

Decorative Techniques in Oriental Swords: *Savoir Faire* in Craftsmanship and Artistry



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Abstract One important aspect in the study and appreciation of arms is the techniques and methods for their decoration. The wide range of materials and techniques used in the creation of swords and daggers were intended to add to the aesthetic qualities of functional items, either for everyday or ceremonial use. Throughout the ages, beautiful swords and daggers were worn by the elite and were presented to warriors and courtiers as gifts to symbolize victory, honor, virility, and to reinforce the bond of loyalty. They were also worn by men as jewelry of prestige and status. Techniques used by artisans to embellish these swords and bladed weapons are the subject of this paper. Examples from museums and private collections are selected to demonstrate the exquisite craftsmanship of gilding and coloring, inlay and damascening, stone and gem-setting, embossing, chasing and engraving, enameling, 3D carving, wiring and filigree, etching and openwork. This chapter focuses on how these techniques were used to produce distinctive details of decorated antique swords and daggers of Eastern origins from the Ottoman empire, Persia, and India.

Keywords Sword · Dagger · Oriental · Decoration · Gold · Islamic · Techniques · Ceremonial · Symbolic

1 Sword Decoration in Antiquity

Major innovations in the history of edged weapons are the adoption of different materials—from stone to different metals and precious materials—to indicate artistry and status, and the developments of different styles of blades to support or counteract different battlefield tactics and defensive equipment.

The oldest known decorated swords, dated to 3300–3000 BCE, were found at Arslan Tepe in the Taurus mountains of southeastern Anatolia in Turkey (Palmieri 1981). Nine swords, ranging in length from 45 to 60 cm, were found in a palace

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Fig. 8.1 A gold blade excavated at the Royal Cemetery in Ur, whose hilt has gold bead inlay

complex and were made from an arsenic-copper alloy. Three of them were beautifully inlaid with silver.

Two gold swords from around 2500 BCE were uncovered during excavations at the Royal Cemetery in Ur, a city of southern Mesopotamia (a historical region now covered by Iraq). One has a blade and lower portion of the hilt made of gold, while the upper portion of the hilt and pommel are comprised of a carved white stone with gold bead inlay for decoration. The other has a blade of gold, while the hilt has gold bead inlay (see Fig. 8.1). Of particular interest is that this sword was found with its sheath intact. The sheath is made of gold decorated in openwork and has two vertical slits on the back to allow it to be attached to a belt.

In ancient Egypt, daggers were usually made of copper or bronze. In pre-dynastic Egypt (circa 3100 BCE), daggers were adorned as ceremonial objects with golden hilts. More ornate and elaborate construction started to appear in the New Kingdom of Egyptian history. The opening of the tomb of Tutankhamun (1342–1325 BCE) revealed two daggers, one with a gold blade, and one of meteorite iron with gold hilt and sheath with a floral lily motif on one side and a feather pattern on the other (see Fig. 8.2). The daggers are exceptional because of their composition and their high manufacturing quality.

From the region of the Aegean Sea, which separates Greece from Turkey, there are also finds of gold-hilted swords and daggers from the Minoan civilization (2700–1450 BCE) centered in Crete and the Mycenaean civilization (1600–1100 BCE) (see Figs. 8.3a, b).

Found in a Hattic royal tomb dated about 2500 BCE, at Alaca Höyük in northern Anatolia, is another gold-hilted dagger with a smelted iron blade (see Fig. 8.4). In the first millennium BCE, the Persian armies used a sword that was originally of Scythian design called the *akinaka* (*acinaces*). However, the great conquests of the Persians made the sword more well known as a Persian weapon, to the extent that the true origin of the weapon has been lost. The name *akinaka* has since been used to refer to whichever form of sword the Persian army happened to be using at the time (see Figs. 8.5).



Fig. 8.2 The two daggers excavated in the tomb of Tutankhamun (Developed by Eric Suen; derived from Viking Sword, Ethnographic Arms and Armors, Meteoric Blades on Bronze Age Weapons)

What does the original Scythian *akinaka* look like? An impressive burial of an ancient Scythian warrior has been found in Ukraine in 2019 which has yielded many treasures among which is a remarkable gilded *akinaka* (Whelan 2019). The weapon, which is somewhat corroded, is a remarkable piece. It has a ribbed grip and a cross-guard, which are in good condition and still have some of their original gilt. Early Scythian precious metal technology in the manufacture of gold jewelry and ornamented weapons were recovered in a kurgan of a seventh-century BCE Scythian royal necropolis in the Republic of Tuva, in Siberia between 2000 and 2003. Iron weapons decorated with gold and silver inlay, such as daggers, knives, arrowheads, and a battle-ax form part of the precious grave goods. The majority of these weapons are decorated in the Scythian animal style (see Figs. 8.6).

Other cultures from circa 600 BCE also had edged weapons embellished in gold. These included Assyria, which fell to the Babylonians in 605 BCE; Persia, which conquered Babylon in 539 BCE (see Fig. 8.7); the Medes, who joined with the Persians in the conquest of Babylon, and the Scythians, who migrated from Russia and Afghanistan to the Near East (see Figs. 8.8). All these weapons were unearthed from the graves of kings and members of the ruling class of these empires.

