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Research on the Gold Necklace Unearthed from the Tomb of Li Jingxun of the Sui Dynasty

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Abstract

The gold necklace and bracelet unearthed from the Sui Dynasty tomb of Li Jingxun exhibit profound exotic characteristics, making them a focal point of debate regarding Silk Road art provenance. While previous studies have proposed Persian, Byzantine, or Indian origins based on fragmented stylistic similarities, this paper re-evaluates these artifacts by integrating archaeological, material, iconographic, and historical contexts. By examining the Li family's Xianbei heritage and their integration into the "Hu" (foreign) cultural sphere, this study contextualizes the artifacts within ancient globalization. Through a detailed comparative analysis of materials (gemstones and pearls), techniques (polyhedral beads), stylistic structures, and symbolic iconography (intaglio deer and the Great Goddess/tree motif), this research argues that the jewelry likely originated from the Sogdia or Bactria regions. The findings suggest that these artifacts are products of Central Asian craftsmen utilizing extensive Silk Road trade networks, intentionally acquired by elite patrons whose cross-cultural backgrounds allowed them to decode and appreciate the fertility and protective symbolism embedded in the jewelry.

Keywords

Li Jingxun tomb, gold necklace, Silk Road art, Sogdian culture, ancient jewelry, Sui Dynasty

1. Introduction

The Silk Road functioned as a dynamic network for cultural and economic exchange, driving an early form of globalization that profoundly shaped the material culture of medieval Asia. Personal ornaments from this era provide a unique window into how distinct artistic traditions merged across vast distances. The gold necklace and gold bracelet unearthed from the Sui Dynasty tomb of Li Jingxun represent exceptional examples of this phenomenon (Figures 1 and 2). Exhibiting a striking blend of foreign techniques and exotic aesthetics, these pieces contrast sharply with traditional Chinese craftsmanship. However, the highly hybridized nature of Silk Road art makes it inherently challenging to pinpoint the exact provenance and cultural identity of such artifacts. By re-evaluating these spectacular gold ornaments within their broader historical and social context, this study seeks to decode their origins and understand how imported luxury goods functioned as symbols of cultural integration and elite identity in ancient China.

Figure 1: Gold Necklace and Clasp Details of Li Jingxun, 6th-7th Century

Figure 2: Gold Bracelet of Li Jingxun, 6th-7th Century

1.1 Literature Review

The initial archaeological report suggested that their craftsmanship and decoration exhibited a pronounced Persian artistic style, though without detailed substantiation [1]. Later, Kiss pointed out similarities between the necklace and those unearthed around the Black Sea, proposing a Byzantine origin [2]. Xiong [3], Xiong and Laing [4] analyzed the materials and techniques, referencing South Asian murals and artifacts, and advanced an Indian–Afghan hypothesis. The Metropolitan Museum of Art's exhibition catalog noted that details of the necklace appear in Hellenistic, Roman, Parthian, and western Sasanian jewelry, making it difficult to pinpoint the origin, which may have come from a Sasanian imperial workshop or western Central Asia [5]. Amid ongoing debates over provenance, recent scholars have further explored the cultural exchanges between East and West reflected in these gold ornaments [6], as well as Confucian, Daoist, and Buddhist cultural elements [7]. For the same artifact, scholars hold divergent views yet each can marshal evidence to support their arguments coherently—this exemplifies the complexity of Silk Road art: the necklace is the product of prolonged exchanges among multiple cultures, allowing experts from different fields to discern familiar cultural elements within it.

2. Research Methodology

To comprehensively determine the provenance and cultural significance of the Li Jingxun gold ornaments, this study employs a multi-disciplinary methodology that integrates typological comparison, iconographic analysis, and historical contextualization. Initially, a comparative material and technical analysis is

conducted to evaluate the necklace's structure, gemstone selection, and metallurgical techniques—such as polyhedral gold beads and nicolo intaglio—against contemporaneous archaeological findings from the Mediterranean, Byzantine Empire, Sasanian Persia, India, and Central Asian nomadic sites. Building upon this physical evidence, the research applies an iconographic approach to decode the embedded symbolic meanings of the artifacts, specifically tracing the intaglio deer, linked pearl clusters, and teardrop pendants back to Eurasian nomadic shamanic beliefs and the "Great Goddess" motif. Finally, this object-based study is grounded in historical textual analysis; by cross-referencing primary historical records (such as the Sui Shu and Zhou Shu) with unearthed epitaphs, the research reconstructs the deeply integrated "Hu" (foreign) cultural background of Li Jingxun's family. This comprehensive method not only clarifies the geographical and cultural origins of the jewelry but also provides a socio-political rationale for its acquisition, adaptation, and symbolic resonance within a Sui Dynasty elite burial.

3. Results and Findings

3.1 Family Background

Previous scholars often approached the subject starting from form, technique, or style, first determining connections to Byzantium or India, and then extending their analysis by seeking out relevant literature or archaeological materials on Byzantium or India accordingly. However, an examination of Li Jingxun's family background and life reveals that "Hu" (foreign, particularly Central Asian) and "courtly" elements are two crucial factors that have been overlooked.

Historical records [ref. 8, Vol. 25, Biographies of Li Xian and Li Yuan, pp. 413–422 and Vol. 30, Biography of Li Mu, pp. 527–530, ref. 9, Vol. 37, Biographies of Li Mu, Li Chong, and Li Min, pp. 1115–1124] and unearthed epitaphs [10, 11] indicate that Li Jingxun's paternal lineage originated from the Xianbei ethnic group. Her ancestors, the Sidi, migrated inward during the Northern Wei period, later adopting the surname Li and claiming descent from Li Ling, eventually settling in Yuanzhou (present-day Guyuan, Ningxia).

From perspectives such as ethnic affiliation, place of residence, and official career trajectories, the Li family had extensive ties to northern and western regional ethnic groups, deeply influenced by medieval "Hu" culture. Guyuan was situated along a key Silk Road route and served as a gathering place for Hu people, among whom the Sogdians (from the present-day Syr Darya and Amu Darya river basins in Central Asia) were particularly noteworthy.

Li Jingxun's maternal lineage traced back to the imperial family; her mother, Yuwen Eying, was the daughter of Emperor Xuanwu of the Northern Zhou and Empress Yang Lihua. Yang Lihua was the eldest daughter of Emperor Wen of the Sui, who, after usurping the Northern Zhou throne through his maternal relatives, enfeoffed her as the Princess of Lepin.

Li Jingxun's burial was quite exceptional. Sui regulations prohibited burials within the capital city, and Wanshan Temple was a site where female members of the Northern Zhou court took the tonsure, many of whom were old acquaintances of Yang Lihua. Thus, this burial site, which violated the regulations, was likely specially arranged by her. The tomb mimicked the burial method for relics by constructing a stupa above ground, reflecting the religious beliefs of Yang Lihua and Li Jingxun, and serving as a compromise to the "prohibition on burials within the city walls" [12]. Li Jingxun was interred in a house-shaped stone outer coffin, a type of burial container commonly used from the Northern Zhou through the Sui and Tang dynasties by high-ranking officials or foreign Hu people. The tomb yielded abundant grave goods, including green glassware and white porcelain that represented Sui "high-tech" achievements, as well as the distinctive gold necklace and bracelet. Given that Li Jingxun was raised in the palace from childhood and that her epitaph mentions "generous funeral gifts", some of the grave goods may have originated from the court. For a nine-year-old girl to receive such treatment after death, Yang Lihua's political power, affection, and faith were undoubtedly key reasons.

In summary, during the medieval period, East-West exchanges and the great fusion of northern ethnic groups exerted a profound influence on China through "Hu" culture, exemplified by the Sogdians; thus, investigations into the origins and dissemination of these gold ornaments should not overlook this aspect.

The interplay of political power with emotion, gender, and religious belief is another critical issue to consider in deeply understanding this exotic gold ornament.

