

Craft, Culture and Exchange: François-Xavier d'Entrecolles' unique Perspective on Jingdezhen's Porcelain Technology in the Early Qing

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Abstract: The 17th to 18th centuries were a critical period for cultural exchange and knowledge transmission between China and the West. French missionaries became an important medium through which Europe understood Chinese material civilization and craftsmanship. As a French missionary who lived in China during the Qing Dynasty, François-Xavier Dentrecolles spent ten years conducting field investigations in Jingdezhen, Jiangxi. He interviewed local potters, consulted local chronicles, and systematically recorded the raw material characteristics, production processes, and firing techniques of Jingdezhen porcelain in letters. This paper examines the various motivations behind Dentrecolles' detailed study of ceramic craftsmanship, considering his academic background, reasons for traveling to China, and experiences in Jingdezhen. The study also contrasts his findings with those of other missionaries from the same era to emphasize his unique scholarly approach in examining crafts, deciphering techniques, and documenting texts. This research seeks to elucidate the unique significance of Dent.

Keywords: François-Xavier Dentrecolles; French Missionary; Ceramics of the Qing Dynasty; Craft Technology; Sino-Western Cultural Exchange

1. Introduction

François - Xavier d'Entrecolles (1664-1741), known in Chinese as Yin Hongxu, a pivotal figure in early modern Sino-Western scientific and cultural exchange, initially seems to have distanced himself from the court-centered scholarly tradition favored by most French missionaries in the Qing Empire. However, his place in the history of cross-cultural knowledge transmission is not as straightforward as it might first appear. His distinctive grassroots

observations on Jingdezhen porcelain production serve as a powerful example of this layered and understudied relationship.

The 17th to 18th centuries witnessed the opening of new sea routes, the growing prosperity of maritime trade in the Far East, and a massive "China Craze" in Western Europe [1]. In 1683 (the 26th year of Emperor Kangxi's reign), French scientific missionaries came to China. Thus, the technological and cultural exchanges between China and France, mediated by these missionaries, officially began. Compared to other missionaries who focused on issues such as Chinese chronology, history, geography, latitude and longitude, science, animals, plants (such as rhubarb, spices, tobacco), and food intake [2], François-Xavier d'Entrecolles showed keen interest in local folk workshops. He interacted with craftsmen and consulted regional historical records. Rather than admiring porcelain merely for its outward beauty embodied in form, glaze and decorative motifs, he conducted thorough research into its essential production principles, including raw material screening, clay proportioning, kiln management and firing techniques (The four research aspects of Yin Hongxu are mainly based on his two reports on Jingdezhen, written in 1712 and 1722, which documented porcelain manufacturing processes and local records). The 1712 letter (September 1, 1712) is included in *Lettres édifiantes et curieuses: China Memoirs* [3], The 1722 letter (January 25, 1722) is contained in the same series [4].

Current scholarship mostly focuses on the translation of Dentrecolles' letters and the collection of ceramic techniques [5], or provides general discussions of his historical role in Sino-Western cultural and technological exchanges [6,7]. Only a limited number of studies have thoroughly examined his educational history, specific reasons for coming to China, and the underlying motivations for his ongoing research

on Chinese porcelain. In addition, existing scholarship rarely places his observations within a comparative framework that includes other French missionaries active in the early Qing. Based on documentary research and comparative analysis, this paper compares the perspectives and approaches of different French missionaries toward Chinese porcelain, and further clarifies the uniqueness of D'Entrecolles' observational and recording methods. Unlike missionaries such as Bouvet (a French missionary who served the Kangxi Emperor at court and focused on astronomy, mathematics, and court diplomacy rather than technical or craft-based knowledge) and Jean de Fontaney (known as Hong Ruohan in Chinese sources, was a French missionary and one of the King's Mathematicians sent to China in 1687.) whose studies of Chinese ceramics remained limited to courtly attributes and foreign trade concerns, D'Entrecolles maintained a non-court, folk-oriented standpoint. He obtained firsthand information through long-term interactions with local potters, on-site investigations of workshops, and extensive consultation of local documents such as the Fuliang Xianzhi [8]. His letters systematically recorded core technologies including the kaolin-petuntse dual formula, glazing processes, kiln construction, and firing control, forming the earliest complete and technically detailed Western account of Chinese porcelain production [9]. Such a down-to-earth, craft-centered investigative approach distinguishes his contributions from those of his contemporaries and establishes his unique status in the history of Sino-Western technological communication. The article proposes that non-court observations and d'Entrecolles' archival research offer unique insights into Chinese porcelain production, aiding in the reinterpretation of knowledge acquisition and cultural exchange.

2. Origins and Itinerary: D'Entrecolles' Scholarly Formation and Spatial Activity in China

To demonstrate d'Entrecolles' academic credibility in Jingdezhen ceramics research, it is crucial to first emphasize the church's teachings and his scholarly skills. In terms of the teachings of the church, as the most influential missionary order in early modern Sino-Western cultural exchange, a formal evaluation mechanism mandated by the General Congregation. According to administrative practice, regular

evaluations of all members were carried out once every three years.

In terms of learning achievements in assessing d'Entrecolles, he used standardized talent evaluation rather than mere personal impressions [10].

These assessments covered five core dimensions: ingenium (intellect), iudicium (judgment), prudentia (discretion), experientia rerum (practical experience), and profectum in litteris (academic progress).

