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Swords in the Deccan in the Sixteenth and Seventeenth Centuries: Their Manufacture and the Influence of European Imports

The history of arms and armor in the Deccan has yet to be written, and even the centers of arms production remain largely unknown and unpublished. A certain amount of metalwork has been attributed to the region, but it is mostly unsupported by inscription, signature, or firm provenance. Much has been attributed on the basis that it is neither Mughal nor Vijayanagaran in style and has a similarity to the aesthetics expressed in Deccani architecture. The correlation between architectural decoration and metalwork has been demonstrated by George Michell and Mark Zebrowski with the publication of a spectacular vambrace, but such a clear connection is rare (fig. 1).[1] Because of this limitation one turns to miniature paintings for assistance in identifying pure Deccani arms features, but Deccani painting lacks the military realism of the Mughals, celebrating instead a gentle, otherworldly vision. Apart from the *Ta'rif-i Husain Shahi* showing the Battle of Talikota in 1565, which is useless in terms of military detail, Deccani patrons largely ignored war as a subject. Nevertheless, one of the earliest surviving Deccani pictures, from 1554, a portrait of Sultan Husain Nizam Shah of Ahmadnagar, shows us a royal sword being carried by a bearer (fig. 2). This essay will attempt to point to the definitive evidence we do have for the manufacture of arms in the Deccan and the competition provided by European imports.

Arms Production in the Deccan and North India

It is clear from the historical sources that a certain amount of arms-making usually took place where iron and steel was produced and that the raw materials were transported long distances to urban or court centers as well as to neighboring countries. In the Qutb Shahi realms it appears that both the iron and the steel necessary for making arms were available locally and that, as well as exporting these raw materials, the kingdom also produced many swords. The sixteenth-century *'Ain-i Akbari* lists Indore as famous for the manufacture of weapons and states that it, as well as Nirmal, had iron mines.[2] Golconda/Hyderabad, Burhanpur, and Aurangabad acquired some reputation for arms-making.[3] Thévenot wrote in the mid-seventeenth century that "a great many Swords, Daggers and Lances are made there, which are vended all over the Indies, and that the Iron is taken out of a Mine near the Town, in the mountains of Calagatch" (Kalaghat).[4] According to Bilgrami and Willmott, writing in the late nineteenth century, the best steel was produced at Konasamudram near Nirmal.[5] Apart from historical references, it is clear from the impressive recent fieldwork of Jaikishan that large amounts of iron and steel were being produced in villages in the districts of Adilabad, Karimnagar, Warangal, and Nizamabad

Fig. 1. Vambrace (*bazuband*). Deccan, first half of 17th century. Steel, gold *koftgari*, 19 × 9 × 3½ in. (48.3 × 22.9 × 8.9 cm). The allover design of the gold decoration is reminiscent of a sixteenth-century Ottoman Ushak carpet, with a central medallion and pendentives with arabesques. Indictor collection

