²⁰ According to one observer, it was at this point that the tuskers had the ends of their tusks cut off, a process known as tipping.¹²¹ It is unlikely these tips were discarded.

113 According to Major Forbes, they were made of bullock hide, but English documents refer to providing ammunition to hunt deer and elk, from whose hides these nooses were made. See Forbes 1994, vol. 1, p. 278, vol. 2, pp. 57–58 and SLNA 7/23ff. p. 22 and 7/29ff. p. 162. The ropes were made by the Rodiya caste. This method is described in Knox 1989, p. 80, among others. Rodiya were by traditional makers of rope. See, e.g., Raghavan 1957, p. 4.

114 See, e.g., Anthonisz 1915, p. 27.

115 Davy 1990, pp. 129–30.

116 Knox 1989, p. 190. See also Tennent 1996, p. 440 and Percival 1990, p. 275. These practices are verified by much later accounts. See e.g. Randow 1958, pp. 164–66.

117 Forbes 1994, vol. 2, p. 78.

118 Knox 1989, p. 190.

119 See, e.g., *ibid.*, p. 360.

120 Forbes 1994, vol. 2, p. 66.

121 Strachan 1702, p. 1053.

By the end of the eighteenth century the elephant trade dwindled, due in part to declining demand for war elephants, but the British revived the roundups. Initially they tried to trade them, sending shipments of elephants to Madras, but the majority of their business was providing tame elephants for public works projects such as road building and railway construction. One hunt was even organized in 1881 for the pleasure of a visiting Edward VII. The last elephant hunt was held in 1950 at Panamura. By this time, the events had become a matter of public spectacle. So-called “kraal towns” would mushroom around the site. Thus, when the necessity of shooting a recalcitrant elephant arose, there were many witnesses. Public outcry finally led to the end of this practice in Sri Lanka.

Kraals were seen as more humane than noosing, but inadvertent death in the kraaling and subsequent three-month taming process was high.¹²² Some elephants died in the initial stampede into the kraal, or from insufficient food or water in the enclosure, where they would sometimes wait for weeks until they could be led out between two tame elephants. Of those driven into the kraal, estimates put the number of survivors at only 40–50%.¹²³ More elephants died during the taming process. According to British doctor John Davy, “more than half of those caught, die during their confinement: they seem to pine for the lost blessing of liberty: they refuse to eat, and generally die of starvation.”¹²⁴ In one hunt conducted under the British

One Hundred & Twenty Six as the number of those driven in to the great kraal, of whom seventeen died in the stable, thirteen in the water kraal, & three more shot as it was found impossible to make them go into the cage & they delayed the capture of the others. Twenty one were on the road to Tangalle & seventy two kraals, eighty three or nearly that number may therefore be considered as the quantity of elephants gained by government in the present hunt.¹²⁵

These figures were sent in a dispatch from Fredric North to show how effective improvements such as smaller kraals and better water supplies had been. Thirty more died from “bruising & long fasting during the taming process.”¹²⁶ Although these figures represent a mortality rate of about 58%, North bragged of a high survival rate. Even if only 7% of the animals had tusks in early modern times, nearly every hunt must have yielded some tusks. In one report back to the Netherlands in 1729, it was noted that eighty-one tusks had been obtained via the kraal method.¹²⁷

Only one source, penned by Pieter van Dam, discusses the outcome of the tusks taken from elephants that died as a result of kraals:

The teeth of those who die in their stalls in Jaffnapatnam were brought to the warehouses of the Company and put on the account of the inland revenues, but

¹²² *Ibid.*, p. 55.

¹²³ SLNA 5/1ff. 211–15; Percival 1990, p. 283.

¹²⁴ Davy 1990, p. 360.

¹²⁵ SLNA 5/1ff. p. 226.

¹²⁶ *Ibid.*

¹²⁷ SLNA 1/796.

those that die in the forest, the hunters keep for themselves, or give to the Wannias¹²⁸ while some come to the castle with a tooth, saying that they wish to present it to the commander, but also now and then they can be purchased but these are generally so few, that at the most no more than 70 or 80 pounds can be obtained.¹²⁹

The Company was not adverse to the idea of slaughtering elephants for tusks, should that prove more profitable than selling the elephants.¹³⁰

While the British continued many of the practices of the Dutch, one significant new introduction was the hunting of elephants for sport. According to Samuel Baker, there was a “peculiar excitement which attends elephant-shooting beyond all other sports.” He did, however, also note that, “One of the most disgusting sights is a dead elephant . . . The gas generated in the inside distends the carcass to an enormous size, until at length it bursts and becomes in a few hours afterwards one living heap of maggots.”¹³¹ This change in the nature and purpose of hunting would have a devastating effect on elephants, and, consequently, the ivory supply. It remained very much the occupation of the colonists. Local sportsmen rarely hunted elephants except when necessary to destroy a rogue or to protect fields, and even that was a last resort.¹³²