3.2 Material Analysis

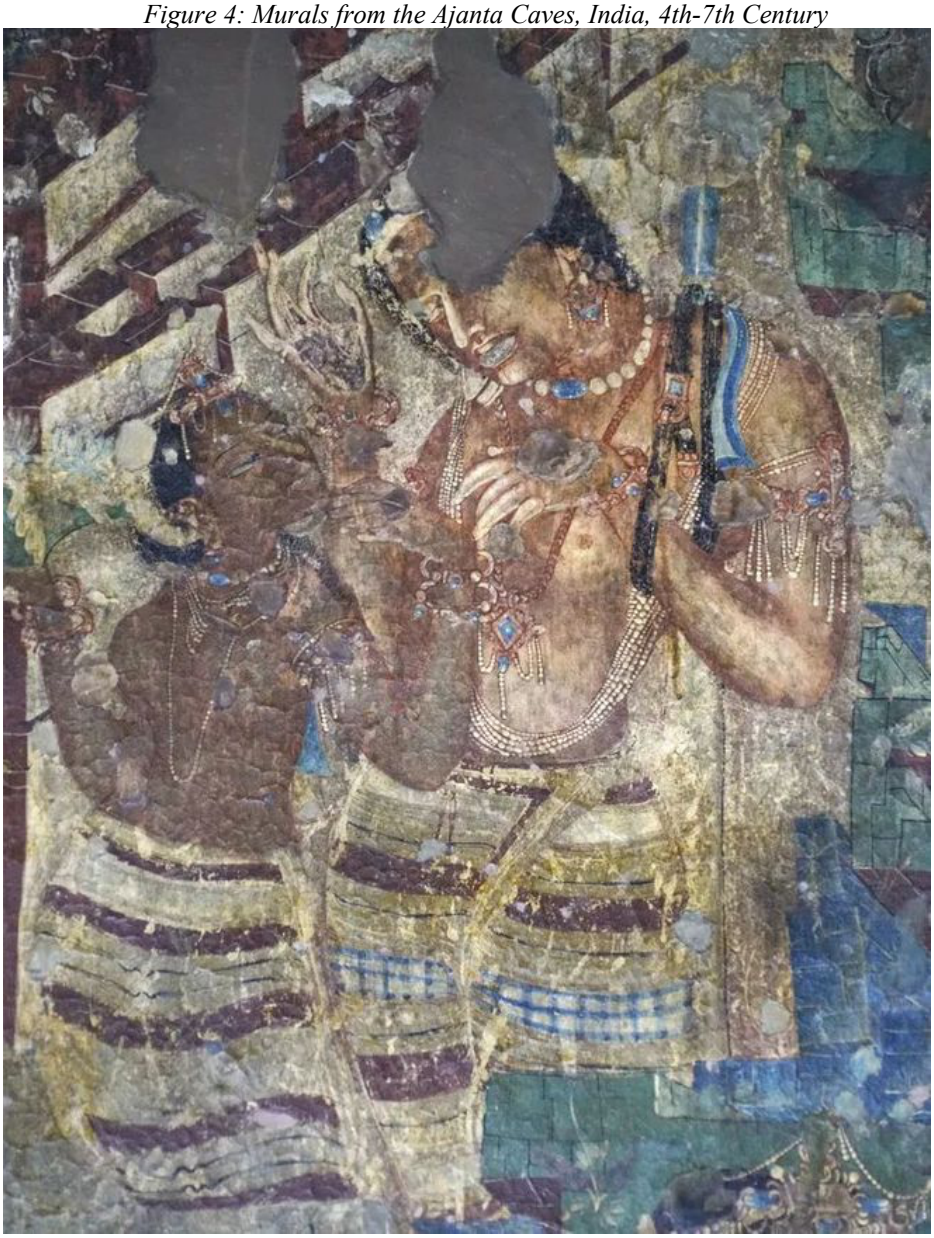
The necklace consists of a chain body formed by threading 28 gold beads onto a gold wire, with pearls inlaid on the gold beads. At the center of the chest is an inlaid translucent red gemstone, referred to in the archaeological report as cinnabar stone, though its transparency and luster suggest it is more akin to chalcedony or carnelian. Below the red gemstone is a small circular clasp inlaid with an opaque blue gemstone, which should be lapis lazuli or a glass imitation; suspended from the clasp is a teardrop-shaped pendant inlaid with a higher-transparency blue gemstone, described in the archaeological report as crystal. On either side of the red gemstone are quadrilateral and circular bases inlaid with opaque blue gemstones, resembling lapis lazuli or imitations. At the center of the rear clasp is an inlaid deep blue opaque deer-patterned gemstone, called lapis lazuli in the archaeological report, but its deeper color and finer, denser texture suggest it is more like onyx or an imitation. The quadrilateral and circular bases on either side of the clasp are inlaid with opaque blue gemstones, also resembling lapis lazuli.

In ancient Eurasia, the most important source of lapis lazuli was Badakhshan in Afghanistan. From around 6,000 years ago, Afghan lapis lazuli was transported via South Asia or West Asia to the eastern Mediterranean coast, where it was extensively used by the civilizations of Mesopotamia and Egypt, becoming a sacred stone with special connotations. Thus, the early usage map of lapis lazuli roughly extended from Afghanistan to the eastern Mediterranean. This map underwent a dramatic change in the second half of the first millennium BCE, with the popularity of lapis lazuli contracting, centering mainly on the production area in Afghanistan and influencing the alternating Persian and nomadic regimes that controlled it. One reason for this contraction was Alexander the Great's eastern campaigns in the 4th century BCE, which promoted the development and trade of South Asian gemstones; thereafter, transparent or highly lustrous gems such as sapphires, emeralds, rubies, diamonds, and aquamarines became fashionable [13].

Physical artifacts, images, and texts all indicate that in the 6^{th}-7^{th} centuries, both Byzantine and Indian jewelry favored gemstones or their imitations with high transparency, luster, or hardness. For Byzantine jewelry, an example is a 6^{th}-8^{th} century bracelet in the collection of the Metropolitan Museum of Art, inlaid with pearls, sapphires, amethysts, faux emeralds (green chalcedony used as a substitute for emeralds), crystals, opals, and glass (Figure 3). For Indian jewelry, the 4^{th}-7^{th} century murals at the Ajanta Caves serve as an example, where figures' headdresses and necklaces feature many blue, green, and red gemstones, often dotted with white spots to indicate high transparency and luster (Figure 4), clearly referring to South Asian specialties like sapphires, emeralds, and rubies. These gemstones remain high-end gems even today, while lapis lazuli has fallen to the status of a semi-precious stone.

Figure 3: Byzantine Gold Bracelet in the Collection of the Metropolitan Museum of Art, United States, 6th-8th Century

Figure 4: Murals from the Ajanta Caves, India, 4th-7th Century



The Li Jingxun bracelet primarily uses pearls, turquoise, and green glass. Turquoise is widely distributed and was used by numerous civilizations in the Old World since prehistoric times. However, from the second half of the first millennium BCE, the steppe nomadic groups were particularly fond of turquoise and imbued it with special connotations, with rich turquoise mines in the Central Asian regions under their control [14]. This type of jewelry has been unearthed in abundance from the Black Sea to Northeast Asia; for instance, the Tillya Tepe site in Afghanistan, a royal tomb of the Saka or Yuezhi nomads from the early 1st century CE, yielded over 20,000 artifacts, many of which were gold items inlaid with turquoise (Figure 5).

The tradition of inlaying large, round carnelians into jewelry is extremely ancient, traceable to ancient Egypt, and was continued by the Persians, Romans, and nomadic groups. It was often set at the center of brooches, necklaces, and diadems for a strikingly prominent effect, as seen in the Li Jingxun necklace.

Pearls were common in medieval Byzantine, Persian, Indian, and Chinese ornaments. The Persian Gulf and Indian coasts produced high-quality pearls, which were important trade goods sold to the Mediterranean. Chinese historical records note that Persian kings' luxurious robes were adorned with pearls, while figures in Byzantine mosaics and Indian murals were often covered in pearls. Likely influenced by these sedentary peoples, pearl jewelry occasionally appears in sites of southern sedentary nomadic groups. Overall, however,

pearls seem to have held relatively less appeal for steppe nomads; necklaces like Li Jingxun's, which use pearls extensively, are comparatively rare.

Figure 5: Gold Plaque Ornament from Tillya Tepe, Afghanistan, 1st Century

The blue crystal pendant on the Li Jingxun necklace and the green glass on the bracelet may reflect the new international gemstone trend represented by sapphires and emeralds since the end of the first millennium BCE. Observation shows that the crystal was originally colorless, with blue pigment applied to the base to create a light blue hue, seemingly intended to imitate highly transparent sapphires. The green glass is cut into a square shape, with an even more evident intent to mimic emeralds—gems in Indian and Byzantine jewelry are generally round, except for emeralds, which favor square shapes because emeralds belong to the beryl family and naturally form hexagonal prisms; ancient craftsmen often retained their original shape or made minor adjustments to preserve maximum size. For example, a Byzantine bracelet in the Virginia Museum collection features round sapphires and square emeralds (Figure 6), with the emerald shape quite similar to that on the Li Jingxun bracelet.

In summary, the Li Jingxun necklace and bracelet primarily feature opaque gemstones and make extensive use of pearls, lacking the colorful style of cloisonné inlays with smoothed garnets, thus differing from contemporary Byzantine, Indian, and Black Sea nomadic regions; therefore, the possibility of origins in West Asia or Central Asia is relatively greater. The aesthetic of the materials overall leans toward the ancient or somewhat outdated, but the imitation of sapphires and emeralds using crystal and glass indicates that the craftsmen were aware of international fashion trends.

Figure 6: Byzantine Bracelet in the Collection of the Virginia Museum of Fine Arts, United States, 4th Century (Sourced from the Virginia Museum Website)

3.3 Technical Craftsmanship

The necklace's chain body employs a gold rope woven from gold wires, threading 28 gold beads, each composed of 12 welded gold rings; the center of each ring features a gold setting for inlaying pearls, surrounded by a circle of gold granules, with gold granules also welded at the ring joints. Similar "gold rope + gold bead" necklaces are extremely rare; typically, only one or the other is used, as the gold rope is almost entirely covered by the gold beads, which seems somewhat wasteful. Although numerous necklaces strung with gold beads have been discovered, few feature such complex and intricate bead fabrication. Thus, the sophisticated craftsmanship is likely a key highlight or selling point of the necklace.

