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Research Article

A Study on the Application of the "Persimmon Calyx Nest Pattern" in Qing Dynasty Textile Embroidery

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Abstract

The "persimmon calyx nest pattern" attained its zenith of application during the Qing Dynasty, influenced by prevailing cultural trends. This research investigates the "persimmon calyx nest pattern" in textiles and embroidery from the Qing period. This study utilizes iconography and archeological typology to methodically delineate the motif's progression from its inception in the "persimmon calyx motif" of the Warring States period to the Han-Tang, Song-Yuan, and Ming dynasties. The examination examines three principal application types and creative traits in Qing textiles, offering a profound interpretation of their cultural significance. Research indicates that the "persimmon calyx nest pattern" of the Qing Dynasty experienced institutionalization and secularization while preserving its previous manifestations. The "nest" configuration, focused around a cross or rice-character structure, was employed for many purposes. It was intricately interwoven with the cosmic concept of "Heaven, Earth, and Humanity in Harmony" and embodied ethical goals for "the prosperity and stability of family and nation." The findings partially enhance iconographic pattern studies, providing academic reference for traditional textile motif research and modern preservation efforts.

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1. Introduction

The "persimmon calyx nest pattern", a composite decorative design derived from the "persimmon calyx motif," retains the structural stability and balanced composition of its predecessor while establishing a decorative system that integrates framework with filling and distinct figure-ground relationships, especially evident in textiles and embroideries from the Ming and Qing dynasties. This design demonstrates both strict formality and adaptable flexibility. It can function as the fundamental framework for textile embellishment while including various symbolic motifs, showcasing remarkable proficiency in ornamental integration and cultural significance. The author notes that current study on the "persimmon calyx motif" mostly emphasizes iconographic approaches. These studies primarily examine naming traditions and the visual identification of persimmon-stem patterns on excavated funerary objects. Zhang Pengchuan (2002) utilizes archaeological typological comparison to delineate the developmental lineage of persimmon-stalk patterns, employing graphic evidence to illustrate that this pattern is primarily derived from lotus

motifs and their variants. Li Ling (2012), referencing inscriptions from two bronze mirrors, rectifies the terminology of the persimmon calyx motif, contending that "persimmon calyx motif" is, in fact, a variant of "fanghua pattern" or "square-flower pattern". When utilized on decorative items such as bronze mirrors, it functioned as a directional indicator. Nevertheless, investigations into the "persimmon calyx nest pattern", which originates from the "persimmon calyx motif" are limited, with studies focusing on its utilization in Qing period textiles and needlework being especially uncommon. This work initially delineates the developmental progression of the "persimmon calyx nest pattern". Subsequently, utilizing the gathered visual materials, it scrutinizes the artistic attributes of their application in Qing dynasty fabrics and embroideries, while further investigating the foundational philosophical notions inherent in their design principles.

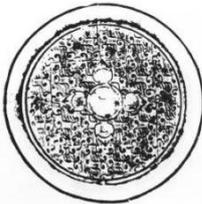
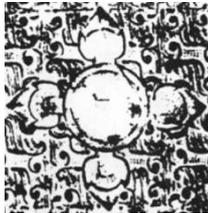
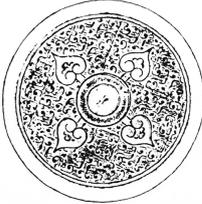
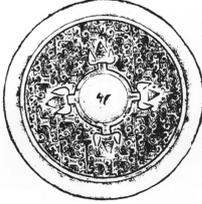
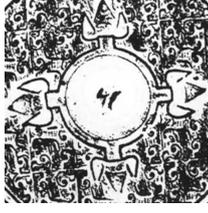
2. Origins and Evolution: The Pattern Transformation from "Persimmon Calyx Motif" to "Persimmon Calyx Nest Pattern"

The "persimmon calyx nest pattern," a traditional composite decorative pattern, originates from the Warring States period. It thrived during the Han and Tang dynasties, experienced transition in the Song and Yuan periods, and attained its zenith of use in the Ming and Qing dynasties. The evolutionary trajectory distinctly delineates the conventional progression of traditional Chinese decorative patterns—from simplicity to complexity, and from realistic representation to stylized symbolism.

2.1 Origins and Prototypes: The "Persimmon Calyx Pattern" from the Warring States Period to the Han and Tang Dynasties

The term "persimmon calyx motif" originates from its radiating structure of four or eight petals, which resembles the calyx of a persimmon fruit. The essential visual attributes are characterized by "one point and two curves," creating a symmetrical cross-shaped configuration. This motif was commonly featured on hard surfaces from the Warring States period until the Han dynasty, including bronze mirrors, lacquerware, jade artifacts, and tomb construction. Bronze mirrors served as the principal medium for this ornamentation; nonetheless, the pattern was commonly designated as "four-leaf" designs rather than "persimmon calyx motif," as illustrated in Table 1.

Table 1. Bronze Mirrors Featuring "Persimmon Calyx Motif" from the Warring States Period to the Han and Tang Dynasties.