3. Explanation of the Driving Force: François Xavier d'Entrecolles Focused on the Internal and External Factors of Porcelain

Some scholars argue that d'Entrecolles came to China driven solely by devotion rather than academic curiosity [11]. However, this perspective is somewhat one-sided. The motivations behind d'Entrecolles' research on Jingdezhen ceramics can be divided into two main aspects: The first is the reason for his missionary journey to China, which was the prerequisite condition for him to visit the porcelain capital and come into contact with the porcelain-making industry; the second is the intrinsic reason for his deep interest in Jingdezhen ceramics after his arrival in China, which was the core driving force for him to stay there for a long time and actively conduct in-depth research and systematic studies on ceramics. The purpose of this module research is to systematically dissect the multiple driving forces behind d'Entrecolles' focus on porcelain's internal and external factors-integrating his personal experiences, historical context, and cultural mission. It aims to enrich our comprehensive understanding of his role as a scholar-missionary, as well as lay the groundwork for his perspective on the study of Jingdezhen ceramics.

3.1 France's Missionary Layout and the Institutional Context

No official records of François Xavier d'Entrecolles' specific reasons for traveling to China have been preserved in the archives of the French Mission, nor has his volunteer application for overseas missionary service been located in repositories in France. However, insights into his decision to join the order and embark on a mission to China can be gleaned from a letter he wrote to Daubenton on June 23, 1713, while residing in Jiujiang. In this

correspondence, d'Entrecolles expressed joy at the news of Jean-François Régis (a French missionary whose devotion to fieldwork and grassroots mission served as an important model for d'Entrecolles's own on-site research in China.) [12].

Nevertheless, individual aspirations such as d'Entrecolles' rarely constituted the decisive factor in securing a missionary posting to China. The critical turning point emerged in the late 17th century, when Louis XIV resolved to dispatch French missionaries directly to China, bypassing Lisbon and to evade Portuguese patronage over missionary activities in the East. Louis' invitation for the missionaries to visit China was primarily justified by two scholarly reasons. Firstly, this strategic initiative sought to challenge Portugal's exclusive Padroado system, which had historically overseen all missionary routes and personnel in the Far East [13,14]. Furthermore, Louis XIV aimed to extend French influence in Asia by using 'scientific diplomacy' and scholarly knowledge. direct ties with China [15]. At the same time, the Kangxi Emperor's desire for Western scientific knowledge fostered a mutually advantageous relationship [16,17]. Against this broader national backdrop, a group of missionaries led by Joachim Bouvet completed the recruitment process for the China mission in 1697 [18], marking the official launch of their journey to China.

3.2 European Aesthetic Trends and Individual Motivations

d'Entrecolles' in-depth documentation and profound interest in Jingdezhen porcelain during his missionary tenure in China can be attributed to a confluence of external contextual factors and internal personal motivations. Externally, the rise of Chinese porcelain as a dominant aesthetic trend in Europe played a pivotal role. During the late reign of Louis XIV (1643–1715) and the subsequent reign of Louis XV (1715–1774), the royal family members' love for ceramics reached its peak, for instance, Madame de Montespan (was the official chief mistress of Louis XIV and one of the most influential women at the French court in the late 17th century, often referred to as the true Queen of France.) (1640–1707) championed the "Chinoiserie" style, most notably through the construction of the Trianon de Porcelaine (Porcelain Trianon). This pavilion, adorned with Delft blue tiles imitating Chinese blue-and-white

porcelain instead of traditional building materials, became an iconic symbol of European royal enthusiasm for Chinese porcelain. As In this phenomenon porcelain ceased to be merely a commodity of trade; instead, it evolved into a symbol of social status, taste, and courtly fashion. This cultural phenomenon not only exerted a profound influence on the emergence of the Rococo aesthetic (refers to the decorative art style prevalent in 18th-century France, featuring delicate curves, soft hues and elaborate ornamentation.) in Europe but also laid the groundwork for d'Entrecolles' scholarly engagement and passion with Chinese ceramics during his missionary service in China [19].

In spite of that, the wide-ranging admiration of Eastern aesthetic principles across the European continent has not been sufficient to support the in-depth exploration of Jingdezhen porcelain conducted by d'Entrecolles. The underlying drivers for his personal endeavor rested upon two chief considerations. First of all, d'Entrecolles had made earnest attempts to facilitate the advancement of the porcelain manufacturing sector of France through the adoption of the elaborate ceramic production techniques originating from China. In the course of the 18th century within European regions, even though porcelain was a fashionable high-end commodity at that time, European manufacturing entities still lacked the technical expertise to produce premium hard-paste porcelain, a prominent problem that French artisan practitioners were highly motivated to address.

Over the course of his stay within Chinese borders, d'Entrecolles made use of his one-of-a-kind operational and locational advantage to carry out careful documentation of the porcelain-manufacturing skills of Jingdezhen, and disseminated these relevant details to European regions via epistolary correspondence, with the goal of filling the technical voids in European hard-paste porcelain fabrication and facilitating the full development of France's local ceramic handicraft sector. His scholarly work, as a result, was supported by a practical dedication to resolving the technical inadequacies of his home country's artisanal production practices. Long-term habitation in Jingdezhen on the part of d'Entrecolles forced him to face deep-seated cultural divergences between Chinese and European understandings of porcelain's functional purposes and utilization scenarios,

triggering a reconstructive adjustment in his own cognