

A study of cross-cultural exchange and integration in Yuan Dynasty blue-and-white porcelain across multiple contexts—focusing on the Alimari phoenix-headed flat-bodied vase and the Topkapı meiping vase

*Haimu Li**, *Fuli Meng*

Shihezi University, Shihezi, China

*Corresponding Author. Email: 315405141@qq.com

Abstract. Taking the Ali Mari phoenix-headed flat-bodied jar and the Topkapı blue-and-white plum vase as case studies, this article employs iconographic evidence, material cultural history, and cross-cultural comparison—combined with the design logic of their decorative motifs—to examine their production contexts, dissemination pathways, and cultural implications. Both vessels originated in Jingdezhen during the Yuan Dynasty and were made using the same Sumaliqing cobalt pigment, yet they differ markedly in form, decoration, and function: the phoenix-headed flat-bodied jar was a domestic giftware piece, blending the forms of the "Celestial Rooster" and "Stirrup" jars, and was bestowed upon the Chagatai Khanate via the Steppe Silk Road; the Topkapı meiping, on the other hand, was a piece intended for export trade, densely decorated with multi-layered patterns, and reached the Ottoman court via the Maritime Silk Road. These differences are rooted in the adaptation and integration of civilizations across the "object–image–culture" dimensions, highlighting the inclusivity of global civilization mediated by porcelain. Porcelain serves as a visual legacy of material trade and tangible evidence of aesthetic exchange, reflecting the process by which Chinese porcelain culture has integrated into global material civilization through trade and gifts.

Keywords: blue-and-white porcelain of the Yuan Dynasty, cross-cultural exchange, flat-bodied vase with a phoenix-head handle, Topkapı meiping, The Silk Road

1. Introduction

In 1998, a Yuan Dynasty blue-and-white phoenix-headed flat-bodied jar was unearthed at the Alimali Ancient City site in Huocheng County, Ili, Xinjiang [1]. This artifact features a unique design—with a phoenix head serving as the spout and a phoenix tail as the handle; the body is flat and round, decorated with intertwined peony and phoenix motifs, and fired using imported "Sumaliqing" cobalt pigment [2]. Only two such pieces are known to exist worldwide; the other was unearthed in 1970 at the site of the Yuan Dynasty's Dadu in Beijing and is currently housed in the Capital Museum [3] (see Figure 1). The piece unearthed at Alimali is now the crown jewel of the Ili Kazakh Autonomous Prefecture Museum [4]. Meanwhile, at the Topkapı Palace

Museum in Istanbul, Turkey—10,000 li away—there is a collection of Yuan Dynasty blue-and-white porcelain. One example—a blue-and-white peony-and-branch-patterned meiping vase—is large in size and features intricate patterns, representing a rather unique category of Yuan blue-and-white porcelain [5]. This collection of porcelain was treasured by successive sultans of the Ottoman Empire, with its acquisition dating back to the period following the conquest of Constantinople in 1453 [6]. Located at the hub of the Grassland Silk Road (Alimali) and the terminus of the Maritime Silk Road (Istanbul), respectively, these two artifacts constitute a classic case study for cross-cultural research.

Research on Yuan blue-and-white porcelain began in the 1950s [7]. British scholar John Alexander Pope used a blue-and-white elephant-eared vase with a "Zhizheng 11th Year" inscription from the David Collection as a reference piece [8]. By comparing it with artifacts from the Adbir Temple in Iran and the Topkapı Palace in Turkey, he was the first to identify the "Zhizheng-type" Yuan blue-and-white porcelain, thereby laying the foundation for research on this category [9]. Since then, scholars in China and abroad have conducted comprehensive analyses of Yuan blue-and-white porcelain based on criteria such as origin, chronology, kiln sites, cobalt pigments, and decorative motifs. Archaeological investigations at the Alimali site first began in the 1950s. Authorities in Xinjiang have conducted multiple field surveys and small-scale excavations at the site, uncovering various artifacts related to the Chagatai Khanate, gold and silver coins, and Nestorian Christianity. The discovery of the phoenix-headed flat-bodied jar in 1998 provided direct evidence of the practical use of Yuan blue-and-white porcelain in the Western Regions.