No.	Period	Name	Illustration	Detail of "Persimmon	Form
1#	Warring States Period	Four-Leaf Mirror (Kong and Liu, 1992)			Flower bud Shape
2#	Warring States Period	Four-Leaf Mirror (Kong and Liu, 1992)			Peach Shape
3#	Warring States Period	Four-Leaf Mirror (Kong and Liu, 1992)			Mountain Shape
4#	Warring States Period	Flower-Leaf Mirror (Kong and Liu, 1992)			Peach-Leaf Shape

5#	Warring States Period	Beast Mirror (Kong and Liu, 1992)			Four Major Flat-Leaf Pattern
6#	Han Dynasty	Jinhua Eight-Petaled Leaf Mirror (Kong and Liu, 1992)			Four-Leaf Pattern
7#	Han Dynasty	Sunlight Single-Row Single-Layer Grass Leaf Mirror (Kong and Liu, 1992)			Persimmon Leaf Pattern
8#	Han Dynasty	Jianning Era Year 1 Deformed Four-Leaf Beast-Headed Mirror (Kong and Liu, 1992)			Bat-Shaped Four-Leaf Pattern
9#	Tang Dynasty	Four-Luan Treasure-Form Flower Mirror (Kong and Liu, 1992)			Eight-Petaled Rhombic Floral Shape
10#	Tang Dynasty	Four Horsemen Hunting Mirror (Kong and Liu, 1992)			Eight-Petaled Rhombic Floral Shape

As illustrated in Table 1, items 6# and 7#, the "persimmon calyx motif" transcended simple botanical representation throughout the Han Dynasty, gaining significant cosmic importance. In contrast to the varied four-cornered interpretations of the Warring States period, including flower buds, peaches, and mountain fruits, the Han-era "persimmon calyx motif" exhibited a more defined "cross" shape with outward-pointing orientation. When embellishing items, it was frequently perceived as a representation of the "celestial canopy" or the cosmic center, indicating the four cardinal directions and seasons. This pattern was intricately associated with the dominant ideologies of the Han Dynasty, emphasizing "the unity of heaven and humanity" and the pursuit of immortality. Usually located at the core of vessels or representations, it fulfilled both sacred and protective roles. The Han Dynasty not only perpetuated the Warring States tradition of embellishing the four-petaled persimmon calyx with animal patterns and inscriptions but also enhanced this decorative concept under the influence of prevailing cosmological thought. This established the foundation for the later construction of the "persimmon calyx nest pattern" framework structure, illustrated by the distorted four-petaled animal-headed mirror from the inaugural year of the Jianning dynasty, 8#, presented in Table 1. From the Wei-Jin dynasties until the Tang period, the "persimmon calyx motif" evolved beyond simple interior decoration. Owing to its favorable symbolism, the calyx form was progressively utilized for the external outlines of objects, with human, animal, or landscape figures occupying the inside space to produce a "relief"

appearance, as illustrated in Table 1, items 9# and 10#. This style, derived from the Han Dynasty's intricate decorations, enhanced the outline function of the persimmon calyx shape, serving as a valuable reference for product design. The utilization of the persimmon calyx motif progressively extended to textiles. The illustrious Tang Dynasty "persimmon calyx motif" had progressively lifelike, rounded designs, with its spiritual significance waning as its ornamental appeal intensified, establishing a foundation for subsequent development towards the "nest-shaped" motif.

2.2 Transformation and Naming: The "Persimmon Calyx-Shaped with independent contour design" and Cloud Shoulder Designs of the Song and Yuan Dynasties

The Song Dynasty signified the era during which the "kaiguang" decorative method developed and became prevalent in Chinese ornamental art. "Kaiguang" denotes the technique of delineating a decorative space with geometric borders and populating the interior with a core design. The "persimmon-calyx-shaped with independent contour design" subsequently materialized. This is well demonstrated in architectural painted patterns like "round nest persimmon stalk" and "circular head persimmon stalk," recorded in the Song Dynasty's "Yingzao Fashi" (Construction Methods), as well as on Cizhou ware pottery, illustrated in Figure 1. (Li, 2007) At this juncture, the interior of the "persimmon calyx" frame frequently had overlapping patterns, creating a unique "frame-filling" configuration. This emphasized the concept of "nest"—the "frame" functioning as a receptacle for the pattern. This form has also been implemented in textiles and apparel.



(a) Clustered Persimmon Calyx Nest Pattern



(b) Clustered Persimmon Calyx Nest Pattern

Figure 1. Colored Painting Pattern of "Persimmon Calyx Nest" Style Structure from the Song Dynasty.

(a) Clustered Persimmon Calyx Nest Pattern; (b) Clustered Persimmon Calyx Nest Pattern.

The Yuan Dynasty represented a crucial era during which the "persimmon calyx nest pattern" was incorporated onto garments, creating a standardized decorative design. *The History of the Yuan Dynasty* states: "At the inception of the Yuan, all matters were newly instituted. Headgear, garments, and carriages adhered to traditional conventions. Upon unifying the empire, Emperor Shizu approached the Jin and Song dynasties while distancing himself from the Han and Tang." (Song, 1976) The Mongol sovereigns of the Yuan Dynasty adopted other civilizations, integrating the superior aspects of previous dynasties' garments, thus maintaining the "persimmon calyx nest pattern". *The Study of Barbarian Customs* records indicates the existence of an additional style that envelops the shoulders and back, referred to as 'Jiaha'. The corners are pointed, akin to a scoop, and the sides drape over both shoulders. It should be composed of brocade and sable fur, a fashion already established during the Liao Dynasty. (Shen, 2002) Concurrently, the "jiaha" cape, prevalent during the Liao Dynasty, experienced additional development in the Yuan Dynasty owing to its remarkable adaptability to the nomadic, equestrian lifestyle of the Yuan monarchs, offering warmth and safeguarding against the cold. The

History of the Yuan states: "The yunjian (cloud shoulder) was crafted in the form of a four-tailed cloud, featuring a blue border and yellow gauze in five colors, adorned with gold inlays." (Song and Yan, 2002) This indicates that by the Yuan Dynasty, the design of the yunjian had achieved standardization. Incorporated with Mongolian robes, it transformed into an embroidered ornamental band encircling the collar. The "yunjian-style" decoration closely mirrored the "persimmon-calyx shape" in its external contour, frequently forming a "cross with four extensions" pattern around the collar and producing decorative units over the front chest, back, and shoulders. Textiles and paintings from the Yuan dynasty prominently display the four-petaled, collar-centered fill pattern, establishing the "persimmon calyx nest pattern" as a central decorative element and essential spatial arrangement in garments—especially noble robes—thereby directly impacting the Ming and Qing dynasties.

2.3 Peak and Consolidation: The Comprehensive Prosperity of the Ming Dynasty's "Persimmon Calyx Pattern"

In the Ming Dynasty, The rulers strengthened their awareness of class consciousness (Swope, 2015), the use of "persimmon calyx nest pattern" in court garments attained its creative pinnacle. In contrast to earlier dynasties, the "persimmon calyx modif" diminished in use as a garment embellishment, whilst "persimmon calyx nest pattern" became the primary ornamental element within the sartorial ornamentation framework. The "persimmon calyx nest pattern" had substantial enhancement in shape, structure, and symbolism, drawing from the cloud-shoulder style of the Yuan Dynasty. The nest pattern's framework preserved the classic suitable style, appropriate for the design, while also transforming into interlinked cloud-head patterns that resemble numerous fortunate clouds. Innovative structures, including "borderless nest pattern" and "semi-enclosed nest pattern," have emerged, as illustrated in Table 2. The designs adorning the nest became increasingly stylized and hierarchical. Symbolic creatures representing imperial power and official status—dragons, phoenixes, pythons, flying fish, ox-tigers, and qilin—predominated the compositions. These were enhanced by border themes like waves and cliffs, four-directional auspicious clouds, various treasures, and floral elements, creating complicated compositions where "every image conveys significance, and every significance is auspicious."Furthermore, they were flawlessly merged utilizing the "woven-in" process, wherein garments were crafted as a singular entity based on the configuration of the fabric panels and the arrangement of patterns, showcasing remarkable craftsmanship and design acumen. The "persimmon calyx nest pattern" of the Ming Dynasty represented authority, auspiciousness, and order, serving as the visual centerpiece of court ceremonial garments.

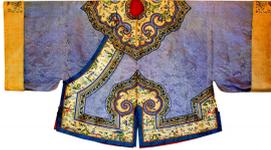
Table 2. Forms of the "Persimmon Calyx Nest Pattern" in Ming Dynasty Textiles.

No.	Name	Physical Image	Physical Detail	"Persimmon Calyx Nest Pattern" Form
1#	Cloud-patterned shoulder cape embroidered with dragon motifs in scattered-thread technique (Jin and Zhao, 2010)			With independent contour design (Suitable Style)
2#	Blue Brocade Robe with Gold-Plated Dragon Embroidery (Jin and Zhao, 2010)			Multiple cloud-head ornaments
3#	Persimmon-stem brooches adorn the shoulder-length robe Embroidered with floral patterns on the silk robe (Jin and Zhao, 2010)			Boundless Nest
4#	Golden Brocade Embroidered Lantern Maid Robe Fabric (Jin and Zhao, 2010)			Semi-enclosed nest shape

2.4 Inheritance and Evolution: Continuity and Innovation of the Qing Dynasty "Persimmon Calyx Nest Pattern"

The Qing dynasty's attire system integrated aspects from the Jin and Song eras while preserving and modifying the Ming system. (Sang and Guan, 2000) It incorporated Manchu elements, building upon the hat and ceremonial dress system of the Ming dynasty. The "persimmon calyx nest pattern" design, a prominent feature in the court clothing of the preceding dynasty, was thoroughly adopted and formalized by the Qing rulers. The Qing dynasty rules, including *Illustrated Compendium of Imperial Ritual Vessels*, delineated specific regulations for the decorative designs on the garments of emperors, empresses, and aristocratic consorts, with the "persimmon calyx nest pattern" being a crucial element. In contrast to the audacious inventions of the Ming Dynasty, the Qing Dynasty's "persimmon calyx nest pattern" progressed towards a more uniform, complete, and rounded design. Although maintaining sharp corners, these were often softened, frequently resembling four-sided auspicious cloud designs. The general look evolved to be more stately and serious. The application extended from court robes and ceremonial clothing donned by imperial ladies (consorts and princesses) to the formal attire of high-ranking noblewomen, serving as a distinct marker of position and rank. Concurrently, amid the Manchu-Han cultural amalgamation, the "persimmon calyx nest pattern" became prevalent in women's daily apparel (including qipao, blouses, and robes), independent garments, and domestic items, owing to its function in expressing auspicious sentiments, as illustrated in Table 3. Decorative patterns of several categories filled the space within the nest-shaped motifs or throughout the entire nest form, while maintaining the essential "cross" framework structure. The iterative expansion of decoration and symbolism converted what was initially an exclusive "visual symbol" of power and position, worn by the nobility, into secular women's apparel that encapsulates favorable cultural values and aesthetic ambitions, mirroring the era's new aesthetic. Consequently, the Qing Dynasty is a pivotal era in the history of the "persimmon calyx nest pattern", providing a remarkable insight into its diverse significances in women's fashion.

Table 3. Forms of the "Persimmon Calyx Nest Pattern" in Qing Dynasty Textiles.