It is generally believed that polyhedral bead-making techniques originated in the Mediterranean and spread widely during the Roman Empire period; such beads have been unearthed in Western Europe, South Asia, Southeast Asia, and East Asia. In China, they are mainly found in southern Han and Jin tombs, suggesting they entered China via maritime routes through South Asia and Southeast Asia [15]. The Taxila site in Pakistan yielded a complete necklace using such beads (Figure 7), with white gemstones inlaid in the gold rings, strikingly similar to the Li Jingxun necklace, seemingly supporting the notion of a South Asian origin for the latter.

Figure 7: Gold Necklace from Taxila, Pakistan, 1st Century

Similarly, the eastward spread of these beads could not have completely bypassed West Asian Persia. Persia and Rome competed for trade with the East; Persia controlled the overland Silk Road, prompting Rome to vigorously expand maritime trade, which explains why dodecahedral gold beads are commonly found along the maritime Silk Road. The Patty Burch collection includes several polyhedral gold bead necklaces, reportedly from Iran, dating to the 7th century and later [16]. In summary, polyhedral gold beads could well have spread along the overland Silk Road, but more physical evidence is needed to confirm this.

The intaglio deer-patterned gemstone on the Li Jingxun necklace's clasp, referencing contemporaneous gem carvings, is likely a color-layered onyx or imitation, specifically a type where the surface is deep blue and the base black-brown, known as "nicolo". Intaglio nicolo seals initially flourished in the Roman Empire and later became even more prevalent in the Persian cultural sphere; 6^{th}-7^{th} century intaglio deer-pattern nicolo seals mostly originate from the Greater Persian cultural circle. During the medieval period, with the massive influx of Hu people into China, intaglio nicolo seals were also introduced, unearthed from the Northern Qi Li Xizong tomb in Zanhuang, Hebei; the Northern Qi Xu Xianxiu tomb in Taiyuan, Shanxi; the Northern Zhou Li Xian tomb in Guyuan, Ningxia; and the Tang Shihedan tomb. Among these, the seal patterns from Li Xian and Shihedan belong to the Greater Persian cultural circle. Scholars believe that Sogdians were likely key intermediaries in the transmission of such seals to China [17].

In summary, the techniques used in the Li Jingxun necklace, such as polyhedral gold beads, nicolo, and intaglio, originated in the Mediterranean but had widely spread along the Silk Road by the 6^{th}-7^{th} centuries; thus, technique is not key to determining the necklace's provenance.

3.4 Stylistic Determination

Currently, the Li Jingxun necklace and bracelet have been attributed to Persian, Indian, and Byzantine styles, indicating that this is a multifaceted work requiring particularly careful comparison and analysis. The following sections enumerate comparisons of certain details.

3.4.1 Segmented Structure

The Li Jingxun necklace is composed of three connected parts: the chain body, the chest ornament, and the clasp, a segmented necklace design traceable to the late Hellenistic period. For instance, a segmented necklace from the Hellenistic period in the Walters Art Museum collection (Figure 8), unearthed from the Parutino Olbia tomb in Ukraine, features a gold rope chain body with the chest ornament inlaid with amethyst and glass, connected to the chain by a crystal beast-form clasp, from which butterfly- and teardrop-shaped pendants inlaid with emeralds and chalcedony are suspended; its style is ornate and exquisitely detailed, likely the work of Greek craftsmen or influenced by Greek aesthetics. In contrast, a segmented necklace from the Parthian Dynasty of Persia exhibits a bold style (Figure 9), with the chest ornament consisting of three large circular bases—the central one inlaid with (imitation garnet) glass, and the flanking ones hammered with eagle motifs, the eagles' bodies inlaid with garnets and turquoise—more akin to the work of local craftsmen.

Several segmented gold necklaces dating close to the Li Jingxun necklace have been unearthed in Ukraine and Georgia. Figure 10 originates from Glodosy in Kirovograd, Ukraine, with a gold rope chain body and a chest ornament base of one square and two circles, suspended with a pendant. These necklaces serve as important evidence for positing that the Li Jingxun necklace originated from Byzantium or western Sasanian territories.

3.4.2 Beaded Chain Body

The practice of stringing large gold beads onto a gold rope is relatively uncommon. Beaded chains with large beads appear to have been popular in the Greater Persian cultural sphere, traceable to two large gold bead necklaces unearthed from the Tillya Tepe site in Afghanistan dating to the early 1st century CE, and continuing into the Islamic period. Deities and nobles in Sasanian silver coins, sculptures, and Sogdian murals frequently wear large beaded chains; segmented beaded chains appear multiple times in Sogdian murals. On the west wall of the "Ambassadors' Hall" at Afrasiab, several envoys from Central Asia are depicted holding tribute items such as necklaces, bracelets, and brocades; among them, the necklace is segmented, with a chain body of large white beads, a chest ornament base of one square and two circles,

separated from the chain by blue gemstones at the junction, and a teardrop-shaped blue gemstone pendant suspended below the chest ornament (Figure 11).

Figure 8: Hellenistic Gold Necklace in the Collection of the Walters Art Museum, United States, Late 2nd Century BCE-1st Century CE

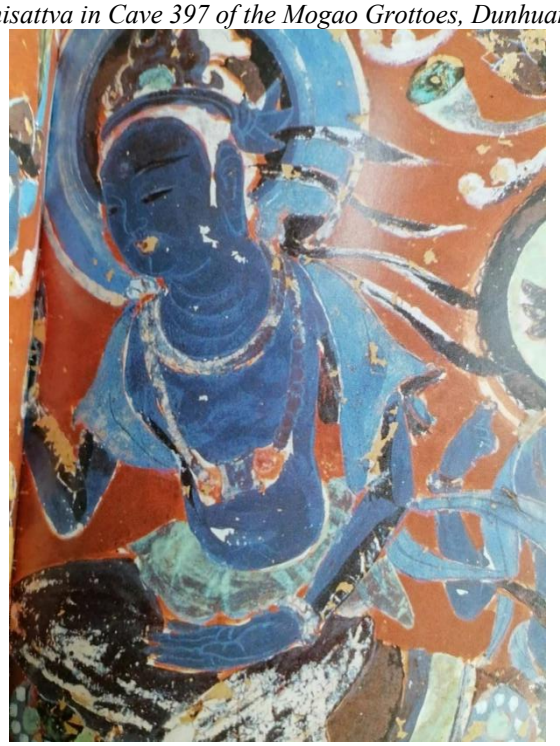
Figure 9: Gold Necklace from the Parthian Dynasty of Persia, 1st-3rd Century

Figure 10: Gold Necklace from Glodosy, Ukraine, 7th-8th Century

Figure 11: Mural from the "Ambassadors' Hall" at Afrasiab, Uzbekistan, 7th Century

From Dunhuang murals, segmented necklaces generally appear starting from the Sui Dynasty and continue into the Tang. The long necklace worn by a Sui Dynasty bodhisattva in Cave 397 of the Mogao Grottoes is clearly segmented, with a beaded chain body, a chest ornament base of one square and two circles, and a pendant obscured by discoloration in the mural (Figure 12). From the Afrasiab envoys and Dunhuang bodhisattvas to the Li Jingxun tomb in Xi'an, these outline the general trajectory of such necklaces' dissemination along the eastern Silk Road segment, also suggesting their popularity during the Sui and Tang periods. Moreover, based on the aforementioned materials, segmented beaded chains appear to have been an exclusive necklace style for high-ranking nobles and deities at the time.

Figure 12: Bodhisattva in Cave 397 of the Mogao Grottoes, Dunhuang, 6th-7th Century



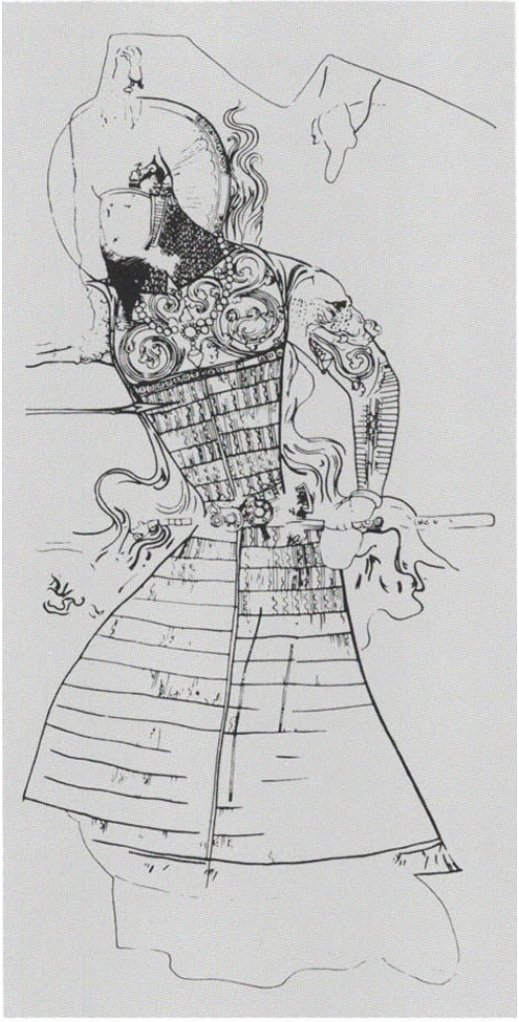
3.4.3 Arched-Sided Square Base

The square base of the necklace's chest ornament features inward-curved arcs, not only perfectly integrating with the flanking circular gold settings but also lending greater harmony and unity to the overall ornament. This type of base appears in the Glodosy necklace from Ukraine, but it seems to have existed in the Sogdian region as well. In the temple murals at Penjikent, Tajikistan, the "paradise" scene is adorned with an ornate segmented beaded chain, where the central square base appears to have arched sides [18, fig. 6]. Additionally, two actual arched-sided square bronze fittings were unearthed from a local architectural site [19]. On coins issued by the Turkic rulers who controlled Chach (present-day Tashkent, Uzbekistan) in the early 7th century, kings frequently wear segmented necklaces with a chest ornament base of one square and two circles, the square base clearly featuring arched sides [20].