In China, precious materials such as turquoise were used to decorate bronze dagger ax as early as the Shang dynasty (1600–1046 BCE) (Harvard Art Museum 1943) (see Fig. 8.9). Recent excavations demonstrate that the use of gold for sword decoration had been widespread since the eighth century BCE. Fittings and rings of gold appear regularly in late Western Zhou tombs and in tombs of the eighth to sixth centuries in Henan and Shaanxi Provinces. Gold is likely to have worked its way to the heart of China from the West, and in many cases, it is found as part of weapons. During the late twentieth century, discoveries were made from a Xiongnu tomb of Warring States period (fourth century BCE) in Xigoupan, Inner Mongolia, of a group of gold sheets bearing embossed animal motifs. These gold sheets, found near the decayed wood scabbards of both iron and bronze swords, were produced in different sizes



Fig. 8.3 Gold hilted swords and daggers were found in the region of the Aegean Sea from the Minoan civilization and the Mycenaean civilization



Fig. 8.4 Gold hilt dagger from a Hattic royal tomb, northern Anatolia, 2500 BCE



Fig. 8.5 Gold Scythian sword from the fifth century BCE



Fig. 8.6 Daggers from the royal necropolis in the Republic of Tuva, Siberia, seventh century BCE

and shapes, for putting together as claddings of the scabbards. Rich burial objects including gold and silver ornamental plaques and pottery were also discovered in the same tomb, indicating the tomb owner was an elite warrior of Xiongnu origin (see Fig. 8.10).

Fig. 8.7 Persian gold ceremonial dagger



Iron daggers and short swords decorated with cast gold hilts were also uncovered from excavations in Shaanxi Province. There are two known examples, respectively in the British Museum and in China of openwork cast gold hilt decorated with interlaced dragons (see Fig. 8.11). The openwork decoration with spirals and granulation of the cast gold hilt was derived from Central Asia. The hilt shape of the two daggers is known from Central Asian and Bactrian blades and is also characteristic of the steppe region (The British Museum 1937).

It was in the fifth century BCE that combination techniques were deployed to decorate swords in China. The Sword of Goujian is one of the earliest known swords in China that deployed sophisticated multiple metallurgical techniques. Black rhombic etchings cover both sides of the blade and blue glaze, and turquoise is imbedded on the sword handle. On one side of the blade, two columns of gold inlaid text are visible with eight characters in ancient Chinese script near the hilt. The grip of the sword is bound by silk while the pommel is composed of 11 concentric circles. The original owner of the sword was Goujian (496–465 BCE), King of Yue.



Fig. 8.8 Scythian gold hilt sword, fifth century BCE (Collection of the State Hermitage Museum, St. Petersburg). Photograph © The State Hermitage Museum/Photograph by Vladimir Terebenin



Fig. 8.9 Turquoise inlaid bronze dagger, Shang dynasty, China

Contacts between China and Central Asia during the Han dynasty were facilitated through extensive military campaigns, diplomatic missions, and scouting expeditions to regions as far as the Black Sea and the Persian Gulf, resulting in an unprecedented growth of commerce and cultural exchanges along the route which became known as the Silk Road. Knowledge of certain aspects of Near Eastern material culture such as ornamentation of luxury wares expanded exponentially by China's mercantile contacts with the Mediterranean region and the Islamic world from the Tang dynasty onward. Scabbard fittings of distinctly Persian form are testaments to the influence of Western Asia on the metal craft of medieval China (Tom [2006](#)).



Fig. 8.10 Examples from the Mengdiexuan collection similar to the gold sheets unearthed at a Xiongnu tomb of Warring States in Xigoupan, Inner Mongolia

Fig. 8.11 Cast gold hilt, Eastern Zhou period, eighth century BCE, Shaanxi Province, China



2 A New Era

Since the seventeenth century, decoration of swords has taken many forms, from the simplest addition of precious elements like gold and silver to more fancy decorations involving the mechanical alteration of the shape, form, and surface, or adorning them in a variety of artistic techniques and styles with additional materials such as semi-precious stones, enamel, ivory, coral, shell, bone, and horn. Sometimes multiple materials and techniques might be combined to decorate one single sword.

Many examples of Oriental arms are especially noteworthy for their opulent ornamentation. They were decorated using a variety of techniques such as gold and silver damascening, inlaying, encrusting, gilding, wiring, and filigree as well as gem-setting and enameling. On some ceremonial items, the decoration could achieve such sumptuous and spectacular effects that the final appearance of the object has more in common with an item of jewelry than a weapon (The Metropolitan Museum of Art 2004).

Through the written and pictorial records in museums, numerous miniatures, and private collections, we came to know that the majority of weapons at the Mughal court in India of the seventeenth century and onward are notable for the richness of their materials, and the great opulence in display. Lavishly adorned hilts were popular in Turkey, Iran, and particularly in Mughal India. Many of the finest examples, with hilts and scabbards sculpted in jade and precious material like crystal, ivory, or rhino horn, were inlaid in gold and gemstones. Others were beautifully carved with animal head pommels (Hales 2013).