No.	Name	Physical Image	Physical Detail	Pattern Combination Theme
1#	Four-Panel Embroidered Cloud Shoulder Collar with Figure Motifs, Front-Closure Women's Jacket (Wang, 2017)			Court Lady Pattern, Hushi Pattern, Pavilions and Towers, Plant Pattern
2#	Embroidered Cloud-Patterned Shoulder Pad with Figure Motif, Right-Lapelled Women's Short Jacket(Wang, 2017)			Court Lady Pattern, Hushi Pattern, Pavilions and Towers, Plant Pattern
3#	Right-lapel women's robe with butterfly-patterned embroidered cloud shoulders(Wang, 2017)			Court Lady Pattern, Hushi Pattern, Pavilions and Towers, Plant Pattern
4#	Four-Panel Cloud Shoulder with Floral, Figurative, and Animal Motifs in Ruyi-Style Bead Embroidery (Wang, 2017)			Having children in succession, Butterflies Playing Among Peonies, Lion Rolling the Embroidered Ball, Carp Leaping Through the Dragon Gate

3. Exquisite Patterns: Application Characteristics of the "Persimmon Calyx Nest Pattern" in Qing Dynasty Textiles and Embroidery

The prevailing ideology of "unity of heaven and humanity" in Qing dynasty ornamental arts frequently manifested rhythmic patterns that encapsulated spatial concepts within confined areas (Yu et al., 2022) The framework of the

"persimmon calyx nest pattern", characterized by its "four-way, eight-direction" diagrammatic structure, represented the "four seasons" and "eight compass directions." Silk embroidered textiles, commonly utilized by the public, encapsulated classical cosmological theories that harmonized seamlessly with the Qing dynasty's prevailing ornamental ideology of "unity between heaven and humanity." Thus, the "persimmon calyx nest pattern" emerged as a favored theme for the creation of women's accessories, textile patterns, and embroidered designs during the Qing dynasty.

3.1 Clothing Accessory: Cloud Shoulder Pad in "Persimmon Calyx Nest Pattern"

The History of Ancient Chinese Dyeing and Weaving Patterns indicates that the "persimmon-calyx shaped with independent contour design" pattern is intricately associated with the "cloud-shoulder" style, which is "fashioned like four-drooping clouds." (Zhang, 2016) Cloud shoulders, a form of "cloak" garment, have been documented for their decorative purposes since the Warring States period, as illustrated in Figure 2. The Warring States bronze sculpture "Playing with Sparrows," located at the Museum of Fine Arts, Boston, includes a collar-like garment resembling a "cloud shoulder" at the neckline.

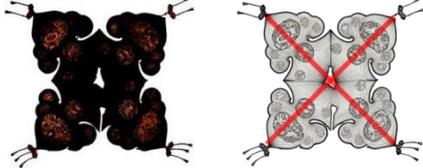
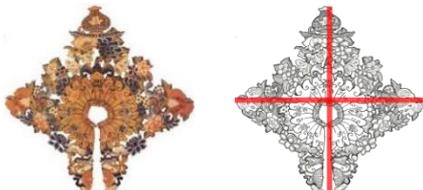


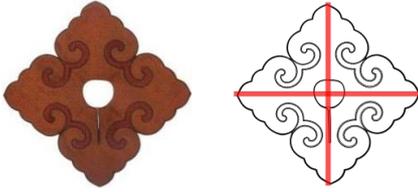
Figure 2. Warring States Period Bronze Sculpture of a Woman Playing with a Sparrow.

During the Qing Dynasty, yunjian progressed from the four-sided ruyi-style "four-hanging clouds" into a variety of forms, while the cross-shaped design continued to be the most prevalent. This cross-shaped framework closely corresponds with the skeletal structure of the cross motif in the "persimmon calyx nest pattern". Analysis of the Qing Dynasty cloud shoulders reveals a diversification in their forms during this era; yet, all primary designs conformed to the "Four Symbols and Eight Directions" framework of the persimmon-stem motif, as illustrated in Table 4.

Table 4. Qing Dynasty "Persimmon Calyx Nest" Style Cloud Shoulders.

No.	Name	Physical Image	Structural Design	Combination Theme	Form and Style
1#	Four-sided Ruyi-style flat-stitch embroidered floral, figurative, and animal motifs on a cloud-patterned shoulder piece (Wang, 2017)			Boy Climbing Peach Tree, The Four Saints Test the Zen Mind, Phoenix Adorned with Peonies, Branch-Plucking Infant Play	Layered Style

2#	<p>Four-sided Auspicious-style Figure-patterned Cloud Shoulder (Wang and Wang, 2018)</p>		<p>Treading Snow to Seek Plum, Jiang Taigong Fishing, Liu Hai Playing with the Golden Toad, Pointing Distantly to Apricot Blossom Village</p>	Layered Style
3#	<p>Silver-Inlaid Cloud Shoulder Ornament in Ruyi Style (Wang, 2017)</p>		<p>Plum, Orchid, Bamboo, Chrysanthemum, Butterfly Loves Flower, Phoenix Adorned with Peonies, Pomegranate</p>	Single-Piece Design
4#	<p>Four-sided Ruyi-style beaded panel with gold embroidered floral and animal motifs on a cloud-patterned shoulder piece (Wang, 2017)</p>		<p>Lion Rolling the Embroidered Ball, Double Phoenixes Adorned with Peonies, Plant and Fruit Motifs</p>	Layered Style
5#	<p>Four-sided Ruyi-style Beaded Embroidery Floral, Figurative, and Animal Motifs Cloud Shoulder (Wang, 2017)</p>		<p>Having children in succession, Butterflies Playing Among Peonies, Lion Rolling the Embroidered Ball, Carp Leaping Through the Dragon Gate</p>	Mixed Style
6#	<p>Quadrant-shaped Cloud Shoulder Ornament with Multicolored Figure Motifs (Wang and Wang, 2018)</p>		<p>Orchid and Grass Motifs, Antique Motif, Figurative Motif</p>	Layered Style
7#	<p>Four-Panel Cloud Shoulder with Floral Motifs in Ruyi-Style Bead Embroidery (Wang and Wang, 2018)</p>		<p>Bat Motif, Fish Motif, Lotus Motif, Peony Motif, Butterfly Motif, Pomegranate Motif, Ganoderma lucidum Motif</p>	Layered Style