Sport hunters would either employ beaters to flush out their quarry, or in what was seen as the manlier alternative, track them into the jungle.¹³³ In the 1820s there was an Englishman named Farrell who ran a hunting lodge in Hambantota equipped with “several fine horses, upwards of eight greyhounds, besides other dogs of various breeds.”¹³⁴ Perhaps most infamous of all the hunters was Major Thomas William Rogers (1804?–1845) of the Ceylon Regiment, who was credited with killing between 1,300 and 1,600 elephants – he stopped counting after 1,300!¹³⁵ According to one visitor, “His whole house is filled with ivory . . . At each door of his verandah stand huge tusks, while, in his dining room,

128 The Vanniars are a Tamil caste in the north responsible for local administration.

129 Van Dam 1932, 2nd book part II, p. 319. Jaffnapatnam is presently known as Jaffna.

130 SNLA 1/794 Letter from the *bewindhebbers* to *the Heren XVII* to Batavia, 21 July 1723. The context is that when elephants were not sold, they tended to eat more than their worth by the next sales season, so it was better to send on the tusks to Surat.

131 Baker 1904, pp. 252, 253.

132 Julius 2004, p. 157.

133 Forbes 1994, vol. 1, p. 285.

134 Campbell 1999, p. 56.

135 Cumming 1892, vol. 1, p. 219. Cumming claims he died in 1843, but this appears to be an error. The memorial dedicated to Rogers in the church at Batticaloa reads: A.D. 1845, THIS CHURCH WAS ERECTED TO THE HONOUR OF GOD, In Memory of THOMAS WILLIAM ROGERS, Major, Ceylon Rifle Regiment, Assistant Government Agent and District Judge of Badulla, By All Classes of His Friends and Admirers. He was killed by lightning at Hapootalle June 7th 1845, Aged 41 “In the midst of life, we are in Death.”

Apparently his spur attracted the lightning. Death by lightning was seen as proof that he was larger than life, as he had been attacked by an elephant and was severely injured yet survived. One story had it that a Buddhist monk had cursed him. Reputedly his grave in Nura Elliya also was struck by lightning repeatedly. See Hensoldt 1894–1895. Rogers was Irish and graduated from the Royal College in 1824.

every corner is adorned with high piles of similar trophies.”¹³⁶ If the quarry had no tusks, its tail was cut off as a trophy.¹³⁷ In addition, Rogers reputedly used the ivory from his exploits to buy his commission.¹³⁸ So while some hunters kept the tusks, the income Rogers derived suggests that successful hunters also sold some of the tusks they obtained.

Elephants were regarded as trophies because they are not terribly easy to kill. Special brass shot (sometimes zinc) was used because the normal lead balls flattened too easily, and even then had to enter the eye or nose socket, or the ear hole. They had to be fired at a distance of no more than twenty yards.¹³⁹ Rogers used special 5oz shot.¹⁴⁰ More than one sportsman, frustrated by his inability to bring down an elephant, went to the Colombo Medical Museum to examine elephant skulls in order to figure out how to kill them.¹⁴¹ If a tusker was caught, the tusks were usually sawed off, but sometimes the head would be buried or left to decay so that the tusks could be removed intact.¹⁴² The tusks were certainly a much more attractive trophy than a tail, so the desire for tuskers was high.

BRITISH IVORY TRADE AND THE EFFECTS OF COLONIAL POLICY

After the conquest of Kandy, the British enjoyed a secure hold on the island, and thus using tribute, and trade, could continue trade in ivory. Regarding ivory trade, both Dutch and British documentation is scant; of the two, however, the British have somewhat more. It appears that the main commercial concerns of the British colonial government were with products that could be exploited by way of a plantation system, such as tea, coffee, cinnamon and indigo. Thus they initially dealt with ivory through taxation. In the early years of British rule, a heavy duty was imposed of two-thirds the value of all the ivory collected in Kandy, but this was before they actually had control of the area.¹⁴³ Early in the nineteenth century, an export duty of one rupee per pound was levied.¹⁴⁴ Ivory ornaments were also one of the items subject to the “joy tax”, a very unpopular levy on personal luxuries instituted by Governor Fredric North in 1800.

In the early years of British rule, it appears not much data was collected on ivory exports.¹⁴⁵ In 1832, a recommendation came down from the colonial government

¹³⁶ Hoffmeister 1844, pp. 166–67.

¹³⁷ See, e.g. Forbes 1994, vol. 1, pp. 140, 288–89.

¹³⁸ Tennent 1861, p. 142. He attributes to Rogers 1,400 kills.

¹³⁹ About hunting with zinc, see Campbell 1999, vol. 1, p. 310. Zinc is part of the alloy of metals from which brass is composed, and is still often used in bullet jackets because it is thought to improve accuracy. Samuel Baker, however, still thought lead was best, but he appears to have been in the minority. Baker n. d., p. 115.

¹⁴⁰ Hensoldt 1894–1895, p. 72.

¹⁴¹ E.g. Forbes 1994, vol. 1, pp. 131–32; Clark 1971, p. 19.

¹⁴² Skinner 1995, p. 16; Campbell 1999, pp. 277–79; Clark 1971, p. 23.

¹⁴³ SLNA 5/18ff. p. 160.

¹⁴⁴ Milburn 1813, vol. 1, p. 348.

¹⁴⁵ The *Ceylon Blue Books* for the years 1821–1824 list ivory as a commodity but read “the necessary data was not collected.”