3.4.4 Linked Pearl Clusters

The red gemstone of the necklace is surrounded by a circle of inlaid pearls, forming clusters known as linked pearl motifs (lianzhu), previously often regarded as a characteristic of Persian-Sogdian art, as seen in the linked pearl-patterned brocade garment worn by the figure in Figure 11. Nobles and deities in Persian coins and Sogdian murals frequently wear necklaces centered with pearl clusters; for example, in a Penjikent mural, a warrior wears a large pearl necklace with a small pearl cluster at its center (Figure 13), and the linked pearl clusters on the brocade clearly represent a stylized version of such necklaces. However, pearl clusters are not exclusive to Persian-Sogdian art; at the time, they were popular from the Mediterranean to East Asia, as seen in a Byzantine bracelet in the Metropolitan Museum of Art collection.

Figure 13: Murals from Penjikent, Tajikistan, 7th-8th Century



According to the author's observations, Byzantine pearl clusters are often strung on wires, and when inlaid in settings, they are frequently secured with prongs, with other materials' beads interspersed between pearls, resulting in clusters that appear relatively loose and free-form. Combined with the typically non-perfectly round shapes of the pearls and beads, this further diminishes the regularity of the clusters. The linked pearl cluster on the Glodosy necklace pendant from Ukraine is strung with transparent crystal beads on gold wire, likely influenced by Byzantium while also reflecting the barbarian groups' relative indifference to pearls. In contrast, the pearls on the Li Jingxun necklace are inlaid in cylindrical gold foil settings, which not only conceal the pearls' irregularities but also arrange them tightly and neatly, imparting a sense of order to the cluster. The neat arrangement of cylindrical settings into clusters appears common in jewelry of southern sedentary nomadic groups, found around the Black Sea, in Central Asia, and in China's Northern Dynasties, though these settings preferentially inlay vividly colored gemstones or imitations. Considering the preference for pearls, it is more likely related to Persian-Sogdian art.

3.4.5 Teardrop-Shaped Pendant

The gemstone of the necklace's pendant appears to be crystal, backed with blue and engraved with a pattern on the surface, set in a metal base. Byzantine and Black Sea regional necklaces also commonly feature teardrop-shaped pendants, often suspended point-downward, with further decoration below the point or on the sides. In contemporaneous Persian-Sogdian necklaces, teardrop-shaped pendants are mostly oriented point-upward, as seen in the Afrasiab mural. This subtle difference is significant, reflecting distinct modes of thought.

A heart-shaped pendant unearthed from the mid-7th century Sogdian tomb of Shisuiyan in Guyuan, Ningxia, appears to be blue-backed crystal engraved with a pattern on the surface, set in a gilded base with a

suspension ring at the top. From the Balalyk Tepe site in Uzbekistan, a 5th-6th century teardrop-shaped pendant was unearthed, featuring a metal base inlaid with emerald-simulating glass and engraved with a nude goddess nursing an infant motif [21]. Thus, such patterned teardrop-shaped pendants made of inexpensive semi-precious stones or imitation gems may represent a Sogdian tradition.

3.4.6 Gemstone Pairing

The central part of the necklace uses a large red gemstone, while the remaining sections employ relatively smaller blue gemstones; on the bracelet, large green glass pieces are placed between two small pearls, with the clasp using turquoise—all gemstones are regularly shaped and cut. Clearly, the craftsmen pursued harmony and unity in color, size, and shape, with emphasis on focal points. Jewelry in Sogdian murals typically uses gemstones of the same color, favoring blue ones—this aligns with the Li Jingxun necklace.

3.4.7 Joints and Clasps

When connecting the necklace's components, rather than simple ring hooks or ties, bolt-like devices are used, with small circular gold settings welded atop the bolts, inlaid with gemstones or pearls to conceal the joints. Additionally, inconspicuous areas such as the pendant's gold chain and the bracelet's rivets employ gilding. This clever concealment and cost-saving technique is also seen in several 6th-7th century earrings and pendants unearthed at Penjikent [19].

The Li Jingxun bracelet's clasp is also relatively uncommon. Contemporaneous Byzantine jewelry interfaces often use large metal roundels decorated with openwork, filigree, etc., as in the Metropolitan Museum bracelet. Ajanta Caves murals show that Indian bracelet interfaces frequently inlay large gemstones, a practice also seen in Sogdian mural jewelry; the bracelet opening mechanism may resemble that of the Metropolitan Museum's Byzantine bracelet, unlike the hook-and-ring used in the Li Jingxun bracelet. A copper ornament unearthed at Penjikent features six gem-inlaid circular bases forming a large circle, with a central void for inserting a hook-and-ring [ref. 19, Рис.78(9)], strikingly similar to the six-petal flower large circle design of the Li Jingxun bracelet.

In summary, the Li Jingxun necklace and bracelet exhibit symmetrical structures, rich and harmonious colors, and rigorously precise components, forming a dignified and elegant style. In comparison, contemporaneous Byzantine pieces favored multicolored elements, openwork, filigree, and large roundels, while Indian jewelry often incorporated hammered patterns, bead nets, bells, and gold foil on main structures (see Figure 4 for Ajanta Caves headdresses, armlets, and long necklaces), resulting in styles that lean toward ornate beauty.

3.5 Images and Symbols

The gemstone with the intaglio deer motif is relatively small, the deer pattern only vaguely outlined, and when the necklace is worn, the deer motif is positioned at the nape of the neck, difficult to see easily; thus, this pattern appears to lack much aesthetic function. Even more peculiar are the four prominent incisions on the surface of the crystal pendant, which not only serve no aesthetic purpose but instead disrupt the gemstone's complete smoothness. Both of these gemstones are relatively hard; if not for aesthetic reasons, why would the craftsmen go to the trouble of engraving them? Moreover, the most visually striking element of the necklace is the central red gemstone of the chest ornament, which aligns precisely with these two engraved symbolic gemstones along a prominent central axis. As noted earlier, this necklace is a rigorously harmonious work, with the craftsmen attending to every detail and integrating them perfectly. Therefore, the patterns, symbols, and central axis are likely not arbitrary but carry some symbolic significance.

The deer on the necklace is depicted in a side-standing pose, with a robust body, small head, large antlers, short tail, thick and short neck appearing to have fluff on the chest and throat, and antlers in a backward-tilting branched form, with the front two tines close together and slanting forward, the second and third tines farther apart with angular turns—this seems to be a male red deer (*Cervus elaphus*). Female red deer lack antlers and have slender necks, while males have thick, short necks with fluff, heads bearing large branched antlers whose main beam grows backward, but with brow tines slanting forward almost at right angles to the beam; the second tine hugs the brow tine closely, and due to the extremely short distance, it is termed the "opposing tine", a key feature distinguishing it from other deer species.

In the 6th-7th centuries, intaglio red deer on gemstones are mainly seen in so-called “Sasanian seals”. The deer on Sasanian seals are highly stylized, mostly in profile, with standing or recumbent postures; standing deer often have one foreleg extended forward, as if advancing yet pausing, conveying a noble but rigid demeanor (Figure 14); the antlers are often crescent-shaped, with vertical lines incised to indicate branching; the head is slightly triangular, with eyes pointed and round, either facing forward or turning back; the neck sometimes bears a ribbon, a common element in Persian art originally signifying royal divine nobility, later symbolizing good fortune; the body is slightly cylindrical, sometimes with a few lines indicating folds in the hide; the haunches are rounded, emphasizing the deer’s plump rotundity; the hooves of standing deer are often rendered as inverted triangles pointing downward, occasionally forked in the middle to indicate cloven hooves. Evidently, the noble standing pose, cylindrical body, rounded haunches, and inverted triangular hooves of the deer motif on the Li Jingxun necklace closely resemble those on Sasanian seals.

Figure 14: Sasanian Seal with Intaglio Standing Deer Motif, 3rd-7th Century

Deer are a common motif in 6th-8th century Sogdian art, even used to distinguish Sogdian from Sasanian art. Deer motifs are a characteristic of Sogdian gold and silverware, typically in noble or serene poses, whereas deer on Sasanian gold and silverware are often hunting prey. Animal patterns on Sogdian brocades feature deer most frequently, while Sasanian brocades are more commonly decorated with lions, rams, peacocks, and so on [22]. In the 6th-7th centuries, Sogdia was under the control of nomadic Turks, who practiced deer worship. When Xuanzang passed through the Sogdian region of Qiansui, he noted: “The Turkish khagan comes here every year to escape the summer heat. There is a herd of deer, many adorned with bells and tassels, tame toward people and not easily startled. The khagan cherishes and rewards them, issuing an order to his followers: ‘Whoever dares to kill or harm them will be punished without mercy’. Thus, this herd of deer lives out its natural lifespan” [ref. 23, Vol. 1, p. 76]. Two gilded silver deer were unearthed from the garden of the Second Turkish Khaganate’s Bilge Khagan, possibly crafted by Sogdian artisans; the Turkish khaganate had many Sogdians, including goldsmiths [24]. Additionally, some Turkish stelae before tombs feature carved deer motifs. The custom of burying deer sculptures and carving deer motifs on tomb steles was widespread among Scythian-Siberian nomadic groups from the 1st millennium BCE onward [25].

The recurring deer in Eurasian nomadic art suggests an eternal Great Goddess, akin to the Great Mother, Mistress of Animals, or Potnia Theron, possessing immense power over life and death; initially, the Great Goddess was aniconic, hinted at through deer and the like, but with contacts with Greek and Persian cultures, she began to take human form, and the deer’s realism intensified to the point of overshadowing its divinity (in some regions even replaced by goats or other beasts). Antlers grow in spring and shed in autumn, creating visual and symbolic links with trees that flourish in spring and wither in fall. Trees root in the underworld and reach toward the sky, implying cosmic layers and the natural cycle of “life-death-rebirth”; birds connect to the sky and souls, playing key roles in life’s cyclical transformations. Thus, deer/beasts, trees/axes, birds, and the Great Goddess became common symbolic combinations in nomadic jewelry [26, 27].

A 1st-century gold diadem from the Khokhlach barrow in Novocherkassk, Russia, provides striking evidence of this symbolic complex. The diadem belonged to the Sarmatian nomads, who originated in Central Asia before migrating westward to the Black Sea region. At its center is an image of the goddess Artemis [28], topped by a tree forming a central axis with the goddess, flanked by deer, goats, and birds

(Figure 16). Artemis in Greek mythology is the Mistress of Animals and Mother of Mountains and Streams, with deer as her sacred beast; she is the ruler of nature, bestowing and safeguarding life, nurturing animal young, suckling and protecting newborns until marriageable age, awakening feminine consciousness, and guarding women in childbirth [29]. Evidently, Artemis's attributes resemble those of the nomadic Great Goddess, so the Hellenized Sarmatians near the Black Sea used an Artemis statue to represent the Great Goddess—a common phenomenon of religious syncretism and iconographic borrowing since the Hellenistic era.

Figure 15: Afghan Carnelian Seal with Deer Motif in the Collection of the British Museum, 7th Century

Figure 16: Gold Crown from Khokhlach, Russia, 1st Century

A contemporaneous gold crown from Tillya Tepe in Afghanistan consists of five golden flower trees, flanked by abstract beasts and topped by birds (Figure 17). Though the crown does not directly depict the goddess, accompanying gold plaques (Figure 5) confirm her presence—the goddess also adopts a Hellenistic form, her semi-nude body and flanking beasts attesting to her identity as "Mistress of Animals", with the goddess and the flower (tree) atop her head forming a central axis, birds on either side of the flower. From the second half of the 1st millennium BCE, such gold crowns or headdresses spread widely from the Black Sea to East Asia; the popular Han-Jin buyao (hairpin) crowns in China may result from their eastward transmission [30-32].

Figure 17: Gold Crown from Tillya Tepe, Afghanistan, 1st Century

Based on the above background, the deer and vertical central axis on the Li Jingxun necklace may similarly allude to the Great Goddess. The necklace uses 28 gold beads, inlaid with 280 pearls, further enhancing the likelihood of this goddess's presence. The number 28 was a sacred figure in many ancient cultures, representing the days in a lunar month, with a lunar month having four phases, each lasting 7 days, totaling 28 days.[1] The four lunar phases form a cycle from waning to full and back to waning, each half requiring 14 days, perfectly aligning with the necklace's "14+14" circular structure, while the moon's waxing and waning symbolizes the cycle or transformation of "birth-death-rebirth". Women's normal menstrual cycles last about 28 days, with menstruation signaling sexual maturity and entry into the childbearing years. Women's pregnancy lasts about 280 days, and pearls are special gems nurtured within bivalves, so 280 pearls symbolize the gestation and birth of life. Sexuality, fertility, and death fall squarely within the Great Goddess's domain.

Due to the lack of more detailed materials, it is impossible to determine the Great Goddess's name definitively, but based on the necklace's cultural context, Anāhitā, Nana, or Umay are strong possibilities. Anāhitā was the most important goddess in the Sasanian dynasty, associated with water and rivers; she purifies men's seed and women's wombs, grants maidens fine husbands, blesses women in childbirth and child-rearing, nurtures crops and herds, and aids in military victories [33]. Nana was the most revered Great Goddess in Sogdia and Bactria, linked to war, fertility, wisdom, and water [34]. Umay is the mother goddess among Turkish and Mongolian peoples, her name appearing in Turkish khagan inscriptions; she is the

[1] A lunar month averages 29.5 days, with about 1.5 days of invisibility, thus approximately 28 days; one phase lasts 7 days, four phases 28 days.

fertility goddess protecting animals, women, and children, also responsible for carrying away the souls of the dead, and still venerated by some Central Asian ethnic groups today [35, 36]. Due to similar attributes, these goddesses inevitably underwent religious syncretism and iconographic borrowing; Kushan coins from Bactria bear images of Artemis but inscriptions naming her Anāhitā or Nana [37]. Thus, the name is unimportant; the key is the "mother goddess" attributes of fertility and protection.

Ancient deities were often linked to celestial bodies, with the life-and-death-controlling Great Goddess frequently associated with the moon or Venus. For instance, Artemis is the guardian of the moon, twin to the sun god Apollo; Anāhitā, influenced by Mesopotamian Inanna, connects to Venus; Nana often holds sun and moon, with a crescent on her head representing the moon or Venus, indicating her celestial nature [38]. Umay and her sister are also deemed connected to the sun and moon. Therefore, the deer-motif gemstone may additionally symbolize a celestial body, its blue-black color evoking the night sky and readily associating with the moon or stars.

The necklace's red gemstone and pearl cluster may symbolize the sun and its rays. The association of large round red gemstones with the sun is ancient; Egyptian jewelry frequently used prominent round carnelians to symbolize the rising sun disk "Re", as in the famous Tutankhamun scarab pectoral. The falcon-headed god Horus's left eye represents the moon, the right the sun, depicted in art with round lapis lazuli and carnelian, respectively. Based on the sun and Horus's unrivaled power, carnelian served as an amulet [39]. A Parthian necklace centers a large round (imitation garnet) glass, surrounded by gold granules forming triangular rays symbolizing solar beams, with flanking eagles further alluding to the sun.

The Li Jingxun necklace's red gemstone is surrounded by 24 pearls; 24 is a sacred number in Persian culture, with Sasanian kings wearing necklaces of 24 pearls, and Persian brocades featuring linked pearl clusters formed by 24 white dots [40, 41]. More importantly, the sun god Mithra emits 24 rays, as seen in the Taq-e Bostan relief of Ardashir II's (4th century) coronation with Mithra, and a Sasanian seal in the British Museum (accession no.1932.5-17.1) depicting Mithra [ref. 42, figs. 8, 9]. Note that on the British Museum seal, Mithra's lowermost ray is obscured by a mountain. The sun dispels darkness, brings light, and is essential for life; weather changes, seasonal shifts, and consequent vegetation cycles all relate to the sun. Thus, the sun god Mithra is believed to thwart evil, bless righteous followers, promote prosperity for humans and livestock, bring rain, and foster plant growth [33].

The pendant, at the lowest point of the central axis, is crystalline, light blue, and teardrop-shaped, possibly symbolizing falling rainwater. In the relatively arid regions of Central and West Asia, the rain god Tishtar is highly venerated. The Persian Zoroastrian scripture *Avesta* contains a dedicated long hymn [33]. In Sogdia, Tishtar appears as the consort and guardian of the Great Goddess Nana, together on murals and ossuaries. The celestial body associated with the rain god is Sirius or Mercury; Sirius's appearance in the sky coincides with the autumn rains, thus seen as the liberator of rainwater, the star of familial harmony and joy, and a dispeller of illness and calamity. Water is the source of life, and rain's arrival heralds life's nourishment, so Tishtar is also linked to fertility.