8#	Four-sided Ruyi-style flat-stitch embroidered floral and figure pattern cloud shoulder(Wang, 2017)		Qilin Delivering a Child, Liu Hai Playing with the Golden Toad, Lion Rolling the Embroidered Ball, Floral Motif	Connected Style
9#	Four-Panel Auspicious Brocade Cloud Shoulder (Wang and Wang, 2018)		Hamur Pattern Ebul Pattern	Single-Piece Style

According to the incomplete data on Qing Dynasty women's cloud shoulders presented in Table 4, the designs from this era may be chiefly classified into four styles: single-piece, layered, mixed, and connected. Layered styles are predominant among these. Layered cloud shoulders are created by methodically stacking and amalgamating several individual cloud shoulders in accordance with defined rules and sequences, resulting in a cohesive, tiered arrangement from large to small. Entries 2# and 4# in Table 4 illustrate characteristic layered cloud shoulders of the Qing era. The superimposed configuration of two layers of ruyi-shaped cloud head embroidered panels amplifies the overall stratified look. The nearly square inner panels complement the almost circular outer panels, expressing the old Chinese cosmological notion that "heaven is round and earth is square." Their construction, termed the "persimmon calyx nest," incorporates ruyi cloud motifs, with the four corners oriented towards the cardinal directions, representing the four seasons. The designs stitched in these corners express ambitions and emotions (Wu et al., 2024).

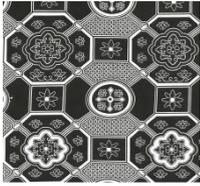
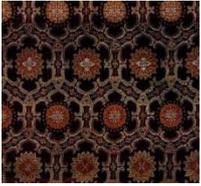
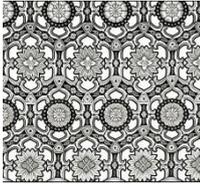
The Encyclopedia of Chinese Costume indicates that Han Chinese garments, derived from old northern ethnic minority, include shoulder ornaments typically made of brocade, embellished with cloud-patterned borders on the back and sides, some featuring tassels, so referred to as 'cloud shoulders.' (Xu, 2000) In addition to interior embroidered motifs for decorating, cloud shoulders may also incorporate external colorful tassels for ornamentation. Table 4, item 6#, illustrates that this cloud-shoulder piece exhibits a four-sided ruyi-style design adorned with multicolored figurative elements. Its fundamental structure adheres to a stratified pattern. The outer cloud-head element of this piece is embellished with vibrant tassels, significantly augmenting its dynamic appearance when worn. The meticulously arranged tassels provide the optimal presentation of the cross-frame, resembling a "persimmon calyx nest pattern." The Qing Dynasty cloud shoulders evolved into practical hybrid and integrated forms due to cultural intertwining and widespread adoption. Examples 5# and 8# in Table 4 illustrate hybrid and interconnected cloud shoulders, respectively. Significant distinctions are evident between these two styles regarding the quantity of embroidered panels, types of panels, and organizational structures. Both shoulder ornaments constantly exhibit the cross-shaped structure patterned after the "persimmon calyx nest pattern."

Even the simplest single-panel shoulder adornment design demonstrates variances in craftsmanship and application owing to distinct ethnic cultural influences. Item 9# in Table 4 is a late Qing Mongolian brocade shoulder adornment featuring a four-sided ruyi motif. In contrast to the draped style of Han Chinese shoulder garments, this piece is donned by being pulled over the head. The dense fabric and muted patterns predominantly highlight the center "cross-shaped nest" design. This item indirectly illustrates the Mongolian people's prioritization of practicality and durability as a nomadic ethnic group.

3.2 Pattern: "Persimmon Calyx Nest Pattern"

In addition to their explicit decorative purpose, the woven and embroidered patterns of the Qing era communicated fortunate connotations through three symbolic methods: representation, homophonic correlations, and ideographic expression (Liu, 2016). In contrast to the "persimmon calyx motif", the "persimmon calyx nest pattern" design provides enhanced formal versatility. Its geometric shape is conducive to the creation of continuous four-sided patterns. The "persimmon calyx" shape can function as an independent medallion motif, complemented by several auspicious decorative themes to enrich overall pattern diversity, as illustrated in Table 5.

Table 5. "Persimmon Calyx Nest Pattern" in Qing Dynasty Textiles and Embroidery.

No.	Name	Physical Image	Pattern Line Drawing	Nest Detail	Cradle Structure
1#	Dark-colored brocade with treasure-patterned floral design (Zong, 2005)				
2#	Deep blue brocade with gold-threaded floral pattern (Jin and Zhao, 2010)				
3#	Suzhou Embroidery Cushion Cover with Dragon, Phoenix, and Peony Motif (Jin and Zhao, 2010)				
4#	Gold-Ground Embroidered Chair Cover Depicting Immortal of Longevity (Jin and Zhao, 2010)				