Table 1. Ivory Exports from Ceylon 1825–1850

Year	To Great Britain	Other areas	Total	Other ivory products
1825	362 lb	735 lb	1097 lb	4 ivory images + 1 elephant head to Gt Britain; 1 base + 2 statues to other British colonies
1826	488 lb	68½ lb	556½ lb	
1827	383½ lb	502 lb	885½ lb	
1828	41 lb	334 lb	375 lb	
1829	65 lb	1031 lb	1096 lb	
1830	596 lb	124 lb	720 lb	
1831	307 lb	3065 lb	3375 lb	
1832	334 lb	579 lb	913 lb	
1833	563 lb	256 lb	819 lb	
1834	45 lb	592 lb	637 lb	8 elephants
1835	414½ lb	234 ¾ lb	649½ lb	
1836			1886 lb	
1837		363½ lb		
1838	illegible	82 pieces, cut	32 pieces	
1839*	1240 lb	142 lb		
1840	cwt 10.3.4 cut ivory	49.18.1		
1841	9.1½	37.4.6		
1842*			cwt 1.2.0	1 package
1843*	205 lb	307 lb	512 lb	
1844				In conservation, not available
1845	1054 lb		1054 lb	
1846	540 lbs	50½ lb	590½ lb	
1847	7.2.48	143.22.6		
1848*	299 lb	50 lb	249 lb	2 elephants
1849		184 lb and one package		
1850*	141 lb	85 lb	226 lb	

*Data from *Ceylon Government Gazette* 1825–1850.

that the special tax on ivory be repealed, that it be made subject to the same general export duty as everything else, and that revenue of £50 be noted for the crown from the sale of elephant tusks.¹⁴⁶ In the following year, the commercial monopoly of the East India Company was ended, and Robert Percival of the English 19th Regiment reported that “Moors and Malabars” exported ivory from Colombo, but with a 5% duty.¹⁴⁷ It is interesting that by this time ivory revenues (£57) almost equaled those from live elephants (£61).¹⁴⁸

By 1825, the British had begun recording export data. Ivory, the data indicate, was exported every year: As Table 1 shows, Tennent, the Colonial Secretary of Ceylon from 1845 to 1850 who claimed each year “five or six hundred weight”¹⁴⁹ of tusks were being

146 Mendes 1956, 1, p. 292.

147 Percival 1990, p. 117.

148 Mendes 1956, vol. 2, pp. 103, 287.

149 A hundredweight was one-tenth of a ton, or about 112 lb.

imported from Ceylon into Great Britain was, at best, providing an average figure.¹⁵⁰ Because supplies were erratic, sometimes there were significantly more than this and sometimes less; likewise it was probably difficult at times to determine the amount because of irregular counting practices, e.g. quantities were recorded sometimes in weight, sometimes in number of tusks. However, the overall quantity did drop significantly later in the century, a change that directly correlates with a noticeable drop in the number of elephants.¹⁵¹

Destinations

In addition to Europe and India, a significant destination for ivory exported from Ceylon appears to have been China. Travelers from China such as the monk Faxian had visited Ceylon as early as the turn of the fifth century. Large numbers of Chinese ceramics from this period found in Sri Lanka attest to the conduct of trade. During the Song dynasty (960–1279) in particular, there appear to have been regular trading relations.¹⁵² European involvement in moving ivory to China was documented by Linschoten, who mentions “ivorie bones” as products that sold well for the Portuguese in Macao.¹⁵³ Initially traditional middlemen appear to have been responsible, but as the British established themselves in East Asia, more direct routes were developed.¹⁵⁴

Tennent blamed China as a reason for the lack of more exports to Europe.¹⁵⁵ As the British were by this time firmly established in Canton, and later Hong Kong, it would have made sense for them to follow traditional trading patterns. Trading within the Crown Colonies would have cut down on paperwork too. Moreover, for most applications East Asian craftsmen preferred the finer-grained Asian elephant ivory. By the time the British occupied Ceylon, China had developed an enormous appetite for ivory, fueled by both strong internal demand and a thriving export industry.

Dwindling Supplies

In 1859, Tennent suggested that had more Sri Lankan elephants borne tusks, they long since would have been exterminated for their ivory.¹⁵⁶ Likewise, Samuel W. Baker, one of the best-known sport hunters in nineteenth-century Ceylon, attributes the decline in the Sri Lankan elephant population to the demand for ivory.¹⁵⁷ Much more significant, however, was the conscious effort to place their habitat under cultivation, which by both accident and design resulted in a drastic reduction in the number of elephants. Even today, crop damage by wild elephants is an ongoing aspect of the strained relations

150 Tennent 1996, vol. 2, p. 273, n. 3.

151 “There is not so many elephants to be met with now as formerly”; Campbell 1999, p. 263.