The four incisions on the crystal surface are extremely rudimentary and unconnected, seemingly difficult to form an effective symbol; perhaps the unincised portions are the true symbol, i.e., relief positive in negative space. Due to the lack of more comparative materials, it is difficult to accurately identify the symbol, but it may be an abstract Central Asian tamga, Tishtar's companion beast the dragon, or an embryo curled in amniotic fluid—the *Avesta* describes Tishtar as "nurturing the embryo of waters".

In summary, the Li Jingxun necklace serves as both an ornament and an amulet, with its symbols, structure, and materials collectively constructing a complete symbolic system, where fertility and protection may be the system's focus.

3.6 Central Asian Craftsmen in Ancient Globalization

The necklace's craftsman may have originated from the Sogdian or Bactrian regions, or at least was influenced by the cultural and artistic traditions of that area. From the outset of his design, he targeted elite women as customers, thus adopting a segmented beaded chain structure with a pendant—a necklace style popular among high-ranking Central Asian nobility at the time. He planned to imbue the necklace with amuletic qualities through symbols, materials, and numbers to address ancient women's primary concerns

with sexuality, fertility, and protection. This was not a sudden inspiration; Central Asian jewelry had long followed similar traditions, with goddess statues responding to these needs being highly popular locally since the Common Era [43], and his peers were accustomed to incorporating such goddesses into ornaments. However, he may have wished for a more subtle and refined work, or perhaps influenced by the customs of the nomadic groups then controlling Central Asia, he chose the deer and central axis as allusions.

In terms of materials, he made careful selections: lapis lazuli from the Hindu Kush mountains and turquoise from Uzbekistan were the most readily available gemstones in the region, widely used in Central Asian jewelry production, and likely stocked in his own workshop. Patterns from ancient masterpieces like the Tillya Tepe gold ornaments may still have been circulating, and occasionally unearthed antique jewelry could have inspired him, leading his work to inevitably exhibit a touch of archaism. Nevertheless, as an accomplished jeweler, he was familiar with international trends, knowing that intaglio gemstones were popular in Persian culture, transparent gems in Byzantium, and that sapphires and emeralds were particularly favored. He may even have seen Byzantine-style jewelry firsthand, noting that sapphires and emeralds on Byzantine pieces were often cut into teardrop and square shapes, and thus employed teardrop-shaped crystal and square glass for imitation.

His international perspective stemmed from ancient globalization driven by commercial trade. Central Asia was a crossroads of several major civilizations along the Silk Road, making Silk Road trade a vital means of livelihood. Historical records describe the Sogdians: “When a child is born, honey is placed in its mouth and glue in its hand, so that as it grows, its words will be sweet and its grip on wealth as sticky as glue. They are adept at commerce, haggling over every fraction of profit. At twenty, the men are sent to foreign lands, passing through the Middle Kingdom. Wherever profit lies, they go without hesitation” [44]. This illustrates their pronounced mercantile ethos. Naturally, the region became a contested prize among great powers, successively controlled by the Sasanians, Hephthalites, and Turks. Particularly from the mid-6th century, with the rise of the Turks, Sogdians became advisors and agents for the Turks in Silk Road trade, beginning with the Turkish khagan dispatching Sogdian merchants on missions to Byzantium, through which the Sogdians established a vast commercial network from the Mediterranean to East Asia [45], persisting until the 8th century.

Leveraging this network, the Sogdians not only engaged in transshipment trade of Chinese silk, Turkish furs, Sasanian glass, Indian gemstones, Byzantine gold and silverware, and the like, but local handicrafts also began mass-producing imitations of these high-value, best-selling goods. The Sasanian-style gilded silver ewer with Greek mythological motifs from the Guyuan tomb of Li Xian of the Northern Zhou, and the Byzantine gold coins from the Shi family tombs, may have been imitations produced in Bactria and Sogdia [46]. The Sogdians also brought this imitative trend to China, where the Sogdian descendant He Chou, for Emperor Wen of the Sui, replicated Persian gold brocades and revived the long-lost technique of green glass production [9]. It can be said that the Sogdian commercial network facilitated sustained long-distance exchanges among different cultures, thereby triggering cultural transformations (such as the prevalence of “Hu” styles in the Northern Dynasties, Sui, and Tang, and the evident “Hu-ization” of the court), which aligns precisely with the definition of ancient globalization [47].

It was precisely ancient globalization that engendered the complexity of Silk Road art, explaining why certain details of the gold ornament appear simultaneously in multiple locations across East and West. Yet this also raises a question: Was the Li Jingxun necklace certainly made in Central Asia proper? As a “go-anywhere” mercantile people, the Sogdians were highly mobile, establishing numerous immigrant settlements along the Silk Road, with some even leveraging their wealth and talents to successfully enter local elite circles [48, 49]. He Chou, for instance, earned the Sui emperor’s favor through his expertise in architecture, carriage and attire production, and crafts. Interestingly, Li Jingxun’s father, Li Min, once served as Director of the Directorate of Imperial Construction, overseeing civil engineering projects, and likely had frequent interactions with someone like He Chou. Thus, could the necklace and bracelet, so rich in “Hu” flavor, have been made by Sogdians who had entered China, such as He Chou?

The thick commercial atmosphere shaped a shrewd and adaptable national character. Xuanzang, who had firsthand experience there, described the Sogdians as having “corrupt and perverse customs, full of deceit and trickery, generally greedy and profit-driven, with fathers and sons scheming for gain, esteeming wealth above all, without distinction between noble and base” [23]. The necklace’s creator seems to carry this cultural

gene—as the target customers were high-end clientele, yet he used glass and low-end gemstones to imitate luxury ones; the gold chain is strung externally with large gold beads, and the gold clasp is large and precise, giving the visual impression of generous materials and opulent style, but after a millennium of corrosion, the pendant's gold chain appears to be gilded, as are the rivets on the gold bracelet; this corner-cutting is a common technique among Sogdian peers. However, he well understood that exquisite design and fine workmanship could mask material shortcomings, making this the necklace and bracelet's greatest selling point.

3.7 Noble Patrons in Cross-Cultural Contexts

Beyond the necklace and bracelet, the high-footed gold cup, ceramic flat flask, glassware, and another ceramic flat flask unearthed from the Li Jingxun tomb are also linked to foreign cultures.

The Li Jingxun epitaph has long definitively established her status, with the epitaph lid inscribed "Epitaph of the Daughter of the Sui Left Illuminating-the-Emperor's-Household Grandee", and the opening line stating: "The lady, named Jingxun, courtesy name Xiaohai, from Chengji, Longxi; granddaughter of the Grand General-in-Chief and Governor-General of You Province, Zhuang Gong; fourth daughter of the Left Illuminating-the-Emperor's-Household Grandee Min". These emphasize her paternal lineage and noble status as a daughter of the Li family. The subsequent epitaph text recounts Yang Lihua's upbringing of her, due to the deep affection between grandmother and granddaughter, as well as Yang Lihua's dominant role in the exceptional burial arrangements; the mention of the emperor's reaction is a boast-worthy posthumous honor, a phenomenon occasionally seen in epitaphs of ancient nobility. The epitaph makes no mention whatsoever of Li Jingxun's mother, implying that her mother's position in the Sui was not prominent, and that her identity as a Northern Zhou princess was taboo. Furthermore, from the tomb's structure and attendant ceramic figurines, the grade of the Li Jingxun tomb was actually lower than those of true princesses such as Yuwen Rong and Yang Jinghui.

Thus, the anomalies in the Li Jingxun tomb have nothing to do with "foreign princess" status; the special burial site and method primarily stem from the power and affection of her family and maternal grandmother, while the "Hu"-style grave goods are likely related to the globalized and cross-cultural context in which she lived.

As previously discussed, the Li Jingxun necklace and bracelet involve multiple cultures; the same holds for the other "Hu"-style grave goods. For instance, the high-footed gold cup has been unearthed from high-grade tombs from the Northern Dynasties through the Sui and Tang, with the vessel form originating in the Mediterranean and widely popular across Eurasia in the 6th-7th centuries. The Pereshchepina hoard on the northern Black Sea coast in Ukraine yielded multiple high-footed gold and silver cups, alongside contemporaneous Byzantine, Sasanian, and Sogdian artifacts; the hoard belonged to the 7th-century Turkic-descended Bulgars [50]. In 6th-7th century murals at the Balalyk Tepe site in Uzbekistan, Hephthalite nobles frequently hold similar high-footed cups during banquets. They elegantly grasp the base of the high-footed cup with thumb and forefinger, a posture imitated by the Turks and appearing on 6th-7th century stone carvings of Turkic women at Lake Issyk-Kul in Kyrgyzstan (Figure 18) [51]. In the stone bed canopy from the tomb of An Jia in Xi'an, An Jia, conversing with Turks, holds a high-footed cup in a similar pose, with the cup body gilded to indicate it is a gold cup [ref. 52, Plate 63], and he was the *sabao*, the official appointed by the Northern Zhou to manage Hu merchants.

