AN HISTORICAL PERSPECTIVE OF THE YEMENI RHINO HORN TRADE

Esmond Bradley Martin and Lucy Vigne

C/O WWF Regional Office PO Box 62440 Nairobi Kenya

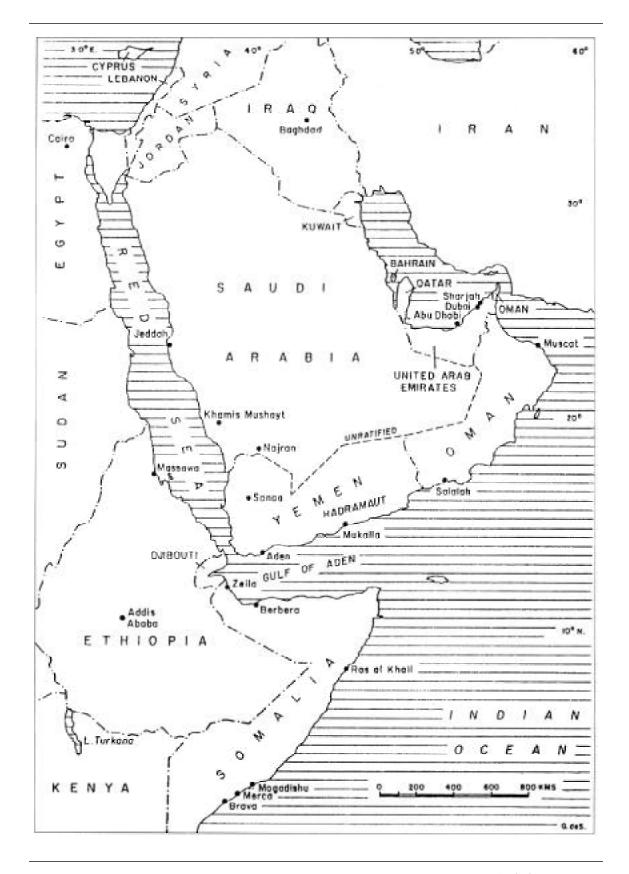
EARLY REPORTS OF THE RHINO HORN TRADE FROM EASTERN AFRICA

Traders in Yemen have been importing rhino horn from Africa for centuries and sending it on to other places, but when Yemenis began using rhino horn themselves is not known. The earliest document describing the trade from eastern Africa is the Periplus of the Eryrhraean Sea, a handbook on the trade of the Indian Ocean. Written in the Greek language, it was probably by a Greek merchant who lived in Egypt during the first century A.D. (Casson, 1989; Huntingford, 1980). There are two references in it concerning the exports of rhino horn from eastern Africa. The first is about the area around Adulis, which was then the major port for Ethiopia: "The mass of elephants and rhinoceroses that are slaughtered all inhabit the upland regions, although on rare occasions they are seen along the shore around Adulis itself... Exports from this area are ivory, tortoise shell, rhinoceros horn" (Casson, 1989). No specific reference in the Greek text is given as to where the rhino horn was taken, but some of it probably ended up in Egypt and in various Mediterranean ports (Casson, 1989). Wilfred Schoff (1912), who was Secretary of the Commercial Museum in Philadelphia, and who produced an annotated translation of the *Periplus* in 1912, believed that rhino teeth and hide were also exported from Ethiopia, but he did not name their probable destination. Interestingly, Lionel Casson (1989), in his introduction to the *Periplus*, wrote: "Muza was an entrepot as well, offering for export what it had imported from Adulis". Most scholars believe that Muza was located near present-day Mocha in Yemen; therefore, if Casson was correct, then rhino horn was being exported from Adulis in Ethiopia to Yemen in the first century.

The second reference to the export of rhino horns in the Periplus concerns a port called Rhapta, its location still controversial among scholars. While some archaeologists and historians believe that Rhapta was in southern Tanzania (Datoo, 1970), others think that it may have existed in northern Tanzania between Dar es Salaam and Pangani. Irrespective of its location, the Periplus states: "the area exports a great amount of ivory but inferior to that from Adulis; rhinoceros horn; best quality tortoise shell after the Indian; a little nautilus shell" (Casson, 1989). Again, no destination is given in the text, but we know that almost all the luxury products obtained along the African coast by the merchants of Roman Egypt were exported through Egypt, ending up in the hands of wealthy buyers in the Mediterranean world. Huntingford believed that perhaps much of the rhino horn from Adulis and Rhapta went to India, but gave no evidence for this statement (Huntingford, 1980). According to the Periplus, Rhapta was under the rule of the governor of Mapharitis, a province in what is now Yemen, and whose main port was Muza; Arabian traders from this



During the mid-19th century large quantities of rhino horn, from what are today Tanzania and Kenya, were shipped to Zanzibar for sale to Arabs and Indians.



part of Yemen settled among the Africans of Rhapta and traded extensively with them (Mathew, 1963). Therefore, it is likely that rhino horn from Rhapta was exported to southwest Arabia, now present-day Yemen, in exchange for goods from Muza, including metal spears, axes, small swords and awls.

Paragraph 17 of the *Periplus* text lists exports from Yemen to Rhapta. Among these is what McCrindle (1879) translated as "knives" and Schoff (1912) as "daggers"; William Vincent (1807), then Dean of Westminster, who translated and had published an early edition of the Periplus in 1807, believed that the correct translation from the Greek was "knives". In a footnote, Vincent wrote that these "knives, called jambea or canjars, are still a great article of trade in Africa, Arabia and India; they are carried in the girdle and ornamented with silver, gold or jewels, according to the ability of the possessor". Consequently, the Periplus may be the earliest reference to allude to the trade of rhino horn from Africa to Yemen. and it is definitely one of the earliest documents specifically referring to the export of jambiyas from Yemen to East Africa. The international trade in rhino horn and daggers with Yemen thus may be at least 2 000 ears old

From the time of the *Periplus* until the 19th century, there are references to the export of rhino horn from eastern Africa to Asia, but few refer specifically to Yemen as an entrepot or end market. Almost all the sources are Arab, Chinese or, later, European. There certainly was a demand, if not the major one, for African rhino horns in China, since they were considerably larger than the Asian horns and thus could be used for making large bowls and other works of art. In fact, from the ninth century, the Chinese specifically mention rhinoceros horn as one of the major imports into Guangzhou (Hirth & Rockhill, 1966). However, the horn was not sent directly from eastern Africa to China, rather via entrepots in Arabia, India and elsewhere in the Indian Ocean. One 13th-century Chinese document refers to the Hadramaut as a major entrepot for the surrounding Arab lands. One of the products available there was rhinoceros horn. Some, if not all of it, according to this Chinese document, was sent to Palembang (in Indonesia), and to the Malayan peninsula for barter. These African horns may have come originally from Somalia, since this document notes that the Berbera coast produced some of the biggest rhino horns, over six kilos each



Rhino horns have been brought to Yemen by dhows for over 2,000 years from the East Africa coast.

Besides horn going from the eastern African coastal ports to Arabia, and then eventually on to China, it also continued to be sent to Egypt and Europe over this 2,000-year period. During the European Middle Ages up until the World Depression in 1929, there was a strong demand for rhino horn for a wide variety of uses, including medicines and works of art in continental Europe. Unfortunately, references to how much rhino horn was actually consumed in what is now Yemen until the 20th century have not been found. We know that Yemen underwent an economic decline before the European Middle Ages; furthermore, according to World Bank economists, economic stagnation persisted into recent times (World Bank. 1979). It is highly probable, therefore, that comparatively small quantities of rhino horn were used by the Yemenis. From at least the 12th century up to the present, rhino horn has been a luxury commodity, and only the wealthy have been able to afford it. Perhaps future archival research in Yemen and in Turkey, which at various times controlled parts of Yemen, will provide more information on the amount of horn consumed by the Yemenis.

IMPORTS OF RHINO HORN INTO YEMEN FROM THE 19TH CENTURY

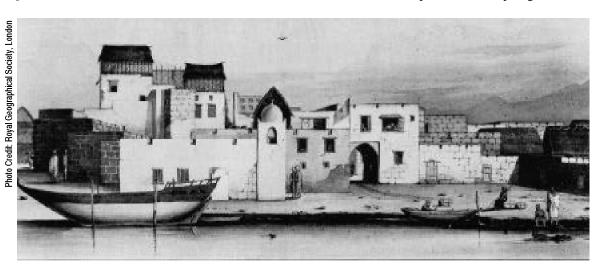
With the arrival of the British in the Red Sea in the early part of the 19th century, some commercial statistics become available. William Milburn, who worked for the East India Company, compiled a huge amount of trade data which Thomas Thornton later edited and published as *Oriental Commerce*, in 1825.

In Mocha, he noted that:

"Rhinoceros' Horns are much esteemed among the Mahametans, on account of their being considered a powerful antidote against poison... A good sized horn, sound, and not broken at the point, is worth from three to four pounds sterling... They are made into drinking cups and snuff boxes" (Milburn, 1825).

According to Milburn (1825), the rhino horns in Mocha came from Zeila, Massawa and other places. There is additional information on rhino horn exports from Somalia and Ethiopia going to the Red Sea countries and Arabia. Massawa exported rhino horns for one to six dollars each, depending on their quality; Brava and Mogadishu businessmen were exporting rhino horns throughout the 19th century, which in 1896/7 were worth US\$ 1,120. In that same financial year, Merca merchants were sending out US\$ 1,057 worth of horns. Even tiny ports such as Ras al-Khail were shipping out horns; in 1889 traders there exported US\$ 20,000 worth of ivory and rhino horn, mostly to Aden and Mocha, even though much of the horn was re-exported (Pankhurst, 1968).

During the first half of the 19th century, the port of Aden developed at the expense of Mocha. Aden was administered as part of the Indian Empire from 1839 until 1937, and trade statistics for this period can be found in the India Office Library in London. There are several reasons why rhino horn is not mentioned. One is that chaos reigned in the Yemeni highlands, and it was almost impossible to transport goods there.



In the 19th century Massawa, as painted here in 1833, was a major port for rhino horn being exported from Ethiopia to Yemen.

R.L. Playfair (1855), the Assistant Political Resident in charge of customs in Aden, wrote in 1855 that overall trade in Aden had declined because of "almost total anarchy reigning in the neighbourhood of Sanaa". In 1926, similar comments were being made: "business with the hinterland has been more or less interfered with owing to the hostilities... The hinterland <is> occupied by many tribes who are generally engaged in warfare among themselves" (Downing Street to Aden Resident, 1926). Throughout the 19th century in Yemen there were continual disturbances, including invasions by Mohammed Ali of Egypt and the capture of Sanaa by the Ottoman Turks in 1872.

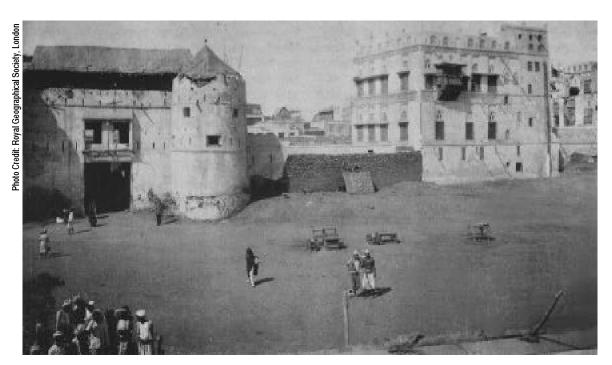
In the early 20th century, fighting against the Turks in Yemen continued. Egyptian, British and Turkish incursions hampered economic growth: "The result was that Yemen remained an economic backwater, largely self-sufficient in foodstuffs, and exporting only minimum quantities of a very narrow range of agricultural goods (especially coffee). The great variety of goods produced or processed in Yemen from the earlier centuries were all but gone..." (Wenner, 1987).

Up until 1962, North Yemen remained one of the most backward and poverty-stricken countries in the world,

due mainly to the extremely conservative policies of the Imams who ruled the country (Halliday, 1974). Strife and poverty kept the demand for rhino horn extremely low. Statistical files for several years are missing from the India Office Library, but in those that are available can be found no mention of any rhino horn imports coming into Aden; probably though. small quantities did reach the highlands through other. less significant ports, such as Hodeidah and Mukalla. The Government of India in 1907 prohibited the import of rhino horn and hide into Aden "except such as are imported under cover of an export pass-note issued in respect of them by an officer of customs at the place of export" (Government of India, 1907). This customs notification would obviously have discouraged official trade in rhino products.

EAST AFRICAN EXPORTS OF RHINO HORN FROM THE 19TH CENTURY

Nevertheless, large amounts of rhino horn were transported from eastern Africa from 1850 to 1950 to other places. According to statistics from the Zanzibar archives for the financial year 1863/4, Zanzibari merchants imported 6,350kg of rhino horn (calculated from the value of the horn) from the coastal towns of main



Hodeidah, as seen here in 1907, was a significant port in Yemen for goods, including rhino horn, coming from eastern Africa.

land eastern Africa (Playfair to Russell, 1865): Its import value was US\$ 0.63 per kg. In 1867/8 Bagamoyo, near Dares Salaam, supplied Zanzibar with 9,700 kg of rhino horn (calculated from the value of the horn) (Secretariat E60, 1868). In 1872/3 Zanzibar's imports of rhino horn further expanded to 12,700kg, valued at US\$ 10,000 (Secretariat E71, 1874). At the time of the partition of East Africa into German and British territories, large quantities of rhino horn were going out: about 7,000kg of rhino horns were exported from Tanganyika in 1893, 9,000kg in 1894 and 13,400kg in 1895 (Bradley Martin & Bradley Martin, 1982). Approximately 11,000kg of rhino horn were annually exported from East Africa between 1849 and 1895. Most was shipped to India, which served as an entrepot for Southeast Asia and China, and to Germany and Britain. In the early 20th century, roughly 30% of all the horn exported from Kenya went to Britain.

During the first 80 years of the 20th century, East Africa was by far the world's largest exporter of rhino horn. In the 1930s an average of 1,596kg was legally exported per year, 45% from Tanganyika, 43% from Kenya and 12% from Uganda. During the next decade, exports declined slightly to an average of 1,528kg per year, probably due to the disruption of transport during World War II. The average price per kg rose from US\$ 6.26 in the first six years of the 1930s to about US\$ 8.38 in the 1940s. Between 1950 and 1959. East Africa officially exported an average of 1,783kg yearly, 51% from Kenya, 47% from Tanganyika and 2% from Uganda, but only a recorded average of 59.5kg a year was exported to Aden or any other Yemeni port. During the 1960s legal exports from East Africa to Yemen gradually increased to a yearly average of 398kg, which was 29% of the total East African rhino horn exports. Prices increased at the end of the decade; the average export price for a kilo of rhino horn in 1969 was US\$ 22.94. From 1970 to 1976 there was a tremendous increase in official exports from East Africa, 97% of which was supplied by Kenya. On average, 3,406kg were exported each year. Of the total 23,841kg exported from 1970 to 1976 (representing the deaths of about 7,950 rhinos), 4,436kg, 28% of the total, went to Yemen. The largest amounts went to Hong Kong (36%) and China (30%).

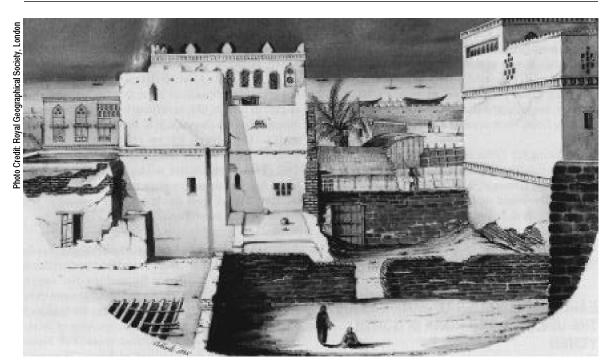
YEMEN'S RECENT IMPORTS OF RHINO HORN

Looking at North Yemen's official statistics for rhino horn, which only started in 1969/70, at the end of the

civil war, imports of rhino horn increased from 233 kg in 1969/70 to 8,310kg in 1975/6. These statistics, published in the Annual Reports of the Central Bank of Yemen, show that the total value of official imports of rhino horn reached their peak in 1977/8, but the weight of the horn is not recorded. The next financial year, the Central Bank stopped all mention of rhino horn imports. It has been difficult to obtain further government statistics from the Central Bank and other government departments, because from 1979 to 1982 (the year imports were made illegal), rhino horn imports were merged with other raw materials, such as buffalo horns, and the computers were unable to disaggregate the data. There is one other set of statistics, also from the Central Bank, which illustrates where rhino horn imports may have originated. These import figures are for three years only, 1973 to 1975, and are for calendar years. For 1973 and 1974, according to these statistics, 65% of the horns came from "Democratic Yemen" (presumably from Aden), 15% from Ethiopia and 9% from Djibouti; in 1975, almost all the horn was imported from Kenya.

Caution should be taken when interpreting these Yemeni import figures. They only represent official statistics and they may also include other types of horn. Varisco wrote, "These figures reflect all horn materials, but that the vast majority refers to rhino" (Varisco, 1987). Nevertheless, the steady increase of horn imports from 1969 to 1979, as shown by the Yemeni statistics, conform with the major expansion in the amount of horn exported from East Africa to South Yemen, according to East African customs figures. Also, the family members making the largest number of daggers with rhino horn handles (about 80%) stated that they had greatly increased their purchases of rhino horn from the 1950s to the 1970s: during the 1950s they bought between 250 and 300kg a year, mostly from Aden; in 1960 and 1961 (just before the outbreak of the civil war), they bought about 400kg a year. The next decade, the boom years for their business in rhino horn handles, the family purchased 3,000kg a year (Vigne & Bradley Martin, 1993; Bradley Martin, 1978a).

It is therefore possible, with these various sets of statistics and data from the main jambiya family in Sanaa, to estimate how much horn was imported into North Yemen, legally and illegally, from the 1950s to the 1970s. The amount of horn consumed by both South and North Yemen during the 1950s was small, due to



Mocha was the main port in Yemen in the early 19th century trading in rhino horn. This sketch shows the Old French Factory in *Mocha in 1835*.

the low demand. From 1962 to 1970, the civil war in North Yemen disrupted communications and adversely affected the economy, which resulted again in small quantities of imports. After the end of the civil war, and with the sharp increase in the price of oil in the early 1970s, about a million men from North Yemen emigrated to Saudi Arabia and the Gulf countries as labourers. They sent back about US\$ 1,000,000,000 a year; the standard of living improved tremendously, and for the first time a large number of North Yemenis could afford to buy daggers with rhino horn handles. The merchants responded by importing enormous quantities of rhino horn, especially from Kenya, to meet the demand. From 1969/70 to 1976/7 North Yemeni official import statistics show that 2,878kg of horn were imported each year on average. Additional supplies were smuggled in to avoid the bureaucracy of the North Yemeni administration. For example, to import rhino horn legally, an import licence from the foreign exchange control board was required. According to the Central Bank report of 1971/2, "after obtaining the licence, the holder has to apply to his commercial bank within a month... for a letter of credit. He also has to deposit in local currency a minimum of 20% of the value of imports... Importation must be completed within three months" (Yemen Arab Republic, 1973). In addition, in 1972 the importer also had to pay a 15% customs duty on the horns, plus a 5% defense tax, 2% statistics tax and a 50 rial "calculation fee". No wonder there was smuggling into North Yemen!

The East African customs records show that from 1970 to 1976 634kg were exported annually to the Yemens, while North Yemen's official statistics show 2,878kg being imported annually. Some rhino horns imported into North Yemen came from sources other than East Africa, such as Somalia, Ethiopia and Sudan. Even so, they would have constituted a small proportion of the total. The simple answer to the disparity is smuggling out of East Africa. During the 1970s there was a breakdown in law and order in East Africa, and an increase in corruption that facilitated illegal killing of rhinos and the illicit export of horns. Ian Parker, a former Game Warden in Kenya and an authority on the wildlife trade of Africa. was told by traders that the actual exports of rhino horn from East Africa were always more than the official ones, due to businessmen trying to avoid taxes and exchange control laws (Parker & Bradley Martin, 1979). Some of the Kenyan horn was smuggled out to Somalia; between 1951 and 1963 the Republic of Somalia statistics state that 1,687kg were exported, but due to the scarcity of rhinos in Somalia, almost all that

horn must have come from Kenya (Funaioli & Simonetta, 1966). During the 1950s Tanzania officially exported 8,385kg of horn, or 47% of East Africa's total. From 1970 to 1976, despite the poaching of over a thousand black rhinos, Tanzanian official exports declined to just 720kg. Where possible, the middlemen evaded legal export channels. It was practically the same in Uganda. During the 1970s poachers eliminated the entire black and white rhino populations, perhaps a total of 500 animals, but official statistics only record an export of 43kg, or horns from approximately 14 rhinos.

Thus, during the 1970s at least 3,000kg of rhino horn were annually imported into North Yemen, representing almost 40% of the total amount of rhino horn on the world market (Bradley Martin, 1980). Practically all this horn was used for making dagger handles. More horn was consumed in North Yemen in the 1970s than in any other period in the country's history, and far more than for any other nation.

EARLY REFERENCES TO JAMBIYAS AND THE USE OF RHINO HORN IN NORTH YEMEN

In Sanaa's museum there is a fifth or sixth century B.C. bronze statue of a man who has a jambiya tucked into his belt. The sculpture was found in Mareb, in the eastern part of the country (Boissiere, 1988; Abdullah,

1983). The archeologist, Wendell Phillips (1955), saw the statue at Mareb, just after its excavation by his expedition, and he wrote about it in his book, "I was particularly struck by a sheathed dagger or jambiya fastened in the man's belt. It was similar to those used today, twenty-five centuries after the time of the statue". Professor Alfred Beeston of Oxford University has found an allusion in a pre-Arabic language to a dagger in Yemen, also testifying to the antiquity of the Yemeni jambiya (Serjeant & al-Akwa, 1983; Boissiere, 1988). The earliest known reference in Arabic to making dagger blades and sheaths in Sanaa is in the 11th-century manuscript written by al-Razi; he also noted that certain trades were associated with certain mosques; the dagger-blade polishers' mosque was called the Masjid al-Sayaqil (Dostal, 1983).

Although Yemeni men have been wearing daggers for more than 2,000 years, there is no known reference to rhino horn as a substance for making the dagger handles until the 1950s. This is very strange since rhino horn has been imported into the country for hundreds of years. According to *The Encyclopaedia of Islam*. the Arabs knew about the African rhino well before Islam and the Muslim conquest of Persia. They were also aware that Ethiopian princes made knife handles from rhino horn (Vire, 1978). The anthropologist Daniel Varisco (1987) believes that there is a possibility that Ethiopians brought rhino horn handles with them when they invaded Yemen in the fourth century A.D.

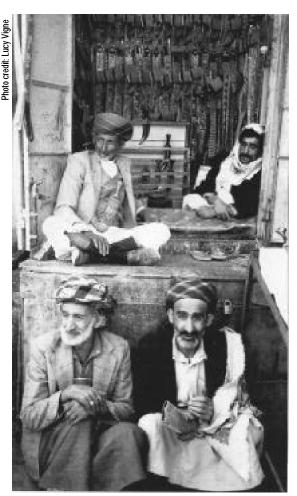


The souk, inside Sanaa's old city, can be reached through the medieval gate-way called Bab al-Yaman.

Muhammad al-Damiri completed a zoological lexicon in Arabic in 1372 entitled Hayat al-Ha yawan al-Kubra which was well known in Yemen, and contained information on rhino horn (Varisco, 1987). Al-Damiri said that rhino horn was used in India to cure colic and to help women give birth; also he noted that the most prestigious trinkets of the Chinese were made from rhino horn. A belt of rhino horn was worth 18,720 grammes of gold (Varisco, 1987). Daniel Varisco (1989) believes, even though he does not have written references, that "the manufacture of rhino horn daggers has been pursued in Yemen for at least 750 years and may antedate the arrival of Islam in the seventh century". The director of the Centre Français d' Etudes Yemenites in Sanaa, Dr Franck Mermier, has read most Arabic and European chronicles and books on daggers but has found no reference on making the handles from rhino horn until the mid-20th century (Mermier pers. comm., 1994; Mermier, 1988). The former director of the American Institute of Yemeni Studies, also in Sanaa, David Warburton, believes that some rhino horn may have been used to make dagger handles in Yemen hundreds of years ago since there was a long-term trade connection between Yemen with Ethiopia and Somalia (Warburton pers. comm., 1993).

The German explorer, Carsten Niebuhr (1723 and 1792), who visited Yemen in the 1760s, mentioned that Arabs there wore 'jambea' that were made in the Hadramaut, but he doesn't say from what substance the handles were carved. Walter Harris (1893) travelled to the Sanaa souk in 1892 and wrote:

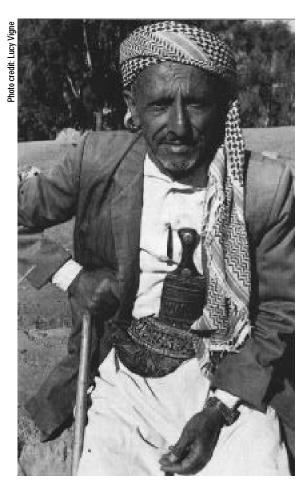
"...the greatest skill of the jewellers of Sanaa, who are rightly renowned for their workmanship, is exhibited in the dagger-sheaths, many of which are of rich silvergilt, and even at times of gold. Perhaps the most lovely, however, are of plain polished silver inlaid with gold coins, principally of the Christian Byzantine emperors; others again, of delicate filigree, which the natives line with coloured leather or silk. But more than even the sheaths of these jambiyas, as they call their daggers, the natives value the blades. Antique ones are generally considered the best and the people declare that the old art of hardening the steel has been lost. Be this as it may, there is no doubt that the modern blades are of no mean workmanship, and great prices, for the Yemen, are paid for good specimens. The two parts of the dagger are nearly always sold separately and a Yemeni, having found a blade to suit him, has a sheath made according to his taste and wealth".



Belts with sheaths attached to them are usually sold separately from the jambiyas, as seen here in Sanaa.

Ameen Rihani (1930) in *Arabian Peak and Desert Travels in Al-Yemen*, gave a first-hand account of how the traditional dagger was made. He also says that the age of the dagger is very important. Hugh Scott (1942), who visited Aden in 1937, recognized that people in various parts of Yemen possessed different styles of daggers, although in the town of Aden the British prohibited people from wearing daggers.

Claudie Fayein (1957), who served as a physician for the Imam in Taiz in 1951 and 1952, gave the first written reference to rhino horn as a substance for making Yemeni jambiya handles. She noted the translucent quality of the horn when it is carved. What is also interesting in her description is the fact that one could immediately tell the status of a person by the kind of dagger he wore:



A Yemeni man proudly wears his old jambiya with a rhino horn handle in the small town of Manakha, near Sanaa.

"All that one needs is a glance at the waist... to know whether or not he is of the Prophet's family, whether or not he is rich, and where he was born. A Seyed (a descendent of Mahomet) wears his dagger to the right. Those of the wealthy are sheathed in silver... The mountaineer's dagger differs from those of the Tihama and the central desert areas by its wooden sheath wound with fine strips of green-dyed sheepskin and by its hilt of zebu horn decorated with brass reproductions of ancient Byzantine coins.

In many Asian countries, rhino horn is consumed for medicinal purposes, but it is rarely used as a medicine in Yemen, although there are accounts of it being used to detect and neutralize poisons, including snake-bites (Varisco, 1987 and 1989; Myntti pers. comm, 1978). In 1983 one dagger-handle maker in

Taiz said that he sometimes burned rhino horn shavings and inhaled the smoke to cure his headaches, but this is very unusual (Bradley Martin, 1983).

CONCLUSION

This detailed account shows that rhino horn has been a trading commodity going in and out of Yemen for at least two thousand years. Academics believe that there has been an internal trade in rhino horn for the making of dagger handles for equally as long in Yemen. Because of this ancient use of rhino horns for the traditional jambiya, it is a very valuable part of Yemeni culture. No other symbol of traditional Yemeni culture is so revered and valued as an antique jambiya with a rhino horn handle. These are equivalent to works of art in the western world. Called "sayfani" old rhino horn has a unique patina, almost translucent at the tips when held up to the light, and with a subtle grain running through it. With age the patina improves. The most expensive item of Yemeni dress one can buy is such a jambiya, reflecting its great significance and popularity. The Sheikh of the Bakil tribe, Yemen's largest and most powerful tribe, paid the most ever for a jambiya in 1992: a million dollars. It had been owned by Imam Ahmed (who had ruled North Yemen from 1948 to 1962). This jambiya had a well known, long and prestigious pedigree. Past ownership of a good jambiya is a favourite topic of conversation among Yemeni men; Yemenis are extremely aware and proud of their long history, able to trace their ancestry, and that of certain jambiyas, very far back in time.

To prohibit the sale of old jambiyas within Yemen would thus be a mistake as it would rid Yemenis of part of their heritage. Such a regulation would also have disastrous consequences concerning the rhino horn trade. Rather than reducing demand, it would increase the need for new rhino horn. As long as old rhino horn jambiyas are permitted to be traded, the law allows Yemenis to buy an alternative to new rhino horn jambiyas. Therefore, the sale of these old jambiyas must be allowed to continue in Yemen.

Yemenis understand increasingly the need to ban the sale of new rhino horn for jambiya handles. The government prohibited imports in 1982, and in 1987 banned the re-export of rhino horn and left-over shavings. Then in 1992 the domestic trade in new rhino horn was made illegal. With severe political and eco

nomic difficulties in the country over the last few years, the government has been unable to put much attention into enforcing these bans, however.

At last, this may be changing. Yemen's interest in conservation and joining international conventions is growing. On 5 January 1997, following a visit from a WWF/TRAFFIC delegation, the President signed his agreement for his country to ratify CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora). On 23 April 1997, during a follow-up WWF mission to Yemen, the Foreign Minister, Dr Abdul Karim al-Iryani, signed the final document needed for Yemen to accede to the Convention. Although it was the hectic week of elections (Yemen's first elections since the 1994 civil war) and despite Dr al-Iryani's position as the Secretary General of the main political Party, he did not hesitate in getting the document written and signed. The Acting Minister of Industry then volunteered to see the process through to completion. He himself brought the document from the Foreign Ministry to hand over, as required, to the Swiss Consul in Sanaa. It was a great moment, after about five years of prodding by WWF, to witness the Yemen government complete its final stage for joining CITES. Therefore, it is appropriate that the international community should now respond in supporting Yemen's efforts to enforce its trade bans on new rhino horn. The long history of Yemen's trade in rhino horn from Africa could finally be drawing to a close.

REFERENCES

- Abdullah, Y. (1983) "The Past Lives on: Man, Landscape and History in Yemen", in R.B. Serjeant and Ronald Lewcock, editors, *Sana an Arabic Islamic City*, World of Islam Festival Trust, London, 478.
- Boissiere, T. (1988) "Les Poignards Courbes du Yemen du Nord: Usages et Significations Culturelles", unpublished thesis for the Universite de Provence, Aixen-Provence, 9.
- Bradley Martin, E. (1978a) Conversation with the main jambiya family and other traders.
- Bradley Martin, E. (1978b) Interview in Yemen with Yemeni medical doctors and academics.
- Bradley Martin, E. (1980) The International Trade in Rhinoceros Products, IUCN/WWF, Gland, Switzerland, 60.

- Bradley Martin, E. & Bradley Martin, C. (1982) *Run Rhino Run*, Chatto & Windus, London, 91.
- Bradley Martin, E. (1983) Interview in the souk in Taiz.
- Casson, L. (1989) Editor and translator, The Periplus Maris Erythraei: Text with Introduction, Translation and Commentary, Princeton University Press, Princeton 6-8, 15, 19, 53, 55 and 61.
- Datoo, B. A. (1970) "Rhapta: the Location and Importance of East Africa's first port", *Azania*, Vol. V, 69.
- Dostal, W. (1983) "Analysis of the Sana Market
- Today", in Serjeant and Lewcock, editors. Sana an Arabic Islamic City, World of Islam Festival Trust, London, 244.
- Downing Street (1926) Letter to Aden Resident, 9 April 1926 with reply. Aden Trade in Yemen and Aden Protectorate. India Office Library and Records, R/20/A/2919.
- Fayein, C. (1957) A French Doctor in the Yemen, Robert Hale, London, 33.
- Funaioli, U. & Simonetta, A. M. (1966) "The Mammalian Fauna of the Somali Republic: Status and Conservation Problems", *Monitore Zoologico Italiano*, Vol. LXXIV, 325—326.
- Government of India (1907) Department of Commerce and Industry, Notification, Customs, No. 4902—62 (Simla).
- Halliday, F. (1974) Arabia Without Sultans, Penguin Books, Middlesex, 81—100.
- Harris, W.B. (1893) A Journey through the Yemen and some General Remarks upon that Country, William Blackwood & Sons, Edinburgh and London, 310—311.
- Hirth, F. & Rockhill, W. W. (1966) Editors, Chau Ju-Kua: His work on the Chinese Arab Trade in the twelfth and thirteenth centuries entitled, Chu-fan-chi, Oriental Press, Amsterdam, 15—16.
- Huntingford, G.W.B. (1980) Editor and translator, *The Periplus of the Erythraean Sea*, Hakluyt Society, London, 5 and 124.
- Mathew, G. (1963) "The East African Coast until the Coming of the Portuguese", in Roland Oliver and Gervase Mathew, editors, *History of East Africa*, Vol.l. Oxford at the Clarendon Press, Oxford, 95.
- McCrindle, J.W. (1879) Editor, *The Commerce and Navigation of the Erythraean Sea*, Trubner and Co., London, 73.