Items 1# and 2# in Table 5 exemplify the Qing Dynasty "persimmon calyx nest pattern" style with four-sided continuous designs. Based on the line drawings and nest-shaped details of the two physical specimens, the "persimmon calyx nest pattern" was frequently employed in the embellishment of brocade items, with the craftsmanship primarily utilizing a segmented shuttle-changing weft diagonal twill pattern, showcasing techniques or a continuous shuttle weft diagonal twill pattern. The core of the "nest" design features either a central motif of lotus or chrysanthemum flowers, or a copper coin motif that acts as the framework for woven patterns, resulting in a harmonic composition with balanced density. The interlaced structure of the "nest" design mimics the Chinese character "米" (rice) and radiates forth in eight directions. The "four corners" or "eight corners" interlink to create diverse yet structured brocade-style patterns, resulting in the illusion of "brocade within flowers, flowers within brocade." (Kim and Bae, 2014) Table 5 presents examples 3# and 4#, which illustrate cushion covers and chair covers, respectively. Both exhibit embroidered "persimmon-calyx nest pattern" with independent contour design. The suitable style "persimmon calyx nest pattern" operates with a degree of autonomy. It generally utilizes the nest outline as a framework, largely adorned with auspicious motifs including lotus blooms, cloud patterns, and vegetation and vines. Functioning as a focal theme or independent ornamental feature in textiles, it stabilizes the visual center of gravity. In summation, the gathered Qing Dynasty "persimmon calyx nest pattern" were predominantly employed on woven and embroidered ornamental objects for quotidian usage. They consistently adhere to a pattern in which the motif's shape is the primary form, filled with amalgamated patterns that convey their intended meaning through homophonic correlations and symbolic representations.

3.3 Illustration: Embroidered "Cloud Shoulder" in "Persimmon Calyx Nest Pattern" Style

The clothing code system of the Qing dynasty, instituted in the early Qing period, was not comprehensively altered or augmented until the Qianlong era (Zong, 2004). It integrated the "adopting the civil but not the military" methodology from prior dynasties' dress rules and instituted dress codes for entities such as the imperial court (Rawski,

1998; Hyun-Jung, 2006), bureaucrats, and noblewomen. The "persimmon calyx nest pattern" design utilized on garment shoulders in the Ming Dynasty was effortlessly incorporated into Qing apparel. It integrated the autonomous cloud shoulder design with the distinctive interior filling patterns of the "nest" shape, transforming into a standardized embroidered form embellishing the collars of women's apparel, as illustrated in Table 6 (Wang, 2017; Wang and Wang, 2018; Wang, 2015).

Table 6. "Persimmon Calyx Nest Pattern" Style Embroidered Cloud Shoulder in Qing Dynasty Attire.

No.	Name	Overall Object	Detail of "Embroidered Cloud Shoulder"	No.	Name	Physical Object as a Whole	"Embroidered Cloud Shoulder" Detail
1a	Red Satin Robe with Figure Pattern: Guo Ziyi's Birthday Celebration Women's Robe with Floral Embroidery in Three Blues on Lapis Lazuli Blue Satin Ground Navy Blue Satin Short-Sleeved Blouse with Eight-Panel Figure Pattern			1b	White-Ground Brocade Robe with Eight-Panel Figure Pattern		
2a	Blue-green satin-ground Embroidery in Three Blues on Lapis Lazuli Blue Satin Ground Navy Blue Satin Short-Sleeved Blouse with Eight-Panel Figure Pattern			2b	Blue-green satin-ground floral and bird pattern women's robe		
3a	Blue-green satin-ground embroidered with three blue and gold threads women's coat			3b	Blue-green satin-ground embroidered with three blue and gold threads women's coat		
4a	Red brocade sash with cloud-patterned shoulder-draped blouse			4b	Embroidered Cloud Shoulder Right-Lap Short Blouse		
5a	Blue Satin Dream of the Red Chamber Character Pattern Women's Short Blouse			5b	Brown satin women's robe with figure pattern		

The physical evidence in Table 6 indicates that the "embroidered cloud shoulder" pattern in Qing dynasty clothes corresponds with the style of cloud shoulder accessories from that era, predominantly showcasing the "persimmon calyx nest pattern". The colors are also extremely rich (Zhao et al., 2025). The red satin women's cloak, adorned with figures illustrating Guo Ziyi's birthday celebration (1a in Table 6), prominently showcases this narrative element as its principal embellishment. The seawater and cliff motifs at the hem indicate that this cloak was owned by a Qing noblewoman. The embroidered cloud shoulder design at the collar features the "persimmon calyx nest pattern", with the interior of the "nest" pattern adorned with the same embellishment as the collar edging. Four acute angles extend from the corners of the "nest," slightly referencing the old Chinese cosmological concept of "heaven is round and earth is square." The "persimmon calyx nest pattern" design, as an embroidered motif, arose in several versions throughout the Qing dynasty's emphasis on detailed craftsmanship. Initially, the cloud motifs on the embroidered shoulder became more voluminous. Table 6, Item 2a, illustrates that the embroidered cloud shoulders on the collar of the robe-coat incorporate fillings of lake stones, avian figures, floral designs, and botanical patterns, aligning with the garment's overarching ornamental themes. The arcs of the cloud heads in the scrolls have a more pronounced inward curvature, resulting in a visually rounded and substantial effect. Secondly, the diversity of nest-shaped contours expanded. The embroidered cloud shoulders on the collars of the two women's short jackets in Table 6, 3a and 3b, contrast with the typical rounded arcs of the ruyi-style cloud heads. Instead, they showcase embroidered cloud shoulders with arching, polygonal forms that approximate squares. Despite alterations to the outside frame curves of the embroidered cloud shoulders, the overall skeletal structure remains consistent with the "rice grain" shape of the persimmon calyx nest pattern. The embroidered cloud shoulders on the women's blouses in Table 6, items 4a and 4b, exemplify variants of the fundamental nest shape. The substantial rise in the quantity of angles in the outer frame contour deviates from the conventional "十" or "米" character shapes of the nest pattern, nearing an almost flawless circular willow leaf form. Moreover, the quantity of cloud-head motifs within the cloud-shoulder "nest" is not limited to even numbers; occurrences with odd numbers are also present. The red satin women's short jacket, adorned with Dream of the Red Chamber motifs as depicted in Table 6, items 5a, showcases ten floral panels intricately embroidered on both the front and back, reflecting themes from Dream of the *Red Chamber*. The "embroidered cloud shoulder" segment of the collar features a "persimmon-calyx nest pattern" design, although curiously showcases 9 cloud heads—an atypical odd number. This may arise from the homophonic connection between "nine" (九) and "long-lasting" (久), indicating lasting importance.