Evidently, from the mid-6th century, the Turks established a vast empire and, with Sogdians as agents, actively participated in Silk Road trade, profoundly influencing this ancient globalization; thus, "Turkic-Sogdian symbiotic culture" is a common element in Silk Road art. The Sui maintained close ties with the Turks, which goes without saying. Emperor Yang of the Sui vigorously developed the western regions; in the third year of Daye, he dispatched Pei Ju to the Hexi Corridor to attract Hu merchants to China, and sent envoys like Wei Jie and Du Xingman to various western states, returning with treasures [9]. In the fifth year of Daye, Emperor Yang personally toured the west; these initiatives brought a brief climax to this globalization within Sui borders. The Li Jingxun family and her maternal grandmother were both at the core of power, closely tied to political developments, and deeply influenced by this globalization—Li Jingxun and Yang Lihua dying en route during Emperor Yang's northern and western tours, respectively, serve as clear evidence. Thus, the "Hu"-style grave goods tell the clichéd story of power and luxury: power afforded Li Jingxun the opportunity to access the latest international trends.

Figure 18: Turkic Female Stone Carving from Lake Issyk-Kul, Kyrgyzstan, 6th-7th Century

However, jewelry differs from other artworks; most people passively encounter temple sculptures, grotto murals, or public architecture, but body-worn jewelry requires active acceptance. Jewelry with amuletic properties used as grave goods further demands cultural understanding and identification. The Li family's cross-cultural background undoubtedly provided the prerequisite for her acceptance and comprehension of this necklace. The Li family originally hailed from northern nomadic groups; after settling in Guyuan, they had close interactions with Sogdians, adopting a Han surname yet retaining their "Hu" spirit—martial prowess over literary arts, with her father Li Min being "handsome in bearing, skilled in riding and archery, proficient in song, dance, pipes, and strings, versed in all". A fondness for "Hu"-style items was a family tradition; despite severe looting, the tomb of her great-grandfather Li Xian still yielded multiple western imports, including a gemstone ring worn by Li Xian's wife engraved with a nude female holding ribbons, possibly the Persian goddess Anāhitā bearing fertility responsibilities.[2] Chinese ancient art typically avoided nudity, so without understanding and endorsing the symbolic meaning behind the nude female, such a "shocking" piece of jewelry would hardly have been chosen.

The symbolic meaning of the Li Jingxun necklace may seem extremely obscure to modern people, but not to the Li family, who had long lived in a cross-cultural context. Close contacts with Hu people allowed them to easily decipher the necklace's symbolism, while their Xianbei heritage made them naturally understand and accept it—the deer, tree, bird, and underlying goddess were shared cultural codes among Inner Eurasian steppe peoples, repeatedly appearing in Xianbei jewelry. For example, a Xianbei deer-tree buyao from the Xihezi hoard in Inner Mongolia uses a deer head as the base, with massive antlers simulating tree branches laden with flowers and leaves (Figure 19). The antler-tree reflects the ancient shamanic belief of Eurasian nomads that "the world tree reaching toward heaven transforms into antlers", with the deer serving as a celestial conduit and intermediary between gods and humans. This concept persists today among Siberian nomads, who slay deer at funerals to accompany the deceased to the underworld or ancestral abode [53]. Guiding souls to and from the underworld or ancestral lands is central to shamanism, with shamans playing the leading role. To ensure a smooth journey, shamans require auxiliary tools: drums painted with celestial patterns serve as mounts, attire adorned with antlers and feathers protects the shaman and grants transformative powers, and the shaman tent's pillars—symbolizing the world tree or an imagined axis—connect heaven and earth [26]. Shamanic beliefs and shaman priests once played significant roles in Xianbei

[2] Nude or semi-nude females holding ribbons frequently appear in West and Central Asian art, with her identity undetermined; Anahita is a common interpretation. Regardless, nudity or semi-nudity often relates to sexuality and fertility.

regimes [54, 55], and though the Xianbei gradually Sinicized, successive northern steppe nomadic powers like the Rouran and Turks rose, continually reviving memories of the deer, tree, bird, and goddess.

Figure 19: Deer-Tree Buyao from Damiao Banner, Inner Mongolia, 5th-6th Century

Li Jingxun died in the fourth year of Daye, at the age of nine. Combining this with the historical facts of the third to fifth years of Daye, when Emperor Yang dispatched Pei Ju and others to the western regions to attract Hu merchants and return with treasures, the necklace was likely imported or made around this time and came into Li Jingxun's possession. Nine years old marks the transition from childhood to adolescence for females; typically, breast development begins around age nine, and girls with better nutrition may experience menarche, making it highly appropriate to wear this necklace symbolizing guidance, fertility, and protection at this stage. Since deer also function to escort the deceased's soul to the afterlife, the necklace was equally fitting as a grave good when she tragically died young.

Li Jingxun was interred on the twenty-second day of the twelfth month, a full six months after her death; in contrast, Yuwen Rong was buried just six days after dying. The prolonged delay in Li Jingxun's burial may relate to large-scale tomb tower construction but could also involve awaiting a special date—Lichun, the Beginning of Spring. The day after her burial was Lichun, signifying the revival of all things and the start of a new cycle, perfectly corresponding to the final link in the nomadic art's deer-tree symbolic system of "life-death-rebirth". If this speculation holds, it suggests that, beyond Buddhist elements, the funeral may have incorporated shamanic factors.

In the fourth year of Daye, within a Sui palace, Li Jingxun—clad in beautiful silk, adorned with a golden flower-tree headdress,[3] golden necklace, and golden bracelet—gracefully pinches the base of a high-footed gold cup with delicate fingers protected by golden arm guards. A thousand miles away, Sui envoys in the tent of the Western Turkic khagan's consort witness Turkic noblewomen sipping grape wine from similar

[3] This inevitably brings to mind the often-overlooked Li Jingxun headdress, shaped like a cluster of golden flower trees topped by a winged moth. It is generally considered related to Wei-Jin and Southern-Northern Dynasties buyao, evolving either from tree-form buyao crowns influenced by the West or from indigenous Chinese buyao flowers, with opinions divided [ref. 56, Vol. 2, pp. 513–518, refs. 57, 58]. If the Li Jingxun flower-tree ornament can be traced to western tree-form crowns, the flying moth undoubtedly evokes the birds atop golden tree crowns. When worn on the head, it forms an invisible vertical central axis with the body, a design incorporating the human form as the axis also seen in nomadic art. However, did the designer of the golden flower tree hold shamanic beliefs? If so, the symbolic meanings of the golden flower-tree headdress and the golden necklace unexpectedly align—is this coincidence or something more profound, awaiting further materials for resolution.

high-footed gold cups in the identical pose,[4] just as the Issyk-Kul lakeside Turkic noblewoman statue depicts: clad in a lapel brocade Hu robe and a three-pronged crown, yet her segmented gold necklace and gem-inlaid bracelet resemble those of the young girl in the Sui palace—this is all the result of cross-cultural exchanges amid the waves of globalization.

4. Conclusion

This article posits that the Li Jingxun necklace and bracelet are related to the ancient eastern Iranian region, particularly the areas of Sogdia and Bactria. This was a crossroads of Silk Road civilizations and, under the impetus of the Turkish Empire in the 6th-7th centuries, became a frontier of ancient globalization; thus, the gold ornaments exhibit multiple cultural elements. In the early 7th century, Emperor Yang of the Sui's policies of attracting Hu merchants and dispatching envoys brought this globalization to a brief climax within Sui borders, with the gold ornaments likely manufactured or imported at that time. Raised in the palace from childhood, Li Jingxun's family occupied the core of power and possessed a cross-cultural background, enabling her to obtain and appreciate these gold ornaments. The anomalies in Li Jingxun's funeral arrangements resulted from the interplay of the broader historical context and the family's specific circumstances, as well as power and emotion.

References

[1] Institute of Archaeology, Chinese Academy of Social Sciences. Tang Chang'an Suburban Sui-Tang Tombs. Cultural Relics Publishing House; 1980.

[2] Kiss, A. A Byzantine Jewel from the 6th-7th Century in China, Acta Orientalia Academiae Scientiarum Hungaricae. 1984, 38(1/2), 33-40.

[3] Xiong, C. On the Provenance of the Gold Necklace and Gold Bracelet Unearthed from the Sui Tomb of Li Jingxun, Wenwu. 1987(10), 77-79.

[4] Xiong, V. C., Laing, E. J. Foreign Jewelry in Ancient China, Bulletin of the Asia Institute. 1991, 5, 163-173.

[5] Watt, J. C. Y., Others. China: Dawn of a Golden Age, 200–750 A.D. New York: Metropolitan Museum of Art; 2004.

[6] Zhao, Y. Insights into East-West Cultural Exchange from the Necklace Unearthed from the Sui Tomb of Li Jingxun, Art & Design (Theory). 2020(4), 140-142.

[7] Ding, N. Research on Exotic Jewelry under Silk Road Exchange. Ph.D. Thesis, China University of Geosciences, 2023.

[8] Zhou Shu. Zhonghua Book Company; 1971.

[9] Wei, Z. Sui Shu. Zhonghua Book Company; 1973.

[10] Luo, F. A Brief Study on the Epitaphs of Li Xian and His Wife, Art Research. 1985(4), 59-61.

[11] Li, X., Yu, F. Li Xian of the Northern Zhou and His Family, World of Cultural Relics. 2020(11), 33-38.