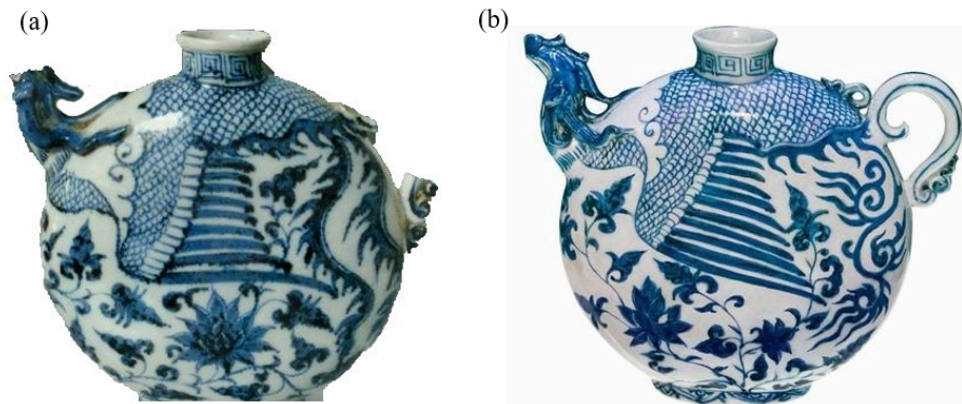


Figure 1. Two extant specimens of Yuan Dynasty blue-and-white phoenix-headed flat-bodied flasks with cross-cultural characteristics. (a) Yuan Dynasty blue-and-white phoenix-headed flat-bodied flask unearthed from the ancient city of Alimali (present-day Huocheng, Xinjiang), collected by Ili Kazakh Autonomous Prefecture Museum; (b) Yuan Dynasty blue-and-white phoenix-headed flat-bodied flask preserved in the Capital Museum, excavated from the ruins of Yuan Dadu (modern Beijing)

Among the studies on the Yuan blue-and-white porcelain collection at Topkapı Palace, the collaborative project between the British Museum and Topkapı Palace stands out as the most significant. This project systematically cataloged the palace's collection, confirming that it comprises more than 40 pieces, making it one of the world's most important collections of Yuan blue-and-white porcelain. This study takes the Alimari phoenix-headed flat-bodied vase and the Topkapı meiping vase as core cases—both fired in Jingdezhen with identical "Sumaliqing" cobalt, yet divergent in form, decoration, and function—and from a cross-cultural communication perspective poses the following question: How, within the unified Mongol imperial space, did these two vessels embody distinct production logics, travel via the Steppe and Maritime Silk Roads through different institutional mechanisms, assume reconfigured functions and symbolic meanings in the contrasting

contexts of domestic gift and export commodity, and, through their formal and decorative convergences and divergences, reveal mechanisms of cross-cultural exchange? By tracing their complete "production–circulation–consumption" chains, this paper moves beyond stylistic analysis to illuminate the multi-layered logic of "object–image–civilization", thereby deepening understanding of how Chinese porcelain culture was integrated into global material civilization through trade and tribute.

2. Production context: kilns, raw materials, techniques, and civilization

During the Yuan Dynasty, Jingdezhen was home to the "Fuliang Porcelain Bureau", an institution dedicated exclusively to the production of porcelain for the imperial court. The production of Yuan blue-and-white porcelain took place precisely within this institutional framework [10]. Based on archaeological findings and surviving artifacts, Yuan blue-and-white porcelain can be divided into two categories: one is for export, featuring large forms (large plates, large bowls, large jars) and dense decorations, primarily sold to Islamic regions in the Middle East; the other is for domestic consumption or as imperial gifts, featuring medium-sized forms (vases, jugs, bowls, plates), with sparse and elegant decoration, intended for use by the imperial court and nobility or for bestowal as gifts. The Alimari Phoenix-Headed Flat-Bodied Pitcher belongs to the latter category. With its compact form and sparse yet harmonious decoration, it forms a pair with the "Luan Pitcher" unearthed in Beijing and was likely a wine vessel used by the imperial court or nobility [11]. The Topkapı meiping, on the other hand, belongs to the former category. Standing approximately 40–45 centimeters tall, it is a large vessel covered in multiple layers of decorative patterns; it is a typical "Zhizheng-style" Yuan blue-and-white porcelain, produced specifically for export to the Middle Eastern market. This is corroborated by historical records: *A Brief Account of the Island Barbarians* repeatedly mentions "blue-and-white flowers" and "blue-and-white ware" as trade goods [12]; *The Travels of Marco Polo* also notes that near the city of Zaitun, "bowls and porcelain are manufactured in great quantity and of fine quality" [13]. This demonstrates that Yuan blue-and-white porcelain was already an important export commodity at the time.