152 Furber 1976, p. 142.

153 Burnell 1970, p. 145.

154 De Bussche 1999, p. 106.

155 Tennent 1996, vol. 2, p. 273, n. 3.

156 *Ibid.*

157 Baker 1904, p. ix.

between wild elephants and stationary human agricultural populations. In colonial Ceylon, the elephants destroyed fields, ate crops and killed workers. The reduction of the elephant population was regarded as a necessity. The British, who sought to promote an economy based on plantation labor, found intrusions by elephants especially irksome. The policy of agricultural development was especially strong during the 1830s, under the administration of Governor Robert Wilmont Horton. Initially, the effort to reduce elephants was seen as a success. The government profited through fees for hunting licenses and was able to open up more land for cultivation. However, the decline of the elephant population was precipitous. In the late 1840s Samuel W. Baker noted,

The government reward for the destruction of elephants in Ceylon was formerly ten shillings per tail; it is now reduced to seven shillings in some districts, and is altogether abolished in others, as the number killed was so great that the government imagined they could not afford the annual outlay. Although the number of these animals is still so immense in Ceylon, they must nevertheless have been much reduced within the last twenty years.¹⁵⁸

Similarly, in 1859 Tennent observed, “They have entirely disappeared from districts in which they were formerly numerous.”¹⁵⁹

This sharp decline resulted in some of the earliest wildlife legislation anywhere in the world. In 1870 the Elephant Protection Act was passed, in an attempt to reverse the trend. In that same year, an export duty of £20 per head was placed on elephant exports, a measure which effectively halted the trade.¹⁶⁰ In 1891, Ordinance no. 10 was passed in order “to prevent the wanton destruction of elephants, buffaloes and other game.” Hunting tuskers was expressly prohibited.¹⁶¹ By the turn of the twentieth century, licensing fees alone made elephant hunting the sport of “foreign princes and noblemen and millionaire globe-trotters.”¹⁶² Even in 1907, however, the decline of elephant populations caused by destruction of habitat continued to be noted.¹⁶³ Other measures were passed, such as the 1937 ban of elephant hunting for sport.¹⁶⁴

Conservation measures led to the end of ivory carving in Sri Lanka, and today it is no longer openly practiced. As early as 1850 Henry Sirr complained, “this art is falling into decay and disuse,” recounting that:

The Kandians formerly used drinking-cups of ivory, which were so extremely thin, as to be rendered perfectly transparent and pliable; a friend having one

¹⁵⁸ Baker n.d., p. 107. In this book Baker notes several times how their number has decreased.

¹⁵⁹ Tennent 1996, vol. 2, pp. 272–73.

¹⁶⁰ Hornaday 1929, p. 228.

¹⁶¹ Licenses cost 100 rupees. If a tusker was shot without a license, the fine was 1,000 rupees. Exemptions were granted for rogue elephants. Clark 1971, p. 95.

¹⁶² Clark 1971, p. 19.

¹⁶³ Julius 2004, p. 157.

¹⁶⁴ Martin and Stiles 2002, p. 20.

of these remarkable vessels in his possession, we were most desirous to obtain a similar specimen, but to our dismay were informed by a Kandian chief, that he knew but of one old man living in the interior, who could fabricate these curious cups, and that he was too ill to work. A short time afterwards we heard of the death of the old man in question, and with him the art is said to have died, as he refused to impart his secret to any living being, and we can only hope for the sake of posterity that our informant had been misled in this respect.¹⁶⁵

While mourning over a lost past is a commonly held sentiment, the definite decline in the craft of ivory carving resulted from a change of demands. Writing in 1908, Ananda Coomaraswamy attributed this phenomenon in great part to British destruction of the traditional system of state-sponsored craftsmen.¹⁶⁶ As early as 1955, one authority viewed ivory carving as “more or less extinct” for the last twenty years; another authority called the death of artist Utuwankande Swarnatilake in the 1970s the loss of the “last champion”. Blame was placed on the inability of craftsmen to receive proper payment for the time it took to produce quality ivory carvings.¹⁶⁷ It may very well be that these problems all led to the decline of quality work in ivory, but tourist art in Sri Lanka continued to be produced in large quantities, relying partially on imports of tusk from Africa.¹⁶⁸

Wildlife protection laws were tightened in 1964, going so far as to prohibit ownership of even a part of a tusk, and from the late 1970s onward serious efforts were made to enforce these laws. As a consequence, even the production of curios for tourists eventually ceased. By 1979, the Sri Lankan ivory industry had become one of the smallest in Asia.¹⁶⁹ The passage of CITES more or less brought all Sri Lankan ivory carving to a halt. The only use I was able to discern in present-day Sri Lanka was the practice of ornamenting the casket dais at funerals with whole, undecorated tusks mounted in ebony stands. It appears that even some of these are imitation.

CONCLUSION

In literate societies we are inclined to trust paperwork; for a large, bureaucratic institution such as the East India Company, one might conclude that if something is not documented, it may never have happened. At first glance, the documentary history of decline in Sri Lankan ivory over the past 150 years would seem to support the idea that there was no significant ivory trade to be discovered. The scarcity in Sri Lanka of elephants in general, and tusked elephants in particular might even lead one to believe that there never was sufficient ivory to trade.

Any good historian questions his or her sources; in this case there is much to learn because physical, anecdotal and extra-official sources all support different, and at times

¹⁶⁵ Sirr 1991, pp. 265–66.

¹⁶⁶ Coomaraswamy 1979, p. vi.

¹⁶⁷ Deraniyagala 1955, p. 306 and Gunasekera 1977, p. 156.

¹⁶⁸ Sri Lankan carvers started using imports from Africa in 1910. See Santiapillai *et al.* 1999, p. 176.

¹⁶⁹ Martin and Martin 1990, p. 5.

contradictory, stories. It is apparent that when their populations are not under duress, even tuskless elephants are able to provide a significant amount of ivory. Although later sport-hunting practices were a contributing factor, habitat destruction was equally if not more significant in the reduction of ivory resources. It is unlikely that the Dutch East India Company would have ignored a trading opportunity that they were aware of and, later, was successfully exploited by the British. There was sufficient supply, distribution and demand to make ivory trade both possible and desirable, as well as a high level of indigenous craftsmanship to provide both fine exports and sailor's souvenirs until the twentieth century. The East India Company's archives are vast and scattered; further examination of other archives may reveal more information. But even without accounting books and cargo lists, the abundance of other evidence that remains suggests that ivory trade, based upon carved and uncarved forms, and carried out through official and unofficial channels, was a constant in early modern Ceylon.

To what extent early modern Ceylonese ivory trade was significant on a global scale cannot presently be determined, because so little is known about the trading patterns of ivory for most of the regions of Asia.¹⁷⁰ Still, as a product, it certainly was known and appreciated in both East Asia and the West. It is not a matter of blind faith to accept that ivory played a significant role in the political, economic and cultural landscape of early modern Ceylon; it is rather a matter of looking beyond Company documents.

REFERENCES

- Alpers 1976
Alpers, Edward. "Gujarat and the Trade of East Africa c. 1500–1800." *International Journal of African Historical Studies* 9:1 (1976), pp. 22–44.
- Anthonisz 1914
Anthonisz, Sophia, trans. *Memoir of Hendrick Becker, Governor and Director of Ceylon, for his successor, Isaac Augustyn Rumpf, 1716*. Colombo: Government Record Office, 1914.
- Anthonisz 1915
Anthonisz, Sophia, trans. *Memoir of Thomas van Rhee, Governor and Director of Ceylon, for his Successor, Gerrit de Heere, 1697*. Colombo: L. C. Cottle, Government Printer, 1915.
- Arasartnam 1974
Arasartnam, Sinnappah, trans. *Memoir of Julius Stein van Gollenesse*. Colombo: Government Printing Office, 1974.
- Arasartnam 1995
Arasartnam, Sinnappah. "Sri Lanka's Trade, Internal and External in the 17th & 18th Centuries." In K. M. De Silva, ed., *History of Sri Lanka*, vol. 2. Peradeniya, Sri Lanka: University of Peradeniya, 1995, pp. 399–416.
- Arasartnam 1995
Arasartnam, Sinnappah. "The Consolidation of Dutch Power in the Maritime Regions 1658–1867." In K. M. De Silva, ed., *History of Sri Lanka*. Dehiwala, Sri Lanka: University of Peradeniya, 1995, p. 239.
- Bailey 1863
Bailey, John. "An Account of the Wild Tribes of the Veddahs of Ceylon: Their Habits, Customs, and Superstitions." *Transactions of the Ethnological Society of London* 10 (1863), pp. 278–320.
- Baker n.d.
Baker, Samuel W. *Eight Years Wanderings in Ceylon*. Chicago: Belford, Clarke & Co., n.d.
- Baker 1904
Baker, Samuel W. *The Rifle and the Hound in Ceylon*. London: Longmans, Green, and Co., 1904.

¹⁷⁰ The trade between East Africa and India is perhaps the best documented. See, for example, Alpers 1976 and the works by Malyn Newitt.

- Baldaeus 1996
Baldaeus, Philip. *A True and Exact Description of the Most Celebrated East-India Coast of Malabar and Coromandel as also of the Isle of Ceylon*. (1672) New Delhi: AES, 1996.
- Bertolacci 1983
Bertolacci, Anthony. *A View of the Agricultural, Commercial and Financial Interests of Ceylon* (1817). Dehiwala, Sri Lanka: Tisara Prakasakayo, 1983.
- Bennett 1998
Bennett, J. W. *Ceylon and Its Capabilities* (1843). New Delhi: Asian Educational Services, 1998.
- Bidermann 2005
Bidermann, Zoltàn. "Das Geschäft mit den Dickhäutern: Anmerkungen zum celoneischen Elefantenhandel vom 16. bis zum 18. Jahrhundert." In Jorge M. dos Santos Alves, Claude Guillot and Roderich Ptak, eds., *Mirabilia Asiatica: Produtos raros no comércio maritime, Produits rares dans le commerce maritime, Seltene Waren Im Sehandel*, 2. Wiesbaden and Lisboa: Harrossowitz Verlag and Fundação Orient, 2005, pp. 141–66.
- Binning 1857
Binning, Robert B. M. *Journal of Two Years' Travel in Persia, Ceylon, etc.* 2 vols. London: Wm H. Allen and Co., 1857.
- Boyajian 1993
Boyajian, James. *Portuguese Trade in Asia under the Hapsburgs*. Baltimore: Johns Hopkins University Press, 1993.
- Bruijin 1987
Bruijn, J. R. et al., *Dutch Asiatic Shipping in the Seventeenth and Eighteenth Centuries*, 2 vols. 's Gravenhage: Martinus Nijhoff, 1987.
- Burnell 1970
Burnell, Arthur Coke ed. *The Voyage of John Huyghen van Linschoten to the East Indies* New York: Burt Franklin, 1970.
- Campbell 1999
Campbell, James. *Excursions, Adventures and Field-Sports in Ceylon; Its Commercial and Military Importance and Numerous Advantages to the British Emigrant* (1843) New Delhi: AES Reprint, 1999.
Ceylon Blue Book, Colombo: Ceylon Government, 1821–1850.
Ceylon Government Gazette. Colombo: Ceylon Government. 1821–1850.
- Chitty 1989
Chitty, Simon Casie. *Ceylon Gazetteer*. (1834) Colombo: PLW & Company, 1989.
- Clark 1971
Clark, Alfred. *Sport in the Low-Country of Ceylon*. Dehiwala, Sri Lanka: Tisara Prakasakayo, 1971.
- Codrington 1995
Codrington, H. W. ed. *Diary of Mr. John D'Oyly* (1917) New Delhi: Navrang, 1995.
- Coolhaas 1960–2007
Coolhaas, W. Ph. *Generale missiven van gouverneurs-generaal en raden aan Heren XVII der Verenigde Oostindische Compagnie*, 's Gravenhage: Martinus Nijhoff 1960–2007, ongoing, 13 vols. to date.
- Coomaraswamy 1979
Mediaeval Sinhalese Art. 3rd edn. New York: Pantheon Books, 1979.
- Coomaraswamy 2004
Coomaraswamy, A. K. "Native Arts and Handicrafts." In Arnold Wright, *Twentieth Century Impressions of Ceylon* (1907) New Delhi: Asian Educational Services, 2004, pp. 180–88.
- Cumming 1892
Cumming, C. F. Gordon. *Two Happy Years in Ceylon*, 2 vols. London: Blackwood and Sons, 1892.
- Davy 1990
Davy, John. *An Account of the Interior of Ceylon and of Its Inhabitants*. (1821) Delhi: Asian Educational Service, 1990.
- De Bussche 1999
De Bussche, L. *Letters on Ceylon Particularly Relative to the Kingdom of Kandy*. (1817) New Delhi: Asian Educational Services, 1999.
- De Moor and Van Der Velde 1997
de Moor, J. A. and P. G. E. I. J. Van Der Velde. *De Werken van Jacob Haafner*. Zutphen: Walburgh Pers, 1997, vol. 3, p. 354 (*Reize in Eenen Palanquin* 1827).
- De Queyroz 1930
de Queyroz, Fr Fernão. *The Temporal and Spiritual Conquest of Ceylon*. 2 vols. Colombo: A. C. Richards, Government Printer, 1930.

- Deraniyagala 1955
Deraniyagala, P. E. P. "Sinhalese Ivory Carving Part I." *Spolia Zelanica: Bulletin of the National Museums of Ceylon* 27:2 (May 1955).
- De Silva 1990
De Silva, C. R. "Peddling Trade, Elephants and Gems: Some Aspects of Sri Lanka's Trading Connections in the Indian Ocean in the Sixteenth and Early Seventeenth Centuries." In K. M. De Silva *et al.*, *Asian Panorama: Essays in Asian History, Past and Present*. New Delhi, 1990, pp. 287–302.
- De Silva 1995
De Silva, C. R. "Sri Lanka in the Early Sixteenth Century." 2 vols. In K. M. De Silva, *History of Sri Lanka*. Peradeniya, Sri Lanka: University of Peradeniya, 1995.
- De Silva 1995
De Silva, C. R. *Ceylon under the British Occupation, 1795–1833*. New Delhi: Navrang, 1995.
- Doeff 1833
Doeff, Hendrik. *Herinneringen uit Japan*. Haarlem: Froncois Bohn, 1833.
- D'Oyly 1929
D'Oyly, John. *A Sketch of the Constitution of the Kandyan Kingdom*. Dehiwala, Sri Lanka: Tiasara Prakasakayo, 1929.
- Dijk 2007
Dijk, Wil. *Seventeenth-century Burma and the Dutch East India Company, 1634–1680*. Honolulu: University of Hawaii, 2007.
- Fayle 1929
Fayle, C. Ernest ed. *Voyages of the East Indies*. London: Cassell and Company, 1929.
- Ferguson 1998
Ferguson, Donald. *The Earliest Dutch Visits to Ceylon*. New Delhi: AES Reprints, 1998.
- Ferguson 1908
Ferguson, Donald, trans. "The History of Ceylon, from the Earliest Times to 1700 A.D. as related by Joan de Barros and Diogo do Couto." *Journal of the Ceylon Branch of the Royal Asiatic Society* 20:60 (1908).
- Forbes 1994
Forbes, Major [Jonathan]. *Eleven Years in Ceylon*. (1840) 2 vols. New Delhi: Asian Educational Service, 1994.
- Furber 1976
Furber, Holden. *Rival Empires of Trade in the Orient, 1600–1800*. Minneapolis: University of Minnesota Press, 1976.
- Gibb ed. 1969
Gibb H. A. R. ed. *Ibn Battuta-Travels in Asia and Africa, 1325–1354*. New York: Augustus M. Kelley, 1969.
- Gunasekera 1977
Gunasekera, Sudath. "Traditional Handicrafts of Sri Lanka with Special Reference to Some Indigenous Techniques and Tools." Colombo: Department of Rural Development and Cottage Industries, 1977.
- Haafner 1995
Haafner, Jacob. *Travels on Foot through the Island of Ceylon*. (1821) New Delhi: Asian Educational Services, 1995.
- Haeckel 1881
Haeckel, Ernst. *A Visit to Ceylon*. 3rd edn. Clara Bell, trans. New York: Peter Eckler, 1881.
- Hamilton 1930
Hamilton, Alexander. *A New Account of the East Indies*. William Foster, ed. 2 vols. London: The Argonaut Press, 1930.
- Hensoldt 1894–1895
Hensoldt, Henrich. "The Fate of Major Rogers: A Buddhist Mystery of Ceylon." *The Arena* 11 (Dec. 1894–Feb. 1895), pp. 71–78.
- Hoffmeister 1844.
Hoffmeister, W. *Travels in Ceylon and Continental India*. Edinburgh: William P. Kennedy, 1844.
- Hornaday 1929
Hornaday, William T. *Two Years in the Jungle – The Experiences of a Hunter and Naturalist in India, Ceylon, The Malay Peninsula and Borneo*. New York: Scribner's Sons, 1929.
- Jaffer and Schawbe 1999
Jaffer, Amin and Melanie, Anne Schawbe. "A Group of Sixteenth-Century Ivory Caskets from Ceylon." *Apollo* 144 (1999), pp. 3–14.
- Jaffer 2002
Jaffer, Amin. *Luxury Goods from India – the Art of the Indian Cabinet Maker*. New York: Harry N. Abrams, 2002, pp. 50–51.