[12] Zhou, F. Research on the Sui Tomb of Li Jingxun: Also on the Background of the Use of House-Shaped Stone Coffins before the Tang Dynasty, Huaxia Archaeology. 2012(1), 100-110, 119.

[13] Thoresen, L. Archaeogemmology and Ancient Literary Sources on Gems and Their Origins.In Gemstones in the First Millennium AD: Mines, Trade, Workshops and Symbolism, Hilgner, A., Greiff, S., Quast, D., Eds., Mainz: Römisch-Germanisches Zentralmuseum; 2017, pp. 155-218.

[14] Kostov, R. I. Archaeomineralogy of Turquoise in Eurasia.In La Parure En Callaïs Du Néolithique Européen, Querré, G., Cassen, S., Vigier, E., Eds., Oxford: Archaeopress; 2019, pp. 387-396.

[4] See [ref. 9 Vol. 87, p. 3300], on Sui missions to the Western Turks.

[15] Chen, H. Archaeological Research on Gold Bead Ornaments Unearthed from the Maritime Silk Road During the Han Dynasty, Journal of Guangxi Normal University (Philosophy and Social Sciences Edition). 2012(1), 133-137.

[16] Гмии Им. А.С. Пушкина, Гос. Эрмитаж. Украшения Востока. Из Коллекции Патти Кадби Берч. США: Орияк: Характер; 1999.

[17] Han, X. Sogdians and the Transmission of Seals (Bead Ornaments) Along the Overland Silk Road in the Medieval Period, Silk Road Research Bulletin. 2022(2), 63-76, 526.

[18] Maršak, B. I., Raspopova, V. I. Cultes Communautaires Et Cultes Privés En Sogdiane.In Histoire Et Cultes De L'asie Centrale Préislamique, Bernard, P., Grenet, F., Eds., Paris: Éditions du CNRS; 1991, pp. 187-195.

[19] Распопова, В. И. Металлические Изделия Раннесредневекового Согда. Ленингр: Наука; 1980.

[20] Шагалов, В. Д., Кузнецов, А. В. Каталог Монет Чача III-Viii Вв. Ташкент: Фан; 2006.

[21] Ремпель, Л. И. Цепь Времён. Вековые Образы И Бродячие Сюжеты В Традиционном Искусстве Средней Азии. Ташкент: Издательство Литературы и Искусства имени Гафура Гуляма; 1987.

[22] Kageyama, E. Use and Production of Silk in Sogdiana.In Ērān Ud Anērān: Studies Presented to Boris Il'ič Maršak on the Occasion of His 70th Birthday, Compareti, M., Raffetta, P., Scarcia, G., Eds., Venezia: Cafoscarina; 2006, pp. 317-332.

[23] Xuanzang, Bianji. Da Tang Xiyu Ji Jiaozhu. Zhonghua Book Company; 2000.

[24] Chen, L. Archaeological Research on the Turkish Khaganate and Eurasian Cultural Exchange. Shanghai Guji Publishing House; 2013.

[25] Aruz, J., Farkas, A., Fino, E. V. The Golden Deer of Eurasia: Perspectives on the Steppe Nomads of the Ancient World. New York: Metropolitan Museum of Art; 2006.

[26] Jacobson, E. The Deer Goddess of Ancient Sibe. Leiden: E. J. Brill; 1993.

[27] Jacobson, E. The Hunter, the Stag, and the Mother of Animals: Image, Monument, and Landscape in Ancient North Asia. Oxford: Oxford University Press; 2015.

[28] Трейстер, М. Ю. Диадема Из Кургана Хохлач, Размышления О Центре Изготовления, Древности Боспора. 2021, 26, 381-410.

[29] Zolotnikova, O. A. Becoming Classical Artemis: A Glimpse at the Evolution of the Goddess as Traced in Ancient Arcadia, Journal of Arts and Humanities. 2017, 6(5), 8-20.

[30] Sun, J. Buyao, Buyao Crowns, and Shaking Leaf Ornaments, Wenwu. 1991(11), 55-64.

[31] Tian, L. Examination of the Origins and Development of Buyao Crowns, Northern Relics. 2021(6), 69-79.

[32] Peterson, S. A Study of the Gold Folding Crown from Tillâ-Tepe as an Indicator of Cultural Exchange.In Cultures in Contact: Central Asia as Focus of Trade, Cultural Exchange and Knowledge Transmission, Baumer, C., Eds., Wiesbaden: Harrassowitz Verlag; 2022, pp. 205-223.

[33] Dustkhah, J. Avesta: Zoroastrian Sacred Scriptures. Commercial Press; 2005.

[34] Saadi-Nejad, M. The Goddess Nana and the Kušan Empire: Mesopotamian and Iranian Traces, Acta Via Serica. 2019, 4(2), 129-140.

[35] Потапов, Л. П. Умай — Божество Древних Тюрков В Свете Этнографических Данных.In Тюркологический Сборник 1972Eds., Москва: Наука, ГРВЛ; 1973, pp. 265-286.

[36] Котов, В. Г. Женское Божество Умай/Хумай: Сравнительная Характеристика, Известия Алтайского Государственного Университета (Серия: История, Политология). 2010(4/2), 111-114.

[37] Grenet, F., Marshak, B. I. Le Mythe De Nana Dans L'art De La Sogdiane, Arts Asiatiques. 1998, 53(1), 5-18.

[38] Shenkar, M. Intangible Spirits and Graven Images: The Iconography of Deities in the Pre-Islamic Iranian World. Leiden & Boston: Brill; 2013.

[39] Hussein, A. M. Beware of the Red-Eyed Horus: The Significance of Carnelian in Egyptian Royal Jewelry.In Perspectives on Ancient Egypt: Studies in Honor of Edward Brovarski, Hawass, Z. A., Eds., Le Caire: Conseil Suprême des Antiquités de l'Egypte; 2010, pp. 185-190.

[40] Akbarzadeh, D. A Note on Sasanian Glassware and Zoroastrian Sacred Numbers, Iranian Journal of Archaeological Studies. 2022, 12(2), 37-45.

[41] Akbarzadeh, D. Sacred Beads of Pearl Necklaces of Sasanian Kings Based on Their Coins, Iranian Journal of Archaeological Studies. 2023, 13(2), 103-116.

[42] Compareti, M. Two Seal Impressions from Kāfer Qal'a (Samarkand) and the Representations of Iranian Divinities, Journal of Persianate Studies. 2013, 6(1-2), 127-142.

[43] Заславская, Ф. А. Богиня Плодородия В Коропластике Афрасиаба Кушанского Времени, ИМКУ. 1959(Вып.1), 22-59.

[44] Wang, P. Tang Huiyao. Zhonghua Book Company; 1960.

[45] De La Vaissière, É. A History of Sogdian Merchants. Guangxi Normal University Press; 2012.

[46] Luo, F. The Central Asian-Style Gilded Silver Ewer from the Northern Zhou Tomb of Li Xian: Centered on Bactrian Metalwork, Journal of Archaeology. 2000(3), 311-330.

[47] Jennings, J. Globalizations and the Ancient World. Cambridge: Cambridge University Press; 2011.

[48] Rong, X. Medieval China and Incoming Civilizations. Sanlian Bookstore; 2001.

[49] Rong, X. Medieval China and Sogdian Civilization. Life·Reading·New Knowledge Sanlian Bookstore; 2014.

[50] Kasparova, K. V., Bulgarien, K. Z. K. Treasure of Khan Kubrat: Culture of Bulgars, Khazars, Slavs. Sofia: Centre for Publicity and Print at the Committee for Culture Bulgaria; 2000.

[51] Kubarev, G. V. Turkic Statues from Apshiyakta, Central Altai: On Female Representations in Turkic Monumental Art, Archaeology, Ethnology and Anthropology of Eurasia. 2017, 45(1), 93-103.

[52] Shaanxi Provincial Institute of Archaeology. Xi'an Northern Zhou Tomb of An Jia. Cultural Relics Publishing House; 2003.

[53] Namatov, M. Totem of Deer in Turkic Peoples. Available from: https://tengrifund.ru/totem-of-deer-in-turkic-peoples.html (accessed 21 February 2026).

[54] Yang, Y. On the Tuoba Xianbei's Primitive Worship of Heaven, Journal of Northwest Minzu University (Philosophy and Social Sciences Edition). 2002(6), 28-38.

[55] Shao, Z. On the Early Religious Beliefs of the Xianbei and Their Transformation, Northeast History and Geography. 2007(2), 48-52.

[56] Li, Y., Chen, S., Dong, J., Cao, Z. History of Ancient Chinese Jewelry. Jiangsu Phoenix Literature and Art Publishing House; 2020.

[57] Yang, Z. Buyao Flowers and Buyao Crowns.In Boundless Treasures: The National Treasures of Afghanistan at the Crossroads of Eastern and Western Civilizations, Tsinghua University Art Museum, Eds.: Tsinghua University Art Museum; 2019, pp. 409-414.

[58] Chi, W., Hu, X. Examination and Morphological Reconstruction of Chinese Buyao Origins: Also Debating the 'Western Origin Theory of Buyao', Image History. 2022(1), 23-95.

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