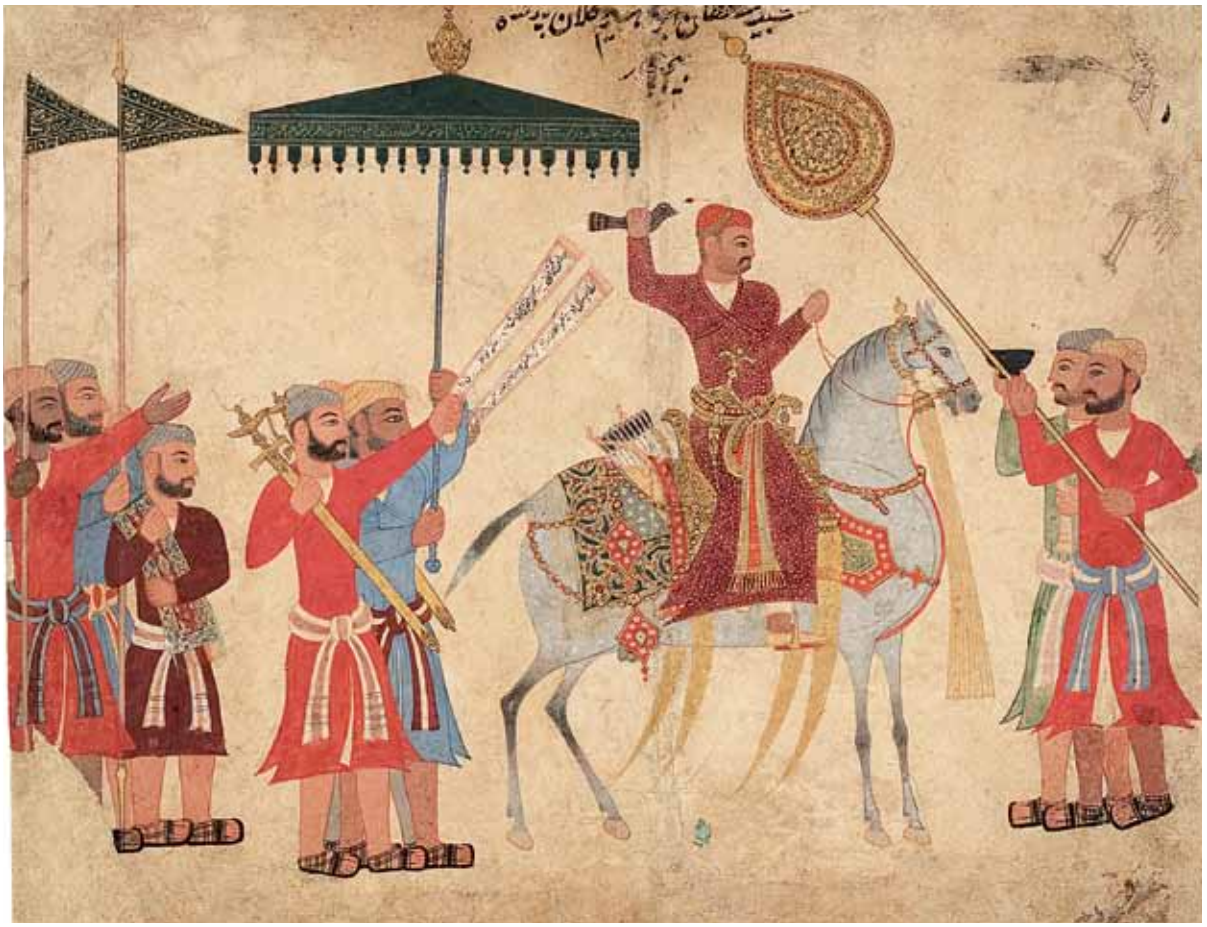

Fig. 2. *Sultan Husain Nizam Shah I of Ahmadnagar on Horseback*. Ahmadnagar, 1554. Opaque watercolor, gold, and silver on paper, 7⅝ × 9⅞ in. (19.5 × 25.1 cm). This early Deccani painting shows bearers carrying the sultan's matched pair of swords. Cincinnati Art Museum, John J. Emery Fund (1983.311)

(formerly Indore) in Telangana. Jaikishan reports three ruined cannon foundries in Nirmal, the only ones known to him in the Hyderabad region other than in Hyderabad itself.[6] These foundries are much the same distance as Hyderabad is from northern Telangana and are likely to have received their iron and steel from there. Bijapur by contrast would have benefitted from the significant iron and steel production in Karnataka. Much of the metal, which included wootz, was exported, but some weapons were produced locally, though the quantity and quality is not certain.

In addition, such arms-producing centers as Gujarat, Khandesh, Malwa, Gwalior, Lashkar (now a suburb of Gwalior) as well as Sirohi in Rajasthan in the north, Nagpur to the east, and Mysore to the south are likely to have made arms for the Deccan. Mysore has plenty of iron and steel, though Sirohi's source is unknown and is assumed to be south India via Surat or the upper valleys of the Tapti and Narmada. We do not

Fig. 3. *Sultan ʿAbdullah Qutb Shah of Golconda*. Golconda, mid-17th century. Watercolor and gold on paper, 7½ × 4 in. (19 × 10 cm). Victoria and Albert Museum, London (IS 18-1980)

Fig. 4. *Malik Ambar*, ascribed to Hashim. India, ca. 1610–20. Watercolor on paper. As in figure 3, the sword held by the ruler has an Indian basket hilt, but the long thin blade would have been European in origin. Victoria and Albert Museum, London (IM 21-1925)

know when arms making began at Sirohi. The local ruler Rao Sobha founded the old town of Sirohi in 1405, but the site proved unsatisfactory. In 1425 his son abandoned it and founded the new town. The *Maʿathir al-ʿUmara* describes a battle at Ajmer in 1615 in which the "sirohi shamshir" established its reputation by inflicting fearful wounds.[7]

Arms Imports from Iran and Europe

Arms were also imported from other parts of the world. In the Deccan and Rajasthan, imported blades were called *jahaji*, from the Persian *jahazi*, meaning "ship."[8] This suggests that blades were imported from Iran, though not all the blades carried were necessarily Persian-made. In some cases these arms were in fact made of exported Golconda steel. Tavernier wrote in 1679 that Golconda steel was taken to Persia to make watered-steel *shamshir*s.[9] William Methwold, who traveled in Telangana and Golconda in the early seventeenth century, referred to the "great store of iron and steel, transported

Fig. 5. *Firangi* sword blade. Ca. 1600. Overall length: 35⅞ in. (91 cm); blade: 31⅞ in. (79.8 cm). The Solingen blade has the "running wolf" mark. The blade has been remounted with a silver and silver gilt hilt and scabbard fittings from North Africa. The Wallace Collection, London (O.A. 1796)

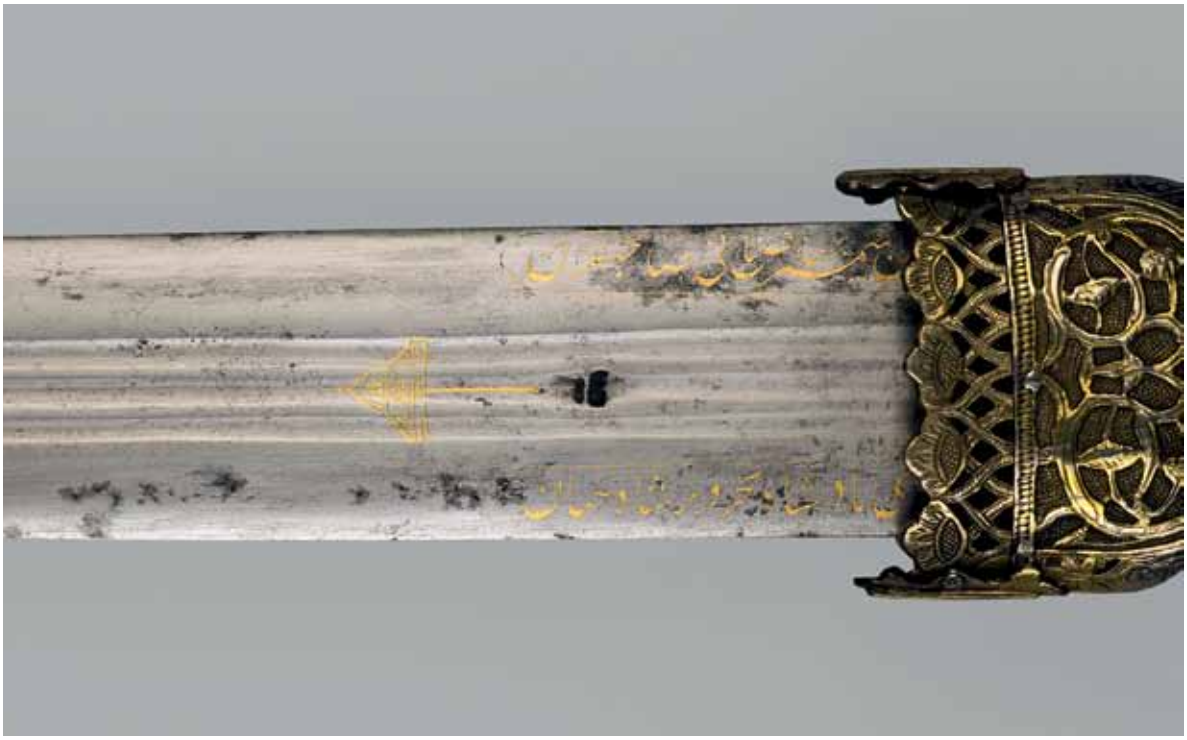

Fig. 6. The Persian inscription (detail of fig. 5) identifies the sword as having once belonged to Shah Jahan: *maliki-i in shamshir-i khas sani-i-sahib qiran badshah-i ghazi, badshah-i bahr-o-bar, shah jahan* (The owner of this special sword is the second lord of the conjunction, the victorious king of the seas and the lands, Shah Jahan).

into many places of India, bought in the place it is made for two shillings the hundred [weight] of iron, and three shillings steele, but being brought upon the backs of oxon fifteene dayes journey before it commeth to the port, it becomes much dearer, yet is sold for five shillings and eight shillings. . . ."[10] These prices and the long journey to Isfahan explain the high prices of the best Persian *shamshir* blades. In addition, the Deccan received large quantities of European arms from the Portuguese, Dutch, and English merchants on the Konkan coast. The arrival there in 1498 of the Portuguese, seeking trade, inevitably brought European military materials to the region. One of the commodities they traded was sword blades, but these were not the first European sword blades to arrive in India. In the mid-ninth century the Persian author Ibn Khurradadhbeh wrote of Jewish merchants bringing European swords to the Middle East,[11] and the international trade in arms is mentioned fairly frequently by contemporary writers and travelers. According to Simon Digby, the evidence given by Fakr-i Mudabbir in Delhi in the early thirteenth century suggests "a trade in arms extending through the medieval Islamic world from Europe to China,"[12] with European blades usually being considered sharper and better than Indian ones. The reputation of European blades was therefore already established when the European companies came to market their products in India.

In 1510 Goa came under Portuguese rule. Diu followed in 1539, and Daman in 1560. Surat and Goa commercially dominated the Deccan in the sixteenth and seventeenth centuries, linked by trade routes to the courts situated in the principal commercial towns. Through these ports, European goods reached the Deccan. The apothecary Tomé Pires described goods from Venice, including swords, arriving in India in 1514.[13]

The early seventeenth-century letter books of the East India Company show the carefully recorded commercial trials of various trade goods—and no reluctance on the part of the newly arrived English merchants to sell firearms and rapiers. For instance, Sir Thomas Roe, writing in 1608, found that the Indian armies were already well supplied with sword blades and that, in comparison, those supplied by the East India Company were of poor quality and unsalable. When asked by one of the Indian generals for English cloth and swords with which to supply his soldiers, he dryly remarked: "In my opinion that had been a good employment of some idle men, and a way to vent our dead commodities." In "Advice for goods for Surat" sent to the Company from Ahmadabad, Roe wrote: "No wine, hot waters [spirits], swords, glasses, nor anie such trash."[14] The letters sent back to London at this time all carry the same advice. "Swords, looking-glasses, armour, bonelace, pictures and strong waters 'lye dead, breed much trouble and yeeld noe profitt."[15] It was noted by Nicholas Downton in 1614 that "streight swords" could not be sold at Surat.[16] He further wrote that "Maccrab [Muqarrab] Khan desires various things to be procured in England and despatched on the next ship to Surat for the Great Magor [Mughal]. a. Two complete suits of armour, strong yet light and easy to wear. b. Curved swords, broad. Difficult to obtain, for they test them on their knees, and if they withstand this, then they don't want them. c. Knives of the best quality, large, long, and so thin that they can be bent round into a circle and then spring back when released."[17] The factors asked the East India Company to send one or two thousand crooked sword blades "of this country fashion" for sale and presents.[18] From Thomas Kerridge at Surat in 1619 we learn that the swords sent "are neather the right make nor very good," and are besides "so exceedinge heavy as few men can use them." The knives were too large.[19] A year later Kerridge again wrote to the Company that swords or knives are fit only for presents, explaining why the Indians were not buying: "The Marriners bring better cheape knives and swordes than the Company."[20]

Fig. 7. Sword with *talwar* hilt covered with silver sheet and then gilded. 16th–17th century. The *firangi* blade shows the "sickle" or "bite" mark. Hilts of this form are illustrated in the *Hamza Nama*, a Mughal manuscript produced between 1562 and 1577. Collection of Brian Isaac

The Dutch, who established a factory at Surat in 1620, seem to have better understood the requirements of the market. In April 1625 Van den Broecke wrote to the directors of the Dutch East India Company (Verenigde Oostindische Compagnie or V.O.C.) at Amsterdam: "Surat ought to be provided with the following goods: 100–200 bright chrome swords . . . and 10 to 20 dozen fine knives."[21] These "bright chrome" swords would have closely resembled the popular form of *khanda* called a *sakhela*,[22] a term relating to a specific Indian steel with a low carbon content that renders the blade flexible and gives it a mirror-like finish,[23] the locally produced alternative to an imported blade.

The identification of imported European blades in India is complicated by the fact that England in the sixteenth and early seventeenth century made mostly low-quality sword blades, while importing a great many blades, predominantly from the German town of Solingen. The only names recognized as a warranty of quality were foreign: Spanish, Italian, or German, such as by Clemens Horn, Andrea Ferara, Picinino, Juan Martinez, etc. English swordsmiths followed the custom of their Solingen contemporaries and struck whatever mark on the blade seemed likely to impress a potential buyer. It was not until 1629, when Solingen bladesmiths were brought from Germany to establish the Hounslow sword factory, that blade production in England improved. Furthermore, the Solingen smiths who worked in Hounslow put their own name on blades, while English swordsmiths continued to put European names on their work, causing Benjamin Stone, the owner of the Hounslow works, to write to the Office of Ordnance in about 1638 requesting the power to stop the practice.[24] Swords found in India mounted with blades bearing the obviously false names of Spanish or Italian makers may therefore be attributed either to Solingen or to England. Most English blades were of extremely poor quality, hence the merchants' adverse

comments about their saleability. German and English bladesmiths worked together at Hounslow, and the quality improved during the 1630s, as did the quantity being produced. There was little point, however, in shipping Hounslow blades to Europe, where they had to compete with the more excellent products of Solingen, Passau, and Toledo. Therefore, they were shipped to India. The Thirty Years' War (1618–48) in Europe created a huge demand for arms in Germany, and it is unlikely that Solingen and the other major producers exported much during this period. English bladesmiths were thus competing with the Spanish and Portuguese for the Indian market.

In March 1641 the East India Company ordered Benjamin Stone, "cutler,"[25] to provide fifty sword blades at ten shillings per piece.[26] In 1667 we find sword blades among the goods listed for India:[27] "forty dozen sword-blades to be shipped. . . ."[28] By this time exporting sword blades had become a popular form of private trade. In February 1669 an East India Company merchant, Thomas Pettit, was permitted by the Court of Committees to send sword blades,[29] and later that month two merchants, William Moses and Samuel Sambrooke Senior, were also authorized to send four cases of sword blades.[30] In mid-December Humphrey Edwin also received permission to send sword blades to Surat.[31] In 1670 the court decided to buy sword blades and "amber, silver, agate and ivory hilted knives" and "Sheffield knives of several sorts"[32] as trade goods for their various factories. More swords were shipped in 1671. In 1674 after representations from several ships' captains, the Court of Committees gave orders that "no permission be granted to ship out any wines or sword blades . . . on account of private trade except what is necessary for the Company's factors and servants. . . ." One sees here that the Court of Committee assumed that their people in India would not buy the Company's blades, which suggests that the swords traded privately were of superior quality, most probably German.

Fig. 8. *Khanda*. Vijayanagara, late 16th century. After the *khanda* was captured at Adoni in 1689, it was taken to Bikaner by Maharaja Anup Singh, whose Rajputs formed part of the Mughal army. Ganga Museum, Bikaner

The market in the Deccan for swords was still a valuable one at the end of the seventeenth century. When the East India Company decided to send an ambassador to Aurangzeb, we can be sure that the gifts selected were calculated to advance the Company's trading prospects. Among the gifts from King William III, presented by Ambassador Norris to Aurangzeb on April 28, 1701, were a large number of sword blades of various forms, all English-made. Norris believed that it might be of great future advantage to the Company to have had English manufactures brought

Fig. 9. Sword. Rajasthan(?), 17th century. This sword blade was made and decorated to suggest it is of sixteenth-century European manufacture though it was actually made in India, probably at the southern Rajasthan town of Sirohi. There are similar blades in the armoury. The *talwar* hilt is eighteenth century. Mehrangarh Fort Armoury, Jodhpur

to the emperor's notice.[33] The king's gifts comprised:

95 Plain Hanger Blades.	
14 Sword Blades Gilt	£10-10.
10 Large back and two edged	£4-10.
5 Hanger blades Collour'd	£1-10.
5 Straite backs edg'd	£1-7.

These were probably made by a group of Solingen bladesmiths who had fled their home town and settled at Shotley Bridge in County Durham in 1691. It is thought that they came for two reasons: to escape persecution as Lutherans;[34] and because they had broken the rules of their guild. Shotley Bridge offered the fast-flowing Derwent River to drive their mills, the necessary local minerals, and tolerance. Furthermore, the landscape closely resembled that of their homeland.[35] Ambassador Norris was from Liverpool and would have favored a northern firm. Shotley Bridge swords quickly became extremely successful. Later, the English army that fought Marlborough's wars in the early eighteenth century were equipped with swords and bayonets from there.

A further six blades and a piece of scarlet cloth had been given earlier as a douceur to the *mansabdar*, the official at the Mughal court who had conveyed a message about protocol from "Ruh-ullah Khan," the "Great Steward," to Ambassador Norris. In addition, twelve large brass cannon, "finely wrought & cast by the King of England's pticuler direction for a present for ye Empr," were presented.[36] Norris also presented his own presents to Aurangzeb[37] and received in return a *saropa*, or robe of honor.

There is no question that in the sixteenth century foreign blades, known as *firangi*s, became one of the preferred forms of blade at the Mughal and Deccani courts (figs. 3, 4). Imperial Mughal examples are, however, better documented than those from Deccani courts. Most of these were remounted during their working life, like the Solingen sword blade with the running wolf mark in the Wallace Collection, once owned by Shah Jahan (figs. 5, 6).[38] We also know that the last Qutb Shahi sultan, 'Abu'l Hasan (r. 1672–87), owned a *firangi* blade, now in the Salar Jung Museum, Hyderabad. There are many other examples of seventeenth-century foreign blades bearing regnal names.

Many sixteenth- and seventeenth-century European blades in India bear the serrated

Fig. 10. "Jupiter as Heavenly King." From the *Nujum al-'Ulum*. Bijapur, 1570. Watercolor on paper, folio 10⅛ × 6¼ in. (25.8 × 16 cm). Chester Beatty Library, Dublin (Ms. 2, fol. 37v)

sickle mark (fig. 7) created by Genoa in the late medieval period, later copied by Venice and by the German states. From the fourteenth century Genoa had trading bases on the Sea of Azov and the Black Sea, and it is likely that the first swords bearing this mark to reach Chechnya and Armenia in the fifteenth and sixteenth centuries were Genoese. Later the Germans supplied Chechnya with their own manufactured swords bearing the Genoese mark because the Chechens regarded what they called the "bite mark" as an indicator of quality blades until modern times. Much of this trade was managed by Armenian merchants, large numbers of whom were settled in New Julfa, a suburb of Isfahan established by Shah 'Abbas the Great. Armenian merchants also established themselves across India very early and are likely to have introduced these blades as trade goods.[39] The French jeweler and traveler in Persia and India, Sir John Chardin, noted in 1666: "As to the Persians they Trade with their own Countrymen, one Province with another, and most of them trade with the Indians. The Armenians manage alone the whole European trade . . . ."[40]

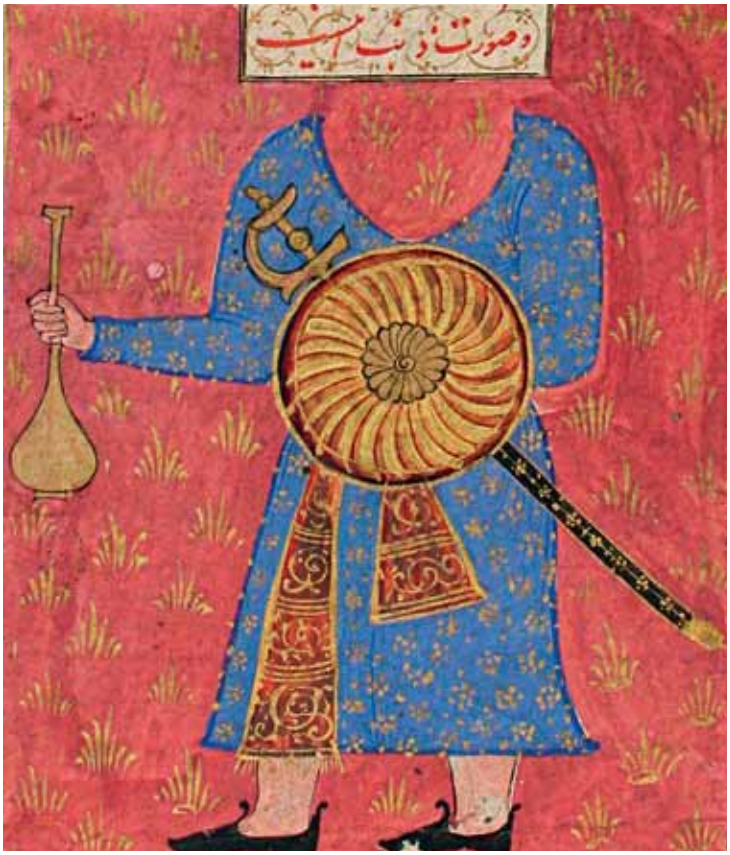

Fig. 11. "The Headless Body of Zamb." From the *Nujum al-'Ulum*. Bijapur, 1570. Watercolor on paper, folio 10⅛ × 6¼ in. (25.8 × 16 cm). Chester Beatty Library, Dublin (Ms. 2, fol. 53v)

straight-bladed sword with the *khanda* (basket hilt) with a spur on the pommel, which allowed the sword to be wielded with both hands.

It was also the fashion to carry a very long sword, known in the Deccan as a *dhup* and to the Mughals as *asa shamshir*, or "staff sword." It was an emblem of authority, conferred by the ruler on successful courtiers.[43] These long swords used imported double-edged European blades, though, for reasons of cost, Indian blades were also made copying European ones (fig. 9). More robust than the *kamr shamshir*, it could be relied upon in battle. These long-bladed swords with the adopted *khanda* appear in miniatures in the *Nujum al-'Ulum*, a Bijapuri manuscript of 1570 showing Hindu weapons (figs. 10, 11).

A very rare surviving example of this late sixteenth century Deccani sword has an unusually long, curved, fullered Indian blade made in *firangi* style, with false edge and ricasso, and a punched Bikaner armory mark at the forte (fig. 12). The Indians did not use the point in sword fighting. Therefore they tried to create a slightly curved version of the European blade for slashing cuts, as in this example. Finding this adaptation slightly awkward, they also developed a two-handed sword with two separate guards. It had a brief existence in the early seventeenth century, before the universal adoption of the *khanda* basket hilt with the spike on the pommel, which enabled the sword to be used two handed if required.[44] The blade is also unusual in that it splits into three at the tang to provide the ridged upper part of the basket guard.[45] This form of construction is a development of the first half of the sixteenth-century Indian sword blades that flare at the forte,[46] over which is a brace that extends up either side of the blade, but that lacked a basket hilt. Later *khanda*s with basket hilts have bracing on the blade that is integral with the hilt construction.

A completely indigenous sword with a broad crooked blade, the *sosun pattah* (fig. 13), can be seen in an illustration entitled

Sword Types of the Deccan

Contemporary sources describe the swords that were popular in the Deccan. Tavernier noted that in Golconda "they do not have a sabre like the Persians, but they carry a broadsword like the Swiss, with which they both cut and thrust."[41] An early form of this type of sword has a pride of three-dimensional lions on the top of the guard, a very royal symbolism (fig. 8). John Fryer, who was in the Deccan between 1672 and 1681, refers to "their Broad, two handed swords."[42] This is a description of the long

Fig. 12. Sword. Bijapur, 16th century. The sword has an unusually long curved Indian blade in *firangi* style. The form of the guard closely resembles the swords shown in the *Nujum al-'Ulum*. Thomas Del Mar Ltd., London

Fig. 13. Sword. Deccan, late 16th–early 17th century. Blade length: 25 in. (63.5 cm). This is a rare South Deccan sword of early *sosun pattah* form. Earlier examples have slightly broader blades and are found in small numbers in Rajput armouries. Private collection

"Kulhasurdmardini Conquers a Demon," from the *Nujum al-'Ulum*.[47] The Hindu goddess, whose name means "Crusher of the Demon," is shown defeating a figure who is clearly Muslim, Muslims having replaced demons in local Hindu literature and paintings. The essential point to note is that the demon figure holds the *sosun pattah* sword type. The belief that this is a Muslim form of blade is supported by the brief Islamic religious inscriptions on a number of these swords (e.g., fig. 13 has two illegible inscriptions).

A successor to this broad-bladed version of the *sosun pattah* is another distinctive type of sword that became popular, called the *tegha*, undoubtedly developed in the Deccan. The word comes from Sanskrit *tig*, from which also derives the Farsi *tegh*, and describes a variety of arms over many centuries. The Deccan type was described by Thévenot in 1666:

> Their swords are four fingers broad, very thick, and by consequence heavy; they are crooked a little, and cut only on the convex side. The guard is very plain; commonly no more but a handle of iron, with a cross bar of the same underneath the pummel which is also of iron, is neither round nor oval, but is flat

Fig. 14. *Tegha* and scabbard. Deccan, late 17th century. The sword was developed to cut through cloth armour, which was common in the region. Private collection

> above and below like a whirligig, that the sword may not slip out of their hands when they fight. The swords made by the Indians are very brittle; but the English furnish them with good ones brought from England.[48]

This type is illustrated by a Deccani example with gilt copper mounts (fig. 14, detail fig. 15). The "flower head" quillon terminals are found on Deccani *khanda*s, and the turned-over pommel spike suggests a late seventeenth-century date.

Within the Deccan it is hard to attribute pieces with certainty to any specific state. Arms were very rarely signed by their maker, and though a number of swords exist with their royal owners' names inlaid on the blade, the hilt is usually not original. A victorious army invariably carried home the weapons of the vanquished and put them in the ruler's armory, where they mingled with locally made arms, making attribution to a specific state exceedingly difficult. The arms captured at Adoni in 1689 and taken back to Bikaner, where they were inscribed, therefore assume a great importance, though this cache undoubtedly included arms from Vijayanagara and from the internecine warfare engaged in by Bijapur since Talikota.

Regarding the form of personal weapons, one must presume design influences from a variety of sources. One dominant influence on Bijapur culture came from the southern Indian state of Vijayanagara. After the

Sultanate confederacy defeated Rama Raya at Vijayanagara, it was Bijapur that benefited most, amassing considerable booty and securing lands beyond the Tungabhadra. There was a strong reluctance by Hindus to abandon the traditional weapons forms, their decoration providing protection against the evil spirits associated with violence that were believed to follow armies.[49] Therefore, traditional arms continued to be made in the former Vijayanagara lands, which then circulated to the rest of the Bijapur kingdom.

As the demand for European swords increased, it became profitable for Indian swordsmiths to manufacture copies. The many copies indicate the popularity of the original. François Bernier, who traveled in the Mughal empire between 1656 and 1668, noted: "Sometimes they [Indian craftsmen] imitate so perfectly articles of European manufacture that the difference between the original and copy can hardly be discerned."[50] At other times the difference was obvious.

James Forbes, an East India Company employee who was in India from 1765 to 1784, wrote that the Marathas "are not as fond of curved blades as the Turks or Persians, but prefer a straight two-edged sword, and will give a great price for those they call Alleman, or German, though formerly brought from Damascus."[51] Assuming Forbes's remark has any substance, these swords were either imported or made at Damascus, pointing to the activities of Indian or Armenian merchants. A letter written in about 1660 by Father Gabriel of Chinon (d. 1668), who had founded the second Capuchin hospice at Tabriz[52] in 1656, describes the Armenian merchants from Julfa and the European products brought from Smyrna and Aleppo, including "lames de saber," that passed through Tabriz on the journey into Persia.[53] Law court registers from the late seventeenth and early eighteenth century show Armenian and Christian involvement in the arms business in Damascus.[54]

Fig. 15. Decoration of copper gilt hilt (detail of fig. 14)

Additionally, because the Deccani courts in the sixteenth century combined Islamic and Hindu culture and because even the boundaries between the two religions blurred at a popular level, exemplified, for example, by Muslims venerating the Hindu god Hanuman and Hindus worshipping Muslim processional *'alams*, the degree to which weapons associated with one culture were adopted by the other is exceedingly difficult to assess. After the Battle of Talikota in 1565 the painters of the defeated Hindu Vijayanagara court joined the Muslim Bijapur court atelier and produced the previously mentioned encyclopedia, the

Nujum al-'Ulum, which shows arms in the hands of traditional Hindu figures. While these arms were undoubtedly still in use, some were archaic by this period. In a period of cultural exchange and amalgamation, the arms in use necessarily evolved. Thus, the cultural composition and focus of each regional court must be assessed in considering what form this change might take. All the courts were quick to adopt imported European blades, but, at the other end of the social scale, tribal mercenaries continued to use their traditional weapons or became matchlock men because firearms made the face, hands, and clothes filthy and was therefore a low-class occupation. The numerous weapons of the Deccan reflect this diversity, and it remains difficult to attribute arms to a specific court or to determine with certainty the origin of many of the *firangi* blades that are mounted on Indian hilts.