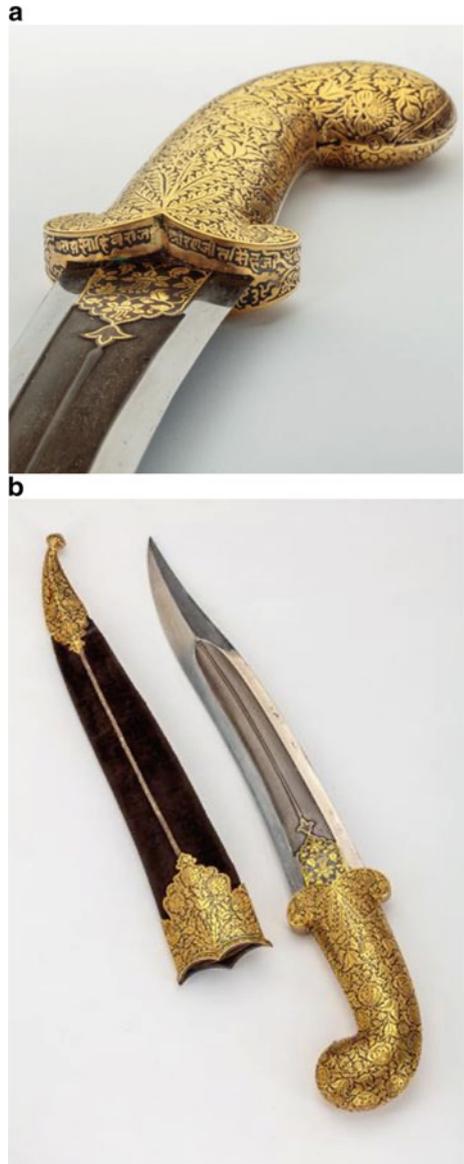
Examples from the Mengdiexuan Collection are used here to demonstrate the different techniques applied to decorating edged weapons in the last four hundred years. A khanjar from the Mughal court, inscribed in gold in Devanagari reading, “Rai Sahib Raja Shri Ranjit Singh Ji dagger made in the armory 1882 (Mohtashemi 2018)” was embellished with dense floral and leafy sprays motif in thick gold overlay on the iron hilt and the metal mounts of the scabbard (see Fig. 8.12). This technique represents the peak of gold overlay craftsmanship of the Mughal court in the new era. Another example of applying multiple techniques and precious elements is a nineteenth-century Mughal court dagger from the former Louis Cartier’s collection. On the white jade hilt of this dagger are kundan-set emeralds and rubies in floral design (Baral et al., n.d.) (see Fig. 8.13). The gilt-metal mounts of the scabbard were gem-set en suite on one side and with repoussé decoration of birds and flowers on the other side.

Princes and nobles of the Mughal court were often portrayed wearing a katar at their side. This was not only a precaution for self-defense but also meant to show off their wealth and position. Upper-class Rajputs and Mughals would even hunt tigers with a pair of katar. For a hunter to kill a tiger with such a short-range weapon was considered the surest sign of bravery and martial skill. Unique to the Indian subcontinent, katar is the most famous and characteristic of Indian daggers. Jade however was rarely found on katar hilt. But this katar of circa 1800, formerly in the collection of Muharram Jah Asaf Jah VIII, Nizam of Hyderabad (see Fig. 8.14) has an unusual hilt carved from one piece of jade. The H-shaped hilt, with two parallel upright arms and a pair of baluster-shaped grips, was carved from a single piece of fine quality translucent pale celadon jade. The sides of the upright arms of the katar are carved with floral sprays of stylized iris and lotus blossoms.

From the HH Sheikh Hamad bin, Abdullah Al-Thani collection is a kard with a clear rock crystal hilt carved in the form of a ram’s head (see Fig. 8.15). The rock crystal has been selected for its clarity and carved in the form of a ram’s head, with cabochon ruby eyes set in the kundan technique. Around the neck is a collar with parallel bands of gold wire bearing a square emerald locket under the chin. In complement to the ornate precision of the ram’s head pommel, the flawless rock crystal is free from fissures or inclusions and brought out by a simple smooth polish. This dagger was articulated with three-fold visual pleasures: the carving of the zoomorphic hilt, the geological and gemological enjoyment of the pure natural quartz; and the connoisseur’s appreciation of the virtuoso blade work in wootz.

Another notable example to demonstrate the great opulence in the decoration of Indian-edged weapons is a seventeenth-century Mughal tulwar with scabbard fitted

Fig. 8.12 Gold encrusted and inscribed 1882 dagger, nineteenth century, India



with a throat-piece and chape crafted in solid gold pierced in openwork showing lovebirds perching against dense vegetal motifs (see Fig. 8.16). The al-Sabah collection in Kuwait has two similar examples and both are illustrated by Salam Kaoukji in the book *Precious Indian Weapons* (Kaoukji 2017).

Fig. 8.13 Jade hilt gem-set dagger, nineteenth century, India



Fig. 8.14 Jade hilt katar, circa 1800, India



Fig. 8.15 Crystal hilt dagger with ram's head



Swords of high value, often elaborately decorated, were produced as presentation pieces and diplomatic gifts throughout the ages. An example is a classic nineteenth-century Arabian saif mounted in gold with an exceptionally long wootz blade (see Fig. 8.17). Associated with the tribal royalty of the House of Saud and the other royal houses of the Arabian peninsula coast such as the Bahraini royal family, the sword represents an apex of a classically known form. The decorative work on this example is one of the finest found on an Arabian saif, including filigree and the use of gold granules to form intricate scrolling geometric motifs and roundels. The cross-guard has a central floral element and bud-form quillons entirely covered in gold. A sword with a very similar scabbard and near identically decorated hilt is in the Victoria and Albert Museum in London. It was presented to Lord Athlone in 1938 by Shaikh Isa of Bahrain (Elgood 1994).

In the universe of Islamic arms, the jambiya is a characteristic form of dagger that is worn throughout the Arab World and wherever Arabian influence has penetrated historically. Jambiya differs in form or shape from one area to another. The upper-class tuza-type jambiya often has a rhino horn handle and ornate scabbard adorned with metal fittings. An example is a nineteenth-century belted jambiya from Yemen (see Fig. 8.18), splendidly ornamented with a rhino horn hilt inlaid with gold coins,

and a scabbard finished with large iron mounts decorated in damascened gold and silver (see Fig. 8.19). The broad leather belt is lavishly adorned and stitched with gold and silver thread.

Jambiya was taken by travelers throughout history to other cultures including the Ottoman empire, Persia, and India, where they were adopted with slight differences in the blade, hilt, and scabbard. Examples include a nineteenth-century Ottoman jambiya with plain agate hilt and silver filigree scabbard inlaid with coral (see Fig. 8.20), a Qajar jambiya with a steel hilt chiseled and gold-damascened in floral motif (see Fig. 8.21), a Gujarat jambiya with repousse gilt copper hilt and scabbard

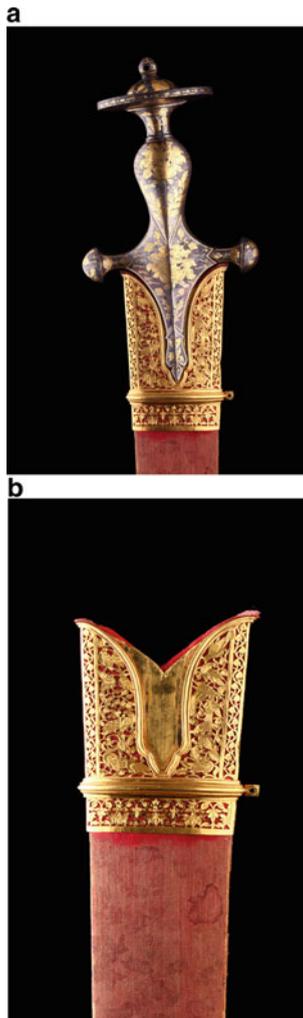


Fig. 8.16 Tulwar in openwork gold mounts, seventeenth century, India



Fig. 8.16 (continued)

mounts (see Fig. 8.22), and a luxurious Mughal gold-hilted jambiya set in diamond, rubies, and emerald (see Fig. 8.23).

Napoleon's conquest of Egypt in the late eighteenth and early nineteenth centuries sowed the seeds for European interest in the Middle East and, during the nineteenth century, there began a surge in admiration and interest for all things Eastern. European goldsmiths and jewelers were commissioned by wealthy patrons to make Eastern weapons like the jambiya with a bespoke purpose. An example is a diamond-studded, enameled gold jambiya made in fine European fashion workmanship that simulates the luxury objects produced in the great empires of the Ottomans, Persians, and Mughals (see Fig. 8.24). This jambiya bears a gold hallmark of France during the second half of the nineteenth century on the gold sheath and on one of the rings of the sheath. The sumptuous use of premium grade gemstones, the fine enameling, and the talismanic color combination of emerald green, ruby red, and sapphire blue are typical of the eighteenth- and nineteenth-century European design of luxury jewelry under the influence of Orientalism. It is likely that the dagger was a presentation object or an important diplomatic gift.

Meanwhile, contacts with Central Asia and India facilitated the import of western as well as Islamic ornamental elements to sword-making in China. The appetite for



Fig. 8.17 Saif with filigree hilt, nineteenth century, Bahrain

exotica and for products made domestically from rare, imported raw materials was a phenomenon among the upper class in the Ming dynasty and the Qing dynasty. Steel blades from Islamic countries were desirable commodities. Steel from Inner Asia, imported to China to be reworked into various luxurious goods often commanded prices higher than silver. Records from thirteenth–fifteenth centuries indicate that jeweled swords and iron were imported to China from Bengal.