In summary, the "persimmon calyx nest pattern" manifested in Qing era attire through three principal applications: 1) As clouds embellishing attire. The cloud shoulders displayed four unique styles—single-panel, layered, mixed, and connected—while all maintained the signature cross-shaped structure; 2) It functioned as a motif for textiles and embroidered items. The "persimmon calyx nest pattern" design predominantly highlighted the calyx silhouette, with favorable implications conveyed through the amalgamation of fill patterns within the nest-shaped interior; 3) It was utilized as embroidered cloud shoulders for apparel. The embroidered cloud shoulder motif showcases various cloud-head designs, contour frameworks, and amounts, exemplifying the delicate and precise craftsmanship of the Qing Dynasty (Silberstein and Rachel, 2016).

4. Cultural Implications: The Symbolic Meaning of the "Persimmon Calyx Nest Pattern" in Qing Dynasty Textiles and Embroidery

As prevalent bearers of favorable culture in the arts, patterns often convey profound notions of good fortune through various and unique decorative shapes (Zhang, 2011). The "persimmon calyx nest pattern" originated from the ornamental "persimmon calyx motif" employed in handicrafts. Its evolution from a mere "pattern" to a distinct "form," influenced by both subjective human-centered and objective ideological factors, transcended its status as a purely ornamental emblem. It progressively solidified into a cultural artifact that encapsulates the aesthetic values, moral principles, and traditional beliefs of its time.

4.1 Microcosm of Ornamentation: Implied Metaphor of "Heaven-Earth-Human Unity"

Ancient thinkers examined the extraordinary world through the cohesive framework of cosmos, society, and humanity, producing a harmonic order inherently present in diverse crafted artifacts (Pan, 2020). The examination of the "persimmon calyx nest pattern" in Qing dynasty textiles demonstrates that this motif possesses notable contextual uniqueness within the Qing Dynasty. The principal application domain focuses on the collar regions of women's garments, typically appearing in two ornamental forms: independent cloud shoulder ornaments and embroidered "cloud shoulders" incorporated into the garment fabric. This motif consequently emerged as a significant symbolic component within the collar decoration system of the Qing Dynasty. The design and ornamental rationale of the "persimmon calyx nest pattern" cloud shoulder consistently centered on the human figure as its focal point. By organically integrating its schematic form, decorative patterns, and the human body, it quietly echoed the fundamental principle of "Heaven, Earth, and Humanity in Harmony" in traditional Chinese culture (Silberstein and Rachel, 2016).

Despite differing in style, the solo cloud shoulder and the embroidered cloud shoulder convey a uniform significance of the coexistence of heaven and earth, due to their equal shape and positioning on the body. The

decoration of both worn and embroidered cloud shoulders is concentrated around the neckline. Their corners elegantly cascade from shoulder to neck, forming a visual arrangement where the neckline represents the core and the cloud shoulder symbolizes wings, reflecting the interplay between the divine and the human. The sense of symmetry is also strengthened (Yu, 1989). Secondly, although the shapes of the accessory shoulder piece and the embroidered "cloud shoulder" vary, their inside designs typically include insects, birds, flowers, plants, pavilions, and towers. The use of these elements, infused with "earthly energy," fulfills the metaphorical representation of the design theme of "heaven, earth, and humanity in harmony."

4.2 Inspiration from the Roots: The Emotional Vision of "Family and Nation's Prosperity"

In the annals of Chinese culture, "observing objects to derive symbols" has been the fundamental wisdom of our predecessors in facilitating communication between nature and humanity. The philosophical reflections in the *Book of Changes* state: "Looking up, one observes the patterns in heaven; looking down, one observes the laws on earth" (Zhou, 1984). Additionally, the artistic representation of flora, fauna, and landscapes through woven and embroidered designs illustrates how the ancients utilized nature as their template, integrating their observations of the world and insights into existence into their craftsmanship. The "persimmon calyx nest pattern" is inspired by the calyx of the persimmon flower. Ancient manuscripts have descriptions of its qualities. The *Miscellaneous Notes from Youyang* state: "Among trees, the persimmon possesses the most robust roots." The general populace refers to it as the 'persimmon base.' (Duan and Wang, 2020) Persimmon trees are distinguished by their profoundly entrenched root systems, and the colloquial expression 'persimmon base' represents this foundational resilience. The persimmon calyx, as a persistent structure, exemplifies "stability" by remaining connected even in maturity. During the Song Dynasty, "persimmon calyx motif" embellished the load-bearing beams of structures, cleverly utilizing the calyx's root-like stability to enhance structural strength.