The rich, vivid blue-green color of Yuan blue-and-white porcelain derives from high-quality cobalt from Persia—"Sumaliqing" [2]. This cobalt, which is high in iron and low in manganese, forms unique black crystalline spots after firing, creating a textured surface when touched [14]. It was transported in a steady stream from Persia to Jingdezhen via the Silk Road. From a scholarly perspective, high-quality cobalt from Persia during the Yuan Dynasty was imported into China via both the overland and maritime Silk Roads, while Jingdezhen's porcelain artisans designed and produced blue-and-white porcelain with elegant forms and vibrant colors to meet the aesthetic demands of various regions. Both of these pieces were fired using "Suma Liqing" [15]. The Alimali phoenix-headed flat-bodied vase "has a pure white body, is entirely covered with a white glaze, and features a lustrous glaze with a bluish tint within its whiteness [16]. The color is deep and vivid, with a slight diffusion effect; in the denser areas, black crystalline spots form, creating a textured surface when touched" [17]. The Topkapı meiping also exhibits the typical color characteristics of Yuan blue-and-white porcelain; its blue-and-white hues are deep and rich, with clearly visible crystalline spots [18]. The glaze characteristics of both pieces confirm the technical practice of using imported cobalt in Jingdezhen during the Yuan Dynasty. The firing of Yuan blue-and-white porcelain represents a phenomenon of "Chinese porcelain + Persian cobalt", which not only integrates techniques from multiple regions but also translates cultural exchange into tangible results within the production process.

The design origins of these two artifacts reflect characteristics of multicultural fusion [19]. Regarding the shape of the vases themselves, the blue-and-white phoenix-headed flat-bodied vases found from the Yuan Dynasty feature a flat, rounded body and a short ring foot, with a height of approximately 18–20 centimeters

[20]. The neck is straight, with a small, lip-shaped rim; the spout is depicted as a phoenix head (with a high crown, wide-open eyes, and an open beak serving as the spout), while the handle takes the form of a phoenix with a curled tail. The phoenix's body connects to the upper part of the vessel, with both wings hanging down on either side, thus presenting the entire phoenix in its complete form [21]. Examining the "Fengshou Bianhu" (Flat-Headed Phoenix-Headed Teapot) based on this form, its design can be traced back to the "Tianji Hu" (Celestial Rooster Teapot) of the Jin and Tang dynasties, reflecting the elegant style favored by Central Plains culture. The tail of the "Shoubo Luán" teapot is decorated with scroll patterns, while the tail of the Yili "Feng" teapot features a sawtooth pattern [22]; the Luán teapot has a larger decorative surface and more saturated blue-and-white hues, whereas the Feng teapot uses slightly smaller patterns with faintly blurred blue-and-white coloring; Judging by the arrangement of the surface patterns, the upper half depicts the phoenix's body and wings, with feathers rendered in fine blue-and-white lines that create clear layers; the lower half features intertwined peony motifs, a continuous decorative style characteristic of Persian-Islamic art; these are complemented in certain areas by scrollwork and ruyi cloud patterns as transitional elements—though varied, the design remains uncluttered, with a clear hierarchy between primary and secondary elements. From a cultural and ideological perspective, this represents the fusion of Central Plains and nomadic traditions. The phoenix-headed flat-bodied jar served practical purposes in aristocratic life, while also incorporating diverse cultural elements into a unified political and aesthetic framework through ritual systems or display. The phoenix is a symbol of Central Plains culture; as a traditional auspicious bird of the Huaxia people, it represents good fortune, nobility, and peace [23]. The peony appears as the "King of Flowers", symbolizing prosperity and flourishing. The combination of the two embodies Han Chinese aesthetic sensibilities and traditions of seeking blessings [24]. The design of the flat-bodied jug bears distinct hallmarks of nomadic civilization. Its flat, regular form was originally intended to suit the equestrian lifestyle of nomadic peoples such as the Mongols—it fits snugly against saddles, is easy to suspend, and remains stable to prevent knocks and bumps, effectively meeting the practical needs of nomadic migration. Sharing a similar design philosophy is the silver flat-bodied pot with a carrying handle unearthed from the "Heishihao" shipwreck [25]. although the two differ in material and have slightly different primary uses, they share the core morphological advantages of the flat-bodied pot. The widespread appearance of a large number of flat-bodied vessels clearly reflects the extremely large user base for this form and further confirms people's fondness for and recognition of this vessel type, which combines practicality with aesthetic appeal. It not only meets the needs of nomadic peoples for carrying goods on horseback but also suits the daily display and storage needs of agricultural communities, while further satisfying the transportation requirements of overseas trade by saving cargo space and facilitating stacking; Regardless of whether the material was clay, metal, or other substances, and regardless of how localized the patterns became, these vessels never deviated from the fundamental morphological logic of the flat-bodied jar. It is precisely for this reason that they were able to transcend geographical, ethnic, and even cultural boundaries, gaining popularity among diverse groups and becoming a widely acclaimed, iconic artifact across civilizational contexts.