The exchanges of material culture between the Middle Kingdom and the Islamic world were further invigorated by the tribute system and the maritime trade route across the Arabian Sea and Indian Ocean, up through the Straits of Malacca to the South China Sea. During the Qing dynasty, the scarcity and beauty of these exotic products inspired the perception that they were superior, and thus fueled a strong desire for the Qing emperors, notably the Emperor Qianlong, to commission native craftsmen to incorporate these exotic decorative elements into his own princely

Fig. 8.18 Rhino horn hilted Jambiya and its belt, nineteenth century, Yemen

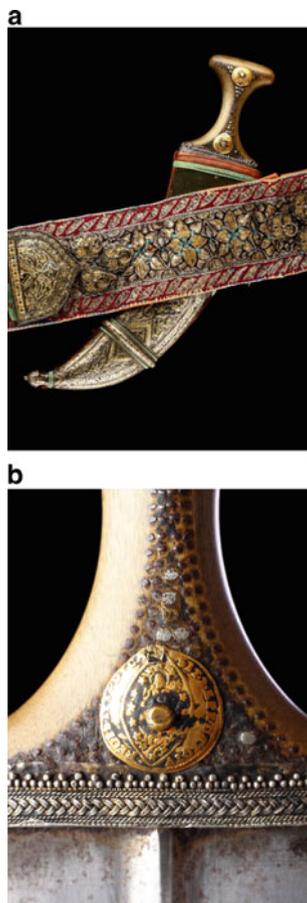


Fig. 8.19 The lavishly adorned scabbard finished with iron mounts decorated in damascened gold and silver

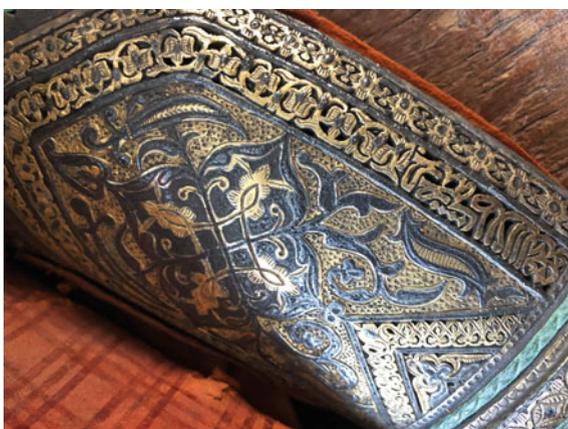




Fig. 8.20 A nineteenth-century Ottoman jambiya with plain agate hilt and silver filigree scabbard inlaid with coral

Fig. 8.21 A Qajar jambiya with a steel hilt chiseled and gold-damascened in floral motif



Fig. 8.22 A Gujarat jambiya with repousse gilt copper hilt and scabbard mounts



Fig. 8.23 A luxurious Mughal gold-hilted jambiya set in diamond, rubies, and emerald



Fig. 8.24 A diamond studded, enameled gold Jambiya made in fine European fashion workmanship which simulates the luxury objects produced in the great empires of the Ottomans, Persians, and Mughals



objects, including swords and sabers. Known as a martial artist and for his exotic taste, Emperor Qianlong in 1748 recruited a group of skilled craftsmen from all over the world as well as from his Imperial Workshop to create 30 swords and 30 daggers for himself between 1748 and 1757. These weapons are for personal collection to satisfy the emperor's appetite for luxurious exotica rather than for use and were inventoried and stored inside the palace. Among them was a 100 cm sword with steel blade, gilt-iron fittings, and wooden sheath covered with red-stained shark skin decorated with auspicious emblems in openwork. On the blade was inlaid in gold characters "number one of the Earth categories" (*dizi yihao*) and "emerging from clouds" (*chuyun*). This sword is presently kept in the Palace Museum (see Fig. 8.25).

Fig. 8.25 A sword manufactured during the Qianlong era, whose blade was inlaid in gold characters "number one of the Earth categories" (*dizi yihao*) and "emerging from clouds" (*chuyun*) (Collection of the Beijing Palace Museum)





Fig. 8.26 One fine example of the Mughal-inspired jade hilted blades featuring pistol pommels, with gold and silver inlays on the forte, which was in the Qianlong emperor's possession

The emperor also had in his possession numerous Mughal-inspired jade-hilted blades featuring pistol pommels, with gold and silver inlays on the forte (see Fig. 8.26).

The movement of people, the transfer of technology and artistry, and the subsequent allure of fashions had changed the outlook of arms design and production in the last six hundred years. Sophisticated techniques were practiced by different groups of artisans skilled in their respective areas across different cultures, who were commissioned to create weapons that are strong statements of the status and aesthetic taste of the patrons of this new era.

3 Transmission of *Savoir Faire*

The *savoir faire* of time-honored craftsmanship and creative skills has been passed on for centuries, and the skills of arms artisans have guaranteed the excellence that goes into crafting swords throughout the ages. This *savoir faire* constitutes a unique, intangible heritage that lies at the heart of a universal sword culture. Techniques, commonly used to decorate swords have been passed down generations since antiquity and are still being honored, enhanced, and practiced by modern-day artisans. In the final section below, I provide a sketch of the main decorative techniques.