1. Michell and Zebrowski 1999, p. 233, fig. 171.
2. Abu'l Fazl, *'Ain-i Akbari*. Translated by H. Blochmann (1873). Reprint New Delhi 1988, vol. 2, p. 238.
3. Egerton 1968, p. 58.
4. Thévenot 1949, ch. 47; and Sherwani 1967, p. 475.
5. Bilgrami and Willmott 1883, vol. 1, p. 399.
6. Jaikishan 2009, p. 29.
7. See Elgood 2004, p. 262, citing Irvine 1962, p. 76 (citing Shah Nawaz Khan, *Ma'athir al-'Umara* [Calcutta, 1888–91], vol. 3, p. 152).
8. Personal communication of Hanwat Singh of Khandela to the author.
9. See Ball's note in Tavernier 1949, vol. 1, p. 127. According to a description by François Bernier (1968, p. 148) four swords were presented by the Persian ambassador to Aurangzeb at Delhi: "four Damascus cutlasses and the same number of poniards, the whole covered with precious stones." Presumably by "Damascus" he meant mechanically watered steel, which would probably have been made in Persia.
10. Moreland 1931, p. 34.
11. Lewis 1982, p. 138.
12. Digby 1971, p. 18. Fakr-i Mudabbir was the pen name of Muhammad b. Said, whose *Adab al-Harb wa al-Saja'a* was written in Delhi soon after A.H. 626 (A.D. 1229).
13. Pires 1944, vol. 1, pp. 12–13 and 43.
14. Original correspondence 610 and 637 in the India Office Library (now the British Library), cited in Foster 1906, p. 18.
15. Francis Fettiplace at Agra to the Company, Dec. 15, 1619, in Foster 1906, p. 164.
16. Farewell 1939, p. 165.
17. Pant 1930, p. 159.
18. Danvers and Foster 1896–1902, vol. 1, p. 239; vol. 2, p. 301.
19. Thomas Kerridge at Surat to the Company, Feb. 1619, in Foster 1906, p. 52.
20. Ibid., p. 184.
21. Prakash 2007, p. 147; V.O.C. 1084, ff.1A -4.
22. See Rawson 1967, p. 43ff.
23. See Elgood 2004, appendix II.
24. Hayward 1973, pp. 153ff.
25. For information on Benjamin Stone, see Southwick 2009.
26. March 17, 1641, Court Book, vol. 17, p. 439 (Sainsbury 1909, p. 153).
27. Sainsbury 1925, p. 392.
28. Nov. 15, 1667 (Sainsbury 1925, p. 399).
29. Feb. 22, 1669 (Sainsbury 1929, p. 161).
30. Feb. 26, 1669 (Sainsbury 1929, p. 163).
31. Dec. 15, 1669 (Sainsbury 1929, p. 286).
32. Oct. 28, 1670 (Sainsbury 1929, p. 377).
33. India Office Library (The British Library), IOR G/40/20, p. 64.
34. The houses of the Solingen bladesmiths in Shotley had carved religious inscriptions in German.
35. My thanks to Anthony North for this point.
36. The Board of Ordnance—the government body responsible for supplying the British army and navy with arms and gunpowder from the fifteenth to the nineteenth century—when asked to supply these cannon, suggested that it might be dangerous to supply them to foreigners who might use them against Englishmen.
37. The ambassador himself gave pocket pistols as a personal present to the emperor, who ordered them to be placed in his bed chamber. These were: "1 fine Padd turn'd off, £5; 1 Ditto Pocket turn'd off, £5; 1 Ditto turn'd off very fine, £6-10; 1 pair Ditto pocket, £3-10; 1 Cartridge Gunn, £10-5; 1 Fuzee or Shot Gunn, £6-10; 1 Ditto, £7-10." See note 33.
38. In addition, a Shah Jahan sword bearing a gold umbrella mark with a long *nasta'liq* inscription, including the title *Sahib-i Qiran-i Sani*, is in the Archaeological Museum, Delhi. Another with the same title, discovered with nineteenth-century North African mounts, now removed, is in a private collection. Another Shah Jahan sword with a *firangi* blade inscribed "Emperor of Ocean and Land" was exhibited at the Delhi Exhibition in 1911. See Sanderson 1911, pl. A.175.
39. For a list of the numerous towns in India with which the Armenians of New Julfa regularly traded

in the seventeenth century, including Hyderabad, Burhanpur, and Sirohi, see Seth 1988, p. 157.
40. Chardin 1927, p. 281.
41. Tavernier 1949, p. 157.
42. Fryer 1992, vol. 1, p. 336.
43. Irvine 1962, p. 76.
44. Elgood 2004, p. 94 and ill. 8.50, 8.51, and 8.52.
45. Thomas Del Mar Ltd., London, June 30, 2010, lot 38. This detail can be seen on a small number of swords with a similar provenance in the Ganga Government Museum, Bikaner. See Elgood 2004, p. 97.
46. Ibid., p. 89.
47. See Leach 1995, vol. 2, p. 871, fig. 9.254.
48. Thévenot 1949, p. 61.
49. See Elgood 2004, p. 144.
50. Bernier 1968, p. 254.
51. Forbes 1834, p. 337.
52. The first was in Isfahan, founded by Father Raphaël du Mans in 1647. Many of the reports on Persia by well-known contemporary travelers emanated from him.
53. Mans 1890, p. 354.
54. Rafeq 1975, p. 298.