- Jones 2006
 Jones, Robin. "An Englishman Abroad – Sir James Emerson Tennent in Ceylon, 1845–1850." *Apollo* 164 (November 2006), pp. 36–43.
- Jordan 1999
 Jordan, Annemarie. "Exotic Renaissance Accessories: Japanese, Indian and Sinhalese Fans at the Courts of Portugal and Spain." *Apollo* (Nov. 1999), pp. 25–35.
- Julius 2004
 Julius, V. A. "Fauna." In *Twentieth Century Impressions of Ceylon* (1907) New Delhi: Asian Educational Services, 2004, pp. 157–60.
- Kattendyke 1860.
 Kattendyke, H. C. Ridder Huyssen van. *Uitbrekels uit het Dagboek 's Gravenhage*: W. P. van Stockum, 1860.
- Knighton 1854
 Knighton, W. *Forest Life in Ceylon*. 2 vols. London: Hurst and Blackett, 1854.
- Knox 1989
 Knox, Robert. *An Historical Relation of the Island Ceylon*, 2nd edn. J. H. O. Paulusz, ed. Dehiwala, Sri Lanka: Tisara Prakasakaya, Ltd. 1989.
- Kunz 1915
 Kunz, George. *Ivory and the Elephant*. New York: Doubleday, Page and Company, 1915.
- Martin and Martin 1990
 Martin, Chryssee Perry, and Esmond, Bradley Martin. "Sri Lankan Ivory Sculpture in Retrospect." *Pachyderm* 13 (1990).
- Martin E. 2002
 Martin, Esmond, and Daniel, Stiles. *The South and South East Asian Ivory Markets*. London and Nairobi: Save the Elephants, 2002.
- Mendes 1956
 Mendes, G. C. *The Colebrooke-Cameron Papers – Documents on British Colonial Policy in Ceylon 1796–1833*. 2 vols. London: Oxford University Press, 1956.
- Milburn 1813
 Milburn, William. *Oriental Commerce*. 2 vols. London: Black, Parry & Co. 1813, vol. 1, p. 348.
- Nelson and De Silva 2004
 Nelson, W. A., and R. K. De Silva. *The Dutch Forts of Sri Lanka – The Military Monuments of Ceylon*. Colombo: Sri-Lanka-Netherlands Association, 2004.
- Percival 1990
 Percival, Robert. *An Account of the Island of Ceylon*. (1803) New Delhi: Asian Educational Services, 1990.
- Pieris ed. 1929
 Pieris, Paul E., ed. *Some Documents Relating to the Rise of the Dutch Power in Ceylon, 1602–1670, from the Translations at the India Office*. Colombo: CAC Press, 1929.
- Pieris 1983
 Pieris, Paul E. *Ceylon in the Portuguese Era*. (1913) 2 vols. Dehiwala, Sri Lanka, 1983.
- Pieris 1995
 Pieris, Paul E. *The Kingdom of Jafanapatam 1645*. (1920) New Delhi: Asian Educational Services, 1995.
- Pieris 1999
 Pieris, Paul E. *Ceylon and the Hollanders*. (1918) New Delhi: Asian Educational Service, 1999, p. 102.
- Pieters 1908
 Pieters, Sophia, trans. *Instructions from the Governor-General and Council of India to the Governor of Ceylon 1656–1665*. Colombo: H. C. Cottle, Government Printer, 1908.
- Pieters 1910
 Pieters, Sophia, trans. *Memoir by Anthony Mooyaart, commandeur of Jaffnapatam for the Information and Guidance of his successor, Noel Anthony Lebeck 1766*. Colombo: H. C. Cottle, Government Printer, 1910.
- Pires 1990
 Pires, Tomé. *Suma Oriental of Tomé Pires*. New Delhi: Asian Educational Services, 1990.
- Raghavan 1957
 Raghavan, M. D. *Handsome Beggars*. Colombo: Colombo Book Centre, 1957.
- Randow 1958
 Randow, Heinz. *Zoo Hunt in Ceylon*. Charles Johnson, trans. New York: Doubleday and Company, 1958.