These methods originated in different parts of Eurasia—some being discovered considerably earlier than the others, depending on complexity. The earliest such techniques—hammering and chasing, inlay and overlay, for example—were already

extensively used for weapon decoration by a wide range of groups in the second millennium BCE. Other techniques tended to be more culturally specific and reflected the unique taste and aesthetic preferences of certain societies. In this regard, openwork (piercing) decorations were exclusively associated with ancient China for a long stretch of time, and only gradually spread to neighboring countries. A number of techniques were more recent, as they were created to meet the increasingly exacting demand for ornamentation in the late imperial period. Among these are enameling, which was established *circa* 1600 in Mughal India, and filigree and granulation, which gained favor in the Himalayas, and South and Southeast Asia. In any case, the eight main techniques discussed below had become common in the decorative traditions of Asia by the eighteenth century. In this way, we may regard them as the alphabet for an aesthetic language of Oriental arms. A summary of these techniques is provided below with examples of antique arms for illustration purposes.

3.1 Piercing

Openwork technique was known in ancient China as early as the Shang dynasty 3500 years ago. It creates a see-through effect and makes the motif on the metal stand out (see Figs. [8.27](#) and [8.28](#)).

3.2 Hammering and Chasing

Hammering is shaping a malleable metal like gold and silver from the back to create a design in low relief on the front. Detail is added to the raised design by carving, known as chasing. The two techniques are often used in conjunction to produce elaborate motifs in low relief and fine details on metal (see Figs. [8.29](#) and [8.30](#)).

3.3 Fire Gilding

Gold is mixed with mercury to create a thin paste or amalgam, and is applied onto the base metal which is heated to drive off the mercury, and the gold remains firmly on the base metal surface (see Fig. [8.31](#)).

3.4 Engraving and Carving

Engraving is incising a design onto a hard, usually flat surface by cutting grooves into it with a sharp tool. Carving is normally applied to precious materials like jade,

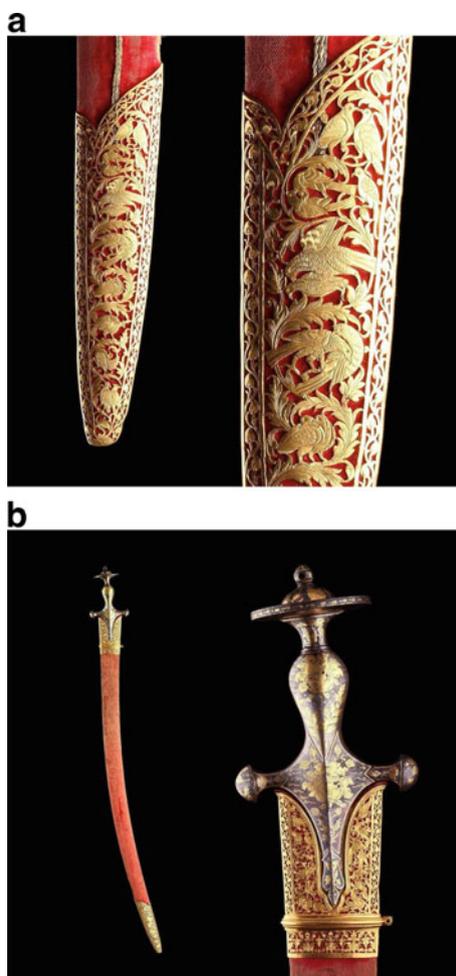


Fig. 8.27 A seventeenth-century Mughal tulwar with scabbard fitted with a throat-piece and chape crafted in solid gold pierced in openwork

crystal, semi-precious stones, ivory, or horn to produce 3-dimensional sculptures for use as hilts (see Figs. 8.32 and 8.33).