When Topkapı Palace served as the imperial palace of the Ottoman Empire, it housed a vast collection of Chinese porcelain (including approximately 40 pieces of Yuan-dynasty blue-and-white porcelain), ranking first in quantity outside of China itself; among these was a peony-patterned meiping vase [26] (see Figure 2). Judging by the shape of the vessel, it stands approximately 42 centimeters tall and exhibits the typical "small mouth, short neck, full shoulders, tapered body, and ring foot" form of a meiping vase [27]. The shoulders are full, and the body tapers elegantly downward, forming a smooth S-shaped curve; the low ring foot is unglazed, revealing a dry, crisp body; some pieces have lids, which are cup-shaped and blend seamlessly with the body of the vessel [28]. Although the form draws on the tradition of Central Plains decorative ware, its larger size

makes it well-suited for imperial court use and banquet settings; in terms of the layering of the decorative elements, each section is separated by fine string patterns, clearly distinguishing primary from secondary motifs—complex yet not cluttered. The neck is decorated with banana leaf motifs; the leaves are spread out and the lines are delicate, a design commonly used on Yuan Dynasty blue-and-white porcelain; the ruyi cloud-head motifs on the shoulder are full and rounded, with simple floral additions inside, serving as a transitional pattern linking the neck to the body [29]; the body forms the main body of the decoration—namely, the climbing peony motif. The peony petals are plump, the leaves are gracefully curled, and the branches are unbroken with no gaps. The composition of the climbing peony motif not only inherits the Central Plains tradition of the "endless vitality" symbolized by the climbing pattern but also incorporates the Islamic artistic concept of continuity. The stylized lotus-petal motifs on the lower leg (a typical "Eight Major Patterns" design of Yuan Dynasty blue-and-white porcelain) feature complete outlines, with concise patterns inside and neat terminations, creating a harmonious balance with the rest of the vase's decoration. From a cultural and philosophical perspective, this meiping vase, whose form originates from the Song Dynasty, represents traditional Central Plains ceramics, embodying aesthetic values and lifestyles associated with agrarian civilization. As an auspicious motif of the Central Plains, the climbing peony symbolizes prosperity, fulfillment, and celebration; it is a universally recognized form of prayer in Han Chinese society and serves as evidence of the continued development of Central Plains culture during the Yuan Dynasty. Even when exported overseas, it did not lose its core value; the aesthetic it embodies—reflecting wealth, stability, and imperial authority—represents the continuation of mainstream Han Chinese aesthetics into the Yuan Dynasty. This meiping serves as tangible evidence of the flourishing Maritime Silk Road during the Yuan Dynasty; its materials, craftsmanship, and decorative motifs can all be regarded as achievements spanning civilizations. The imported Sumaliqing cobalt pigment, which entered China via the Silk Road from Persia, exemplifies the fusion of West Asian materials with Central Plains craftsmanship [19].

Although the decorative motifs on the two vessels differ in complexity, both feature the "entwined peony" as their primary motif [30]. In traditional Chinese culture, the peony symbolizes wealth and good fortune, and it is also highly regarded in Islamic culture. The cross-cultural acceptance of this motif demonstrates that Jingdezhen artisans adopted a design strategy of "maintaining the core motif while adjusting the layout": using traditional Chinese auspicious patterns as the core and adapting the composition to meet the aesthetic demands of different regions, which also reflects the artisans' deep understanding of and proactive adaptation to the needs of overseas markets [31]. Furthermore, both artifacts were made using Jingdezhen's specially formulated two-component body clay (kaolin and porcelain stone), resulting in a pure white, solid, and flawless body; the glaze applied is a typical egg-white glaze with a gentle bluish sheen. The blue color of the blue-and-white decoration is derived from imported Sumali blue cobalt pigment, which appears rich and vividly emerald green, featuring rust-colored spots and sunken crystals—a technique characteristic of the finest Yuan Dynasty Jingdezhen blue-and-white porcelain. This production model of "shared origins but divergent streams" was precisely the result of the institutionalization of porcelain production during the Yuan Dynasty: under the unified management of the Fuliang Porcelain Bureau, the Jingdezhen kilns produced both exquisite wares to meet domestic demand and imperial gifts, as well as large-scale wares tailored for the export market, thereby forming a "two-sided" production model.



Figure 2. Predecessor craft prototype and mature finished product of Yuan Dynasty blue-and-white porcelain shaped flat-bodied vessels. (a) silver flat-bodied flask with lugs, unearthened from the Heishi Shipwreck; (b) Yuan Dynasty blue-and-white interlocking peony meiping vase, collected in Topkapı Palace Museum, Türkiye

3. Trade routes: from Jingdezhen to Alimari and Istanbul

These ceramic wares—which are quite common in daily life and home decor, especially ancient Chinese porcelain—are not only widely loved by people in China, where they have become indispensable items in social life, but are also highly popular overseas. The growing demand in overseas markets has, to a certain extent, stimulated the expansion and prosperity of ceramic production. Consequently, with the continuous development of overseas trade, these ceramics became highly significant export commodities. They successively integrated into the flow of trade along the Maritime Silk Road, were sold to all corners of the world, and played a vital role in ancient Sino-foreign trade and cultural exchange [32]. Furthermore, ceramics discovered in overseas regions can generally be divided into two categories: one category consists of non-commercial ceramics, such as imperial gifts and presents, of which there are limited quantities; the other category consists of ceramics widely sold abroad as commodities. This category is the most common and exists in very large quantities; scholars generally refer to it as "export porcelain", while others call it "trade ceramics" or "foreign trade porcelain", among other terms [33]. Still other scholars, noting its rise due to maritime trade, refer to it as "maritime ceramics" or "maritime porcelain industry", with various names in use. In fact, the nature of these ceramics exported to overseas regions is also diverse. Aside from ceremonial porcelain used for government diplomacy, trade porcelain alone can be further divided into government-sponsored trade and private trade, with the majority conducted via maritime trade—a point that has been clearly elaborated upon by scholars. The discussion here pertains specifically to this category of ceramics sold in large quantities overseas as commodities".

The prosperity of the Silk Road during the Yuan Dynasty was a prerequisite for the spread of Yuan blue-and-white porcelain throughout the world [34]. A series of western campaigns beginning with Genghis Khan had already enabled the Mongol Empire to encompass various regions of Eurasia, "opening up Central Asia, West Asia, and Europe; introducing the culture of the Western Regions; and facilitating overland and maritime trade routes". The resulting conveniences greatly promoted the trade in porcelain (and cobalt) as well as custom-made orders and processing on a contract basis. The Silk Road during the Yuan Dynasty was divided

into two major systems: the overland route and the maritime route [35]. Regarding the overland route, the Steppe Silk Road departed from Dadu, passed through the Northern Desert and the Western Regions, and extended to Central Asia and West Asia, with Alimari serving as a key node along this route; regarding the maritime route, the Maritime Silk Road departed from Quanzhou and Guangzhou, traversed the South China Sea and the Indian Ocean to the Persian Gulf, and ultimately reached West Asia and East Africa [36]. The two routes served different functions in the export of Yuan Dynasty porcelain. The overland route was better suited for the transport of small batches of high-value porcelain, while the maritime route, due to its large cargo capacity and low costs, became the primary channel for large-scale porcelain exports.

The *Yuan Dian Zhang* records: "We exchange our useless umbrellas, mohara, and porcelain... for items they find useful" [37]. This account demonstrates that porcelain was a key commodity in foreign trade during the Yuan Dynasty. Al-Mali, the capital of the Chagatai Khanate, was hailed as the "Paradise of Central Asia" and was a thriving metropolis along the Steppe Silk Road [38]. European envoys such as Paul de Balan and Rubruck had all visited the city [39]. The phoenix-headed flat-bodied jar was unearthed here, and its owner was likely a member of the khan's royal family or a high-ranking noble. Regarding how it arrived there, there are two main possibilities: first, the theory of imperial bestowal. The *History of the Yuan Dynasty* contains numerous records of Yuan emperors bestowing porcelain, gold, silver, and other items upon the kings of the Western Regions [40]. The phoenix-headed flat-bodied vase forms a pair with the "Luan vase" unearthed in Beijing; one remained in the capital, while the other was bestowed upon the Western Regions, creating a symbolic resonance within the political sphere. The paired relationship of "the harmonious singing of the Luan and the phoenix" alludes to the harmonious relationship between the central government and the Khanate; second is the trade theory. A large quantity of Yuan blue-and-white porcelain was exported to West Asia, and as Alimali served as a trade hub, it is also possible that porcelain was transshipped or consumed there. Records in historical documents mention overland transportation. During the Wanli period of the Ming Dynasty, when envoys from the "Countries of Tianfang" returned home from the capital carrying porcelain "over ten thousand li by land", they protected the porcelain by wrapping it securely with sprouting beans and wheat. However, considering the exceptional quality of the phoenix-headed flat-bodied vase and its correspondence with its "sister vase" in Beijing, the theory of a royal gift is more likely.

The Topkapı Palace, located in Istanbul, Turkey, served as the official residence of the Ottoman sultans. The palace houses a collection of more than 40 pieces of Yuan-dynasty blue-and-white porcelain, making it one of the world's most significant collections of this type. This collection is believed to have been acquired after the Ottoman conquest of Constantinople in 1453 [41]. Ma Weidu points out: "What is important is that there are clear records indicating that this collection of Yuan blue-and-white porcelain began to be acquired by the Topkapı Palace after 1453, and it has been there for over 550 years [42]. Although the time of acquisition was still a century after the pieces were fired, this is, after all, the collection of Yuan blue-and-white porcelain with the most recent historical connection in the world". The date of acquisition of the Yuan blue-and-white porcelain in the Topkapı Palace collection must have been after the Ottoman Empire's conquest of Constantinople in 1453 [43]. Regarding the provenance of the Topkapı meiping, there are three possibilities: first, a diplomatic gift. The Yuan Dynasty maintained close relations with the Ilkhanate (a Persian-Mongol regime), with frequent exchanges of envoys [44]. Blue-and-white porcelain from the Yuan Dynasty may have entered the court of the Ilkhanate as a state gift and later found its way to the Ottoman Empire. The connection between Yuan blue-and-white porcelain and the Ilkhanate was particularly close; as both the Mongol Yuan Dynasty and the Ilkhanate were Mongol regimes, porcelain served as an important token in their diplomatic exchanges. Second, trade procurement. Large quantities of Yuan blue-and-white porcelain were exported to the Middle East, and the Topkapı Palace collection may have been partially acquired through trade channels.

Archives of the Dutch East India Company record that European merchant ships vied to purchase Chinese porcelain during the 17th and 18th centuries; Yuan-dynasty blue-and-white porcelain, as a prized commodity, found its way into royal palaces, reflecting the historical tradition of continuous imports of Chinese porcelain into the Middle East. Third, war booty. During the Ottoman Empire's conquests, it may have acquired some porcelain from conquered regions (such as the Mamluk Sultanate and the Byzantine Empire). However, the sheer quantity and exceptional quality of the Yuan-dynasty blue-and-white porcelain in the Topkapı Palace collection far exceed what could be accounted for by war booty alone; it is more likely the result of long-term accumulation.

Wreck data provides tangible evidence of maritime trade. The Sinan Wreck (which sank in Korean waters during the late Yuan Dynasty) yielded more than 20,000 pieces of Chinese porcelain, including cargo tags written in ink on wooden slips that documented the packaging and transportation methods of the goods. This provides concrete evidence for understanding the maritime transport of Yuan Dynasty porcelain. By examining the wreck as a whole, one can assess the scope of maritime trade. From the Heishi Ship (9th century, over 67,000 pieces), the Jingliwen Ship (10th century, 300,000 pieces of Yue kiln celadon), the Nanhai No. 1 (Southern Song Dynasty, 180,000 pieces), the Huaguang Reef No. 1 (Southern Song Dynasty, over 10,000 pieces), to the Xin'an Shipwreck (Yuan Dynasty, over 20,000 pieces), each historical period has witnessed extensive maritime trade involving porcelain [45].

4. Usage contexts: users and object functions

The ruins of the ancient city of Alimali were the site of the capital of the Chagatai Khanate. Artifacts unearthed at the site over the years—including gold and silver coins from the Chagatai Khanate, Nestorian tombstones inscribed in Syriac, and Longquan celadon—attest to its prosperity as a trade hub along the Steppe Silk Road. The phoenix-headed flat-bodied jar was unearthed in a farm field; although it was not the result of a scientific excavation, given the nature of the site, it can be inferred that its user was a member of the khan's royal family or a high-ranking noble. Although the upper part of the spout is damaged and the phoenix-tail-shaped handle is missing, the vessel has been preserved, indicating that it retained value even after being broken. Possible uses may include: a wine vessel for banquets at the Khanate court; a gift bestowed by the Khan upon his subjects; and preservation as a memento after it was damaged. These three possibilities correspond to its practical, political, and commemorative functions, respectively.

Topkapı Palace served as the official residence of the Ottoman sultans and was the center of imperial power. According to research, the use of porcelain in the palace can be divided into three categories: first, practical tableware on the sultan's dining table; second, decorative items for court banquets; and third, artifacts in the cabinet of curiosities. Some scholars have pointed out: "The presence of Chinese porcelain typically signified that the space belonged to the sultan himself". This indicates that Chinese porcelain served as a symbol of power and status within the Ottoman court [46] (See Figure 3). The Yuan-dynasty blue-and-white porcelain in the Topkapı Palace collection consists mostly of intact pieces in good condition. This contrasts with the fragmentary state of the phoenix-headed flat-bodied jug from Alimari—the difference between integrity and fragmentation reflects the distinct approaches to porcelain in the two locations.

When comparing the two objects in terms of practical function, the phoenix-headed flat-bodied jug's role as a wine vessel is relatively clear; for example, its spout is designed with two pouring holes, making it suitable for actually pouring wine. Although the Topkapı meiping might also hold wine, its large size and intricate decoration suggest it was not necessarily an everyday item; rather, it was more suited for display. This distinction is intrinsically linked to the scale of the objects—smaller ones are functional, while larger ones are

meant for display. In terms of symbolic significance, both objects serve as emblems of power, yet they rely on different symbolic forms. The phoenix-headed flat-bodied jug incorporates the Beijing "sister jugs" into a paired system, thereby illustrating the harmonious relationship between the Khanate and the Central Plains—that is, the interconnectedness of various ranks and components within the Mongol Empire. The rarity and foreign origin represented by the Topkapı Meiping, on the other hand, serve precisely as symbols of the sultan's wealth and power, embodying the Ottomans' fascination with Chinese culture. From a commemorative perspective, the phoenix-headed flat-bodied vase, even in its broken state, was not discarded, serving as an example of a commemorative artifact; the Topkapı Meiping, preserved in its entirety, also holds significance in terms of cultural transmission. Neither object is merely a practical utensil; both are tangible forms upon which historical memory is anchored.



Figure 3. Medieval Islamic miniature paintings depicting Chinese porcelain and Sino-Western tributary communication scenes. (a) *The Sultan Receiving Tribute from Eastern Envoys*, miniature painting, collection of Topkapı Palace Museum, Istanbul, Turkey; (b) *Garden Banquet (Maidservants Displaying Chinese Porcelain)*, miniature painting, British Museum collection, London, United Kingdom

The differences in the contexts in which these two artifacts were used stem from the varying ways in which different civilizations understood and utilized porcelain. In the Mongol Khanate, porcelain served as practical drinking vessels and also held symbolic significance in relation to political ties between the central government and local authorities; in the Ottoman Empire, porcelain was used as court decoration and also served as a symbol of power or status. This "functional adaptation" is precisely a manifestation of how porcelain was imbued with new meanings during its cross-cultural transmission. It is worth reflecting on the fact that although these two artifacts are separated by vast distances and their contexts of use are vastly different, they both point to a common reality: in the cross-cultural transmission of porcelain during the Yuan Dynasty, porcelain was not merely a material commodity but also a carrier of meaning. It not only embodied the aesthetic ideals and craft traditions of Chinese culture but was also imbued with new cultural connotations in its places of reception, becoming a material medium for dialogue among diverse civilizations.

5. Cultural exchange: an analysis of mechanisms for cross-regional exchange

The emergence and spread of Yuan blue-and-white porcelain were the result of the fusion of diverse civilizations under Mongol rule. In *The Cultural Code of Yuan Blue-and-White Porcelain*, Xu Ming devotes separate chapters to "The Influence of Persian Culture", "The Influence of Buddhist and Daoist Cultures on

Yuan Blue-and-White Porcelain", and *"The Influence of Han and Mongol Cultures"*, revealing the complex facets of Yuan blue-and-white porcelain as a vehicle for cultural integration. From an artifact perspective, these two pieces epitomize the fusion of three cultural traditions: Han, Mongolian, and Islamic elements. The incorporation of Han culture is evident in the use of the phoenix and intertwined peony as primary motifs; the phoenix is a classical Chinese symbol of good fortune, while the peony traditionally represents opulence. The phoenix-headed flat-bodied jar derives its form from the "celestial rooster" jars of the Jin and Tang dynasties, and the plum vase is a common vessel type from the Song dynasty and beyond. Together, these elements constitute the objects' Chinese cultural foundation. Mongolian cultural elements are evident in the flat, rounded shape of the phoenix-headed flat-bodied jar, which reflects the characteristics of the "stirrup jar" used by northern nomadic peoples—designed for easy transport on horseback. Additionally, the tradition of decorating objects with animal motifs is closely tied to the aesthetic preferences of nomadic peoples. These elements reflect the practical functional needs of Mongolian culture as applied to these objects. Elements of Islamic culture are evident in the use of imported "Sumaliqing" cobalt pigment in both pieces, a product of the Persian region [47]; the "multi-layered, densely painted" decoration on the Topkapı Meiping is clearly inspired by Islamic decorative art. Such designs were highly popular and significant in the Islamic world. One scholar, after examining a Yuan-dynasty Jingdezhen blue-and-white dragon-patterned high-footed cup in the collection of the Xing'an League Museum, concluded: "The birth of blue-and-white porcelain was precisely the product of this cultural fusion—the cobalt pigment originated from Persia, the painting techniques absorbed fine-line elements from Central Asia, and the decorative motifs continued the traditional Chinese dragon-and-phoenix patterns". This observation holds true for both the phoenix-headed flat-bodied jar and the Topkapı vase. Behind this cultural fusion lay the movement of people and the dissemination of technology. During the period of the Mongol western campaigns, "while the Mongol army carried out brutal killings and plundering when they sacked the famous Central Asian city of Samarkand, they also took more than 30,000 artisans from the city and distributed them among Mongol princes and nobles as forced laborers; many of these artisans from the Western Regions later dispersed into the Central Plains". This measure objectively strengthened cultural and technical exchange and integration between China, West Asia, and Eastern Europe. The eastward migration of artisans from the Western Regions had a profound impact on the porcelain industry in Jingdezhen. In his research, Xu Ming discusses issues such as the "eastward migration of artisans from the Western Regions" and "Persian elements in Yuan-dynasty blue-and-white porcelain", arguing that these artisans introduced new craftsmanship techniques and decorative methods. It was precisely through exchanges and collaboration with artisans from the Western Regions that Jingdezhen porcelain artisans mastered the techniques for using imported cobalt and gradually developed a decorative system tailored to the demands of Islamic markets. At the same time, the aesthetics and craftsmanship of Chinese artisans also resonated within the Islamic world. Some of the Yuan Dynasty blue-and-white porcelain pieces in the Topkapı Palace collection clearly exhibit "Chinese-style" characteristics, yet their decorations have been rendered in an Islamic manner—an "Islamic Chinese style". This two-way influence is a profound manifestation of cross-cultural exchange.

At the same time, the prosperity of the Yuan Dynasty porcelain trade was inseparable from a well-developed port system and trade network. Quanzhou (Zaitun Port) was the most important foreign trade port during the Yuan Dynasty; Marco Polo referred to it as "one of the largest ports in the world" [48]. Wang Dayuan's *A Brief Account of the Island Barbarians* records dozens of overseas countries and regions, with porcelain being a recurring commodity in these trade relations [49]. By examining shipwrecks, this study can gain insight into the general network of the Yuan Dynasty's porcelain trade. Among the known shipwrecks, the Heishi (9th century, carrying approximately 67,000 pieces), the Jingliwen (10th century, 300,000 pieces of Yue kiln celadon), the Nanhai No. 1 (Southern Song Dynasty, 180,000 pieces), the Huaguang Jiao No. 1

(Southern Song Dynasty, over 10,000 pieces), and even the Xin'an Shipwreck (Yuan Dynasty, over 20,000 pieces) all attest to the long-standing prosperity of the maritime porcelain trade.

It is worth noting that the porcelain trade was not entirely a one-way export. Yuan-dynasty blue-and-white porcelain "has been found in relatively large numbers in the Middle East; in particular, the large blue-and-white pieces in Middle Eastern and West Asian styles were all specially crafted at the time to suit local customs". From this, this study can conclude that the kilns of Jingdezhen had given considerable consideration to the preferences of overseas customers, serving as an example of two-way trade. The spread of Yuan blue-and-white porcelain across different regions was not a coincidental phenomenon, but rather the result of the simultaneous interplay of three dimensions: "material, imagery, and institutional". Such diverse and multi-layered connections are, in themselves, a quintessential reflection of the Yuan Dynasty's cultural openness and diversity.

6. Conclusion and discussion

The cross-cultural dissemination of Yuan Dynasty blue-and-white porcelain serves as a prime example of cultural exchange along the Silk Road. Focusing on the Alimali phoenix-headed flat-bodied jar and the Topkapı meiping, this article examines the similarities and differences between these two artifacts—as well as the mechanisms of cross-cultural exchange they reflect—from four perspectives: production context, distribution routes, usage contexts, and cultural exchange.

The study reveals that while both objects were produced in Jingdezhen during the Yuan Dynasty and utilized imported "Sumaliqing" cobalt pigment, they differ significantly in form, decoration, and function: The phoenix-headed flat-bodied vase combines elements of the Central Plains' "Heavenly Rooster" vase and the nomadic "horse stirrup" vase; its decorative patterns are relatively sparse. Designed specifically as a gift for the domestic market, it was transported via the Steppe Silk Road to the Chagatai Khanate, where it served as a vessel for royal banquets. The Topkapı meiping, following the traditional form of Chinese meiping, features multi-layered, densely painted patterns. As a trade item intended for export, it was brought to the Ottoman court by sea and came to symbolize the sultan's authority and prosperity. These differences are not coincidental but rather the result of various civilizations adapting and integrating through the triple lens of "material—imagery—civilization": materially, a cycle had been established in which "Persian cobalt arrived in the East while Chinese porcelain traveled west"; visually, a unified decorative style emerged through "Chinese motifs combined with Islamic composition"; and institutionally, this was facilitated by the open system of the Mongol era, official control by the Fuliang Porcelain Bureau, and trade arrangements by the Bureau of Maritime Trade. It is precisely because of such multidimensional and profound interactions that Yuan blue-and-white porcelain can be called "the most important transnational brand of the late Middle Ages".

Porcelain is not merely a utilitarian object but a visual strategy that showcases the aesthetic tastes and cultural identity of the ruling elite. The phenomenon of the dissemination of Yuan blue-and-white porcelain can be used to analyze how China-centered porcelain culture integrated into the global material cultural process through trade, imperial gifts, and taxation. It represents not only the pinnacle of craftsmanship but also an artistic achievement born of collaboration among multiple civilizations. The two pieces come from opposite ends of the globe; one is fragmented, the other intact; one was unearthed in a field, the other preserved in the imperial collection. Though their respective contexts differ, both belong to the same historical narrative of mutual cultural influence. This very connection is likely the charm of Yuan blue-and-white porcelain: transcending geographical and ethnic boundaries, it unites diverse cultures and peoples, forming a heritage shared by all humanity.

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