- Raven-Hart 2001
Raven-Hart, R., ed. *The Pybus Embassy to Kandy, 1762*. Colombo: The National Museum of Ceylon, 2001.
- Reimers 1927
Reimers, E., trans. *Memoir of Joan Maetsuyker*. Colombo: H. Ross Cottle, Government Printer, 1927.
- Reimers 1946
Reimers, E., trans. *Memoir of Jan Schreuder, 1757–1762*. Colombo: Ceylon Government Press, 1946.
- Santiapillai *et al.* 1999
Santiapillai, Charles *et al.* "Trade in Asian Elephant Ivory in Sri Lanka." *Oryx* 33:2 (April), pp. 176–80.
- Seligmann 1911
Seligmann, C. G., and Brenda, Z. Seligmann. *The Veddas*. Cambridge: Cambridge University Press, 1911, p. 163.
- Silva 2007
Silva, Nuno Vassallo e. "An Art for Export: Sinhalese Ivory and Crystal in the Sixteenth and Seventeenth Centuries." In Jorge Flores, ed., *Re-exploring the Links: History and Constructed Histories between Portugal and Sri Lanka*. Wiesbaden: Harrassowitz Verlag: 2007, pp. 279–95.
- Sirr 1991
Sirr, Henry Charles. *Ceylon and the Cingalese*. (1850) New Delhi: Asian Educational Services, 1991.
- Skinner 1995
Skinner, Thomas. *Fifty Years in Ceylon*. (1891) New Delhi: AES, 1995.
- Souter 1818
Souter, John, *The Book of English Trade and the Library of Useful Arts*. London: J. Souter, 1818.
- Sri Lankan National Archives
Sri Lankan National Archives – Abbreviated herein as SLNA.
- Strachan 1702
Strachan, Mr, "An Account of the Taking and Taming of Elephants in Zeylan by Mr. Strachan, a Physician who Lived Seventeen Years There." *Philosophical Transactions* 23. pp. 1051–54.
- Tennent 1861
Tennent, James Emerson. *Sketches of the Natural History of Ceylon*. London: Longman, Green, Longman, and Roberts, 1861.
- Tennent 1996
Tennent, James Emerson. *Ceylon: An Account of the Island*. (1859) 2 vols. New Delhi: Asian Educational Services, 1996.
- Tilakasiri 1974
Tilakasiri, Jayadeva. "Ivory Carving of Sri Lanka." *Arts of Asia* 4:4 (July–Aug. 1974), pp. 42–46.
- Valentijn 1978
Valentijn, François. *Description of Ceylon*. Sinnappah Arasartnam, trans. London: Hakluyt Society, 1978.
- van Dam 1932
van Dam, Pieter. *Beschryvinge van de Oostindische Compagnie*. F. W. Stapel, ed. 's Gravenhage: Martinus Nijhoff, 1932.
- Wagenaar 1994
Wagenaar, Lodewijk. *Galle: VOC-vestiging in Ceylon*. Amsterdam: De Baafsche Leeuw, 1994.
- Watt 1903
Watt, Sir George. *Indian Art at Delhi, 1903*. Calcutta: Superintendent of Government Printing, 1903.
- Webb 2002
Webb, James A. *Tropical Pioneers – Human Agency and Ecological Change in the Highlands of Sri Lanka, 1800–1900*. Athens, OH: Ohio University Press, 2002.
- Whitehouse 2002
Whitehouse, A. M. "Tusklessness in the Elephant Population of the Addo Elephant National Park, South Africa." *Journal of Zoology* (2002), pp. 249–54.
- Wisumperuma 2003
Wisumperuma, Dhanesh. "Human-Elephant Relationships in Sri Lanka: An Historical and Archeological Perspective." In Jayantha Jayewardene, ed., *Endangered Elephants – Past, Present and Future*. Rayjagiriya, Sri Lanka: Biodiversity and Elephant Conservation Trust, 2003, pp. 6–12.
- Wright 1999
Wright, Arnold, ed. *Twentieth Century Impressions of Ceylon: Its History, People, Commerce, Industries, and Resources*. (1907) New Delhi: Asian Educational Services, 1999.