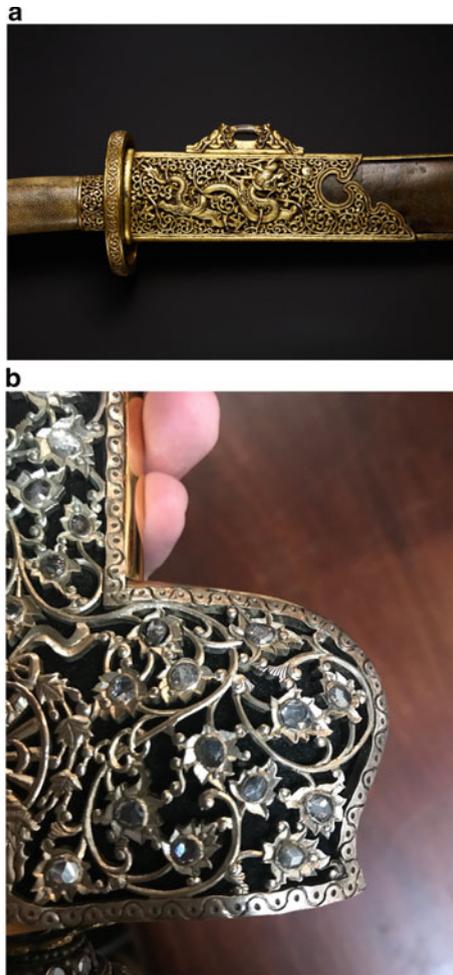
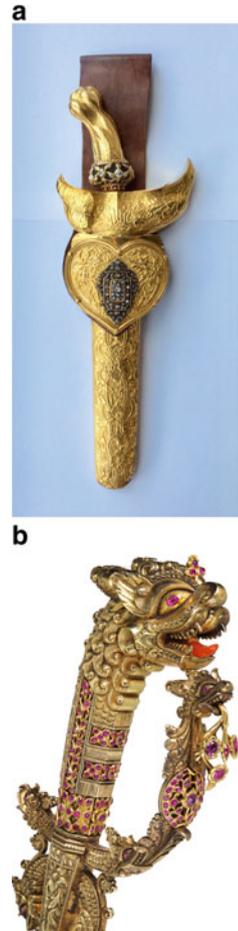


Fig. 8.28 **a** nineteenth-century Chinese *dao* with damascened gold dragon highlighted against the green shark skin leather. **b** A Kris from Indonesia in pierced white silver motif on black

3.5 *Inlay and Overlay*

Gold inlay technique dates back to the ancient Mycenaean period of about 4000 years ago. It remained one of the most common methods of decorating arms and armor until modern times. Inlaying involves cutting channels into the metal surface, then filling them with metal such as gold, silver, or copper alloys. Overlaying is laying gold foil or wire over a rough cross-hatched surface to produce a similar effect (see Figs. 8.34 and 8.35).

Fig. 8.29 **a** An eighteenth–nineteenth century gold Kris. **b** A nineteenth-century Kastane from Sri Lanka



3.6 Enameling

Enameling is applying a thin coat of finely ground glass to a metal. When heated to a high temperature, the glass melts and fuses to the metal. Enameling was established in the Mughal Empire around 1600 for decorating gold and silver objects including swords and daggers (see Figs. 8.36 and 8.37).

3.7 Filigree and Granulation

Filigree is made with tiny beads or fine twisted threads, or both in combination soldered together and arranged in artistic motifs of fine lace-like metalwork, usually



Fig. 8.30 a nineteenth-century Kutch Jambiya. b A nineteenth-century Pata from India

of gold or silver. This technique remains popular in the Arabia peninsula as well as in India, Asian regions, and the Caucasus (see Figs. 8.38 and 8.39).

3.8 Gem-Setting

The most dazzling weapons are those lavishly encrusted with gemstones like diamonds, rubies, and sapphires. Gem-setting methods varied in different cultures,



Fig. 8.31 **a** A nineteenth-century Sino-Tibetan dagger with gilt copper hilt and scabbard. **b** An eighteenth-century partially gilded Kutch dagger. **c** A gem-set gilded hilt in the shape of a demon of a Kris

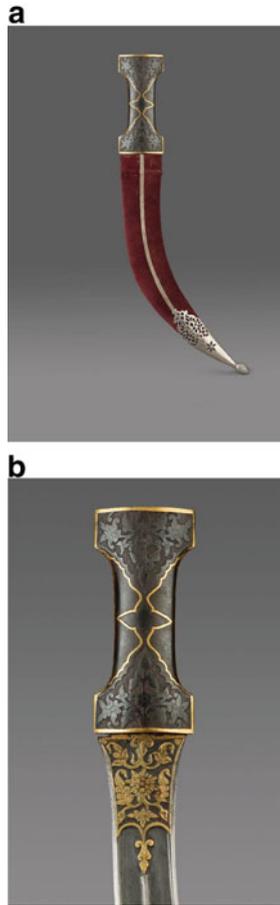


Fig. 8.32 A nineteenth-century Persian dagger

but gemstones were usually set on premium quality jade or on precious metal to exemplify the status of the owners (see Figs. 8.40, 8.41 and 8.42).

The examples discussed in this chapter elucidate the prevalence and importance of sword decoration in different parts of the Eurasia continent in the ancient and early modern times, as well as the variety of techniques used to decorate treasure swords, owned by the ruling elite and high-status warriors. It reveals the extensive nature of cultural exchange between different societies and peoples since the ancient times, as techniques originating in one place were transplanted elsewhere, often merging with local taste and existing techniques. Further, as noted by other authors in this volume, weapons were an important vehicle for the transmission of technology and design, in addition to cultural ideas, artistic forms, and decorative techniques. Such



Fig. 8.33 **a** A steel blade of an eighteenth-century Bhuj axe. **b** A close-up of Fig. 8.33a. **c** A nineteenth-century crystal hilted dagger



Fig. 8.34 A nineteenth-century inscribed and dated dagger from the Ranjit Singh of Bandanwara armory with hilt and scabbard decorated in gold overlay

exchanges continued through subsequent centuries until the end of the age of cold weapons. It is important to note that, as personal adornments and symbolic carriers of social status, daggers and swords continued to be worn ceremonially long after the weapons themselves retreated from the field of action. For this reason, unlike the manufacturing of blades, which suffered a marked decline in quality after it was replaced by firearms, sword decoration continued to evolve and arguably reached its peak during the seventeenth to nineteenth centuries, particularly in Mughal India, Iran, and the Ottoman empire. In almost all cultures, the decorated sword has grown in stature to represent more than just a weapon. These beautifully ornamented weapons have taken on a variety of characteristics with deep emotional meaning and symbolic significance, and they have been ingrained into the cultures and rituals of many historic traditions in the last five millennia.