- Mermier, F. (1988) "Les souks de Sanaa et la Societe citadine", Doctorate Thesis for the Ecole des Hautes Etudes en Sciences Sociales, France.
- Mermier, F. (1994) Pers. comm. with E. Bradley Martin and L. Vigne.
- Milburn, W. (1825) *Oriental Commerce; or the East India Trader's Complete Guide*, Kingsbury, Parbury and Allen, London, 43,52 and 75.
- Myntti, C. (1978) Pers. comm. with E. Bradley Martin.
- Niebuhr, M. (1723) *Description de L'Arabie*, Copenhagen, 54 and 56.
- Niebuhr, M. (1792) *Travels through Arabia and other countries in the East*, Edinburgh, Vol. 2,93,107 and 239.
- Pankhurst, R. (1968) *Economic History of Ethiopia*, Haile Selassie I University Press, Addis Ababa, 371, 427 and 438—443.
- Parker, I.S.C. & Bradley Martin, E. (1979) "Trade in African Rhino Horn", *Oryx*, Vol. XV, No. 2, 157.
- Phillips, W. (1955) Qataban and Sheba: Exploring Ancient Kingdoms on the Biblical Spice Routes of Arabia, Victor Gollancz, London, 262.
- Playfair, R.L. (1855) Assistant Political Resident in charge of Customs to Brig. H. Coghlan, Acting Political Resident and Commandant of Aden, India Office Library and Records, British Library, R/20/A/127, 676—677.
- Playfair, R.L. (1865) Letter for Earl Russell, 1 January, 1865. "Imports into Zanzibar during 1863-4 (August 1, 1863 to July 31, 1864)", Secretariat E46, Zanzibar Archives.
- Rihani, A. (1930) *Arabian Peak and Desert Travels in Al-Yemen*, Constable & Company, London, 170—171.
- Schoff, W.H. (1912) Editor and translator, *The Periplus of the Erythraean Sea: Travel and Trade in the Indian Ocean* by a Merchant of the First Century, Longmans, Green and Company, New York, 73 and 28.
- Scott, H. (1942) *In the High Yemen,* John Murray, London, 23, 80 and 86.

- Secretariat E60 (1868) "Produce of the Zanzibar Dominions on the Coast and Adjacent Islands Imported in Zanzibar in 1867/8", Zanzibar Archives,
- Secretariat E7 1 (1874) "Produce of the Zanzibar Dominions on the Coast and Adjacent Islands Imported into Zanzibar 1872/3" from "Administration Report of the Political Agent and Consul General at Zanzibar for the Year 1873 and 1874", Zanzibar Archives.
- Serjeant, R.B. & al-Akwa, I. (1983) "The Statue of Sana/ Additional Documents", in Serjeant and
- Lewcock, editors, Sana an Arabic Islamic City, World of Islam Festival Trust, London, 239.
- Varisco, D.M. (1987) "Horn and Hilts. Wildlife Conservation for North Yemen", an unpublished report prepared for Asia/Near East Bureau, Agency for International Development, Washington, D.C., under a co-operative agreement with World Wildlife Fund-US Project 6298, ii, iii, 11, 13, 63 and 64.
- Varisco, D.M. (1989) Beyond rhino horn wildlife conservation for North Yemen", Oryx, Vol. 23, No. 4, 215—216.
- Vigne, L. & Bradley Martin, E. (1993) "Yemen strives to end rhino horn trade", *Swara*, Vol. 16, No. 6, 21.
- Vincent, W. (1807) *The Commerce and Navigation of the Ancients in the Indian Ocean*, Vol. II, T. Cadell and W. Davies, London, 172.
- Vire, F. (1978) Editor, *The Encyclopaedia of Islam*, second edition, Brill (Leiden) Vol. 4, 647.
- Warburton, D. (1993) Pers. comm. with E. Bradley Martin and L. Vigne.
- World Bank (1979) Yemen Arab Republic. Development of a Traditional Economy, The World Bank, Washington, D.C; 6.
- Wenner, M.W. (1987) "An Economic History of
 - Yemen: 1500—1948", in Werner Daum, editor, *Yemen 3,000 Years of Art and Civilization*, Pinguin-Verlag, Innsbruck, 327.
- Yemen Arab Republic (1973) Central Bank of Yemen, Annual Report 1971/1972 (Sanaa) 90.