During the Qing Dynasty, feudal autocracy attained its apex. Legal codes and ceremonial restrictions not only regulated the imperial court but also connected the royal family, the court, and the clans of commoners, thus promoting a societal notion of "the family and the nation as one" (Feng and Chang, 2024). Within the "family-state unity" paradigm, the dual-layered symbolic essence of the "persimmon calyx nest pattern" becomes evident. At the national level, the pattern—illustrating the calyx's inherent characteristic of flowering while preserving its fruit—metaphorically conveys the desire for a state characterized by a robust foundation and lasting stability. Figure 3 (Wang and Wang, 2018) illustrates that the stone-blue satin dragon-patterned xiapei robe served as ceremonial clothing for noblewomen throughout the Qing era. Their patterns, colors, and designs conformed to stringent hierarchical standards and were donned for significant events such as court meetings and sacrifice rites. The robe features characteristic themes organized vertically: an embroidered cloud shoulder piece in the "persimmon-calyx nest pattern" style, dragon motifs, and sea-and-river-cliff patterns, intermingled with auspicious designs such as clouds and birds. Collectively, they represent harmony in all dimensions, national stability, and the enduring prosperity of the territory. The highest "persimmon calyx nest"-style embroidered cloud shoulder piece symbolizes the unwavering loyalty and complete blessings of court officials towards the state's administration, while also reflecting the sartorial norms of the ritual culture in feudal society.



Figure 3. Blue-green satin dragon-patterned ceremonial robe.

(a) Front; (b) Back.

Secondly, from the standpoint of family and lineage, the "persimmon calyx nest pattern" symbolizes the favorable aspiration for familial unity while including the support and expectations for future generations. Figure 4, (Wang, 2017) illustrates that the cloud-shoulder item is adorned with a four-directional, auspicious-patterned flat-stitch embroidery with flower, human, and animal motifs. The cloud-shoulder is delineated by a conventional "four-directional" leaf silhouette, with the four corners of the leaves filled sequentially from left to right in a zigzag arrangement: "Boy Climbing Peach Tree," "Four Saints Testing Zen Mind," "Phoenix Amidst Peonies," and "Boy Climbing Peach Tree" (a branch-and-child motif). The motif of "The Four Saints Testing the Zen Mind" from *Journey*

to the West conveys the wearer's desire for "maintaining a steadfast heart" in matrimony. Diagonally paired with the "Phoenix Amidst Peonies" motif, it enhances auspiciousness and prosperity to the foundation of an enduring partnership. The two "Boy Climbing Peach Tree" motifs create a complementary composition. Although addressing the same theme, they diverge in their portrayal of the youngster and the tree's fruit. The upper left illustrates a little child ascending a fully blossomed peach tree, whereas the lower right portrays an adolescent boy kneeling beneath a tree abundant with delicious peaches. The progress depicted in these two paintings reflects the elders' vision of the family's lasting prosperity and continuity. Women in the home usually wore stand-alone cloud shoulders. The silhouette of the persimmon calyx embodies metaphorical associations of fostering and nourishing fruit. When donned, it reflected the concrete reality of women as the mother force, encompassing conception, upbringing, and education of children. It also reflects the female identity of the Qing Dynasty from the side (Kleutghen, 2015). This cultural expression, which integrates environmental imagery with household rituals and life objectives, enhances the "persimmon calyx nest pattern" concept beyond simple adornment. It serves as a crucial cultural emblem representing the familial ideals, kinship sentiments, and life-affirming aspirations of the Qing Dynasty. This illustrates the fundamental characteristic of traditional Chinese culture: "communicating emotions via objects and articulating aspirations through symbols," so enhancing the humanistic richness of Qing Dynasty fabrics and embroidery.

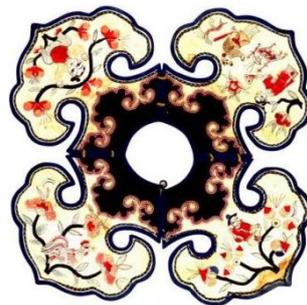


Figure 4. Cloud-Shoulder with Floral, Figurative, and Animal Motifs in Four-Sided Ruyi-Style flat-stitch Embroidery

5. Conclusion

The "persimmon calyx nest pattern" in Qing dynasty textiles illustrates the progression of traditional Chinese decorative patterns, transitioning from realistic representations to stylized symbols, and from imperial ritual insignia to folk fortunate emblems. Its growth history accurately embodies the transformational patterns of traditional decorative themes from the Warring States period to the Qing dynasty. The Qing Dynasty was the apex of this motif's evolution and utilization. As a symbol, it established three solid application paradigms inside the Qing textile and embroidery system: 1) The cloud shoulder as a standalone garment item. 2) As a fundamental decorative motif in textiles and embroidery. 3) As embroidered cloud motifs affixed to the collars of clothes. All three forms consistently conformed to the fundamental "十" (cross) / "米" (rice grain) skeletal structure, demonstrating varied configurations and robust adaptability to different environments. While maintaining the fundamental structure of the ancient motif, it attained innovative advancement in accordance with contemporary demands, vividly reflecting the Qing dynasty's artistic principles of "elaborate, refined, ingenious, and meticulous." The "persimmon calyx nest pattern" serves as a significant symbolic theme beyond simple decoration. Its ornamental rationale, focused on the human neckline, encapsulates the classical cosmology notion of "Heaven, Earth, and Humanity in Harmony." Leveraging the inherent attributes of the persimmon calyx, characterized by resilience and fruitful support, it experienced a cultural enhancement within the Qing dynasty's "family-state unity" framework—evolving from a natural motif into a humanistic emblem representing aspirations for the nation's lasting foundation and the family's ongoing continuity. The evolution and conceptual development elucidate the fundamental logic of traditional Chinese decorative patterns—"observing objects to capture their essence, using symbols to convey meaning"—offering essential support for comprehensive research into traditional textile and embroidery motifs and their modern revitalization and preservation.

Data Availability Statement

Data generated during this study are included in this published article.

Conflicts of Interest

The authors declare no competing interests.

Author's Contributions

Yi Yu: Methodology, Writing- Original Draft, Visualization, Editing, Data collection; **Yi Zhang:** Supervision, Conceptualization, Project administration; **Xiaohan Zhang:** Data collection. All authors have read and agreed to the

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