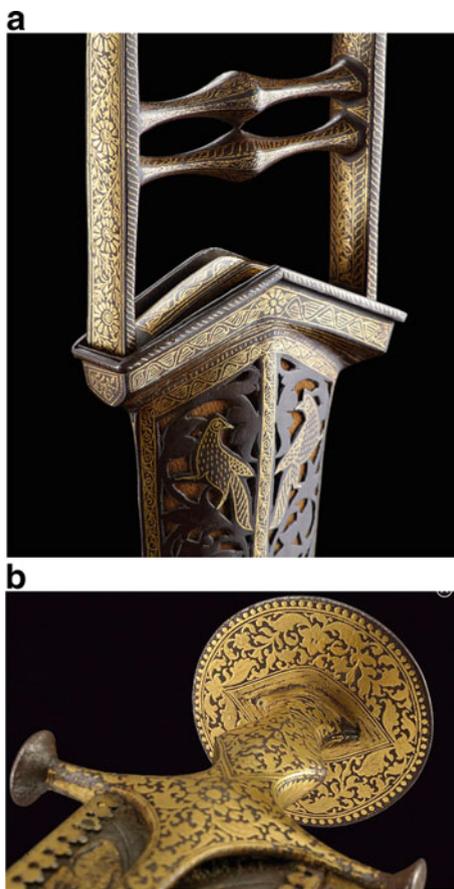


Fig. 8.35 **a** Nineteenth-century katar with gold inlay motif. **b** A nineteenth-century Indian ceremonial sword Thega in gold koftgari



Fig. 8.36 A nineteenth-century India dagger embellished profusely in polychrome transparent enamel



Fig. 8.37 Opaque enamel was found on an eighteenth-century Ottoman Turkey dagger

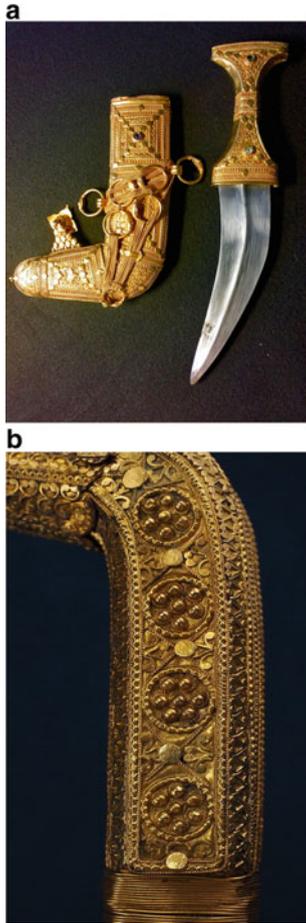


Fig. 8.38 **a** nineteenth-century Jambiya from Oman. **b** The hilt of a nineteenth-century Saif from Bahrain

Fig. 8.39 A Qama, a straight sword from Caucasus has scabbard decorated in fine silver filigree work

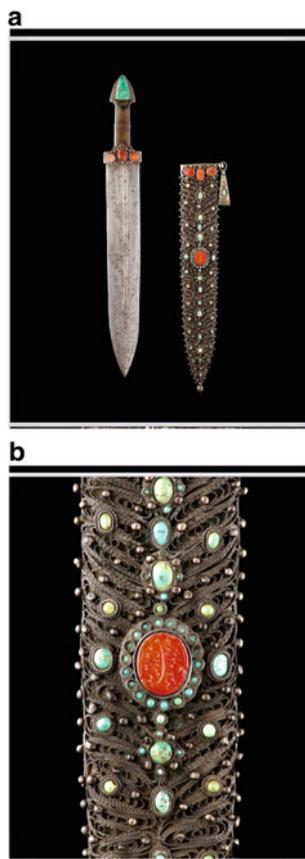




Fig. 8.40 A nineteenth-century Indian Jambiya with gold hilt set in diamond, rubies, and emerald

Fig. 8.41 **a** A European enameled gold Jambiya set in diamond, rubies, and sapphire. **b** A gold Kris mounted in semi-precious stones



Fig. 8.42 **a** An eighteenth-century Indian jade hilted dagger set in rubies and sapphire. **b** An early twentieth-century Indian silver sword set in semi-precious stones. **c** A nineteenth-century Indo-Nepalese saber



Fig. 8.42 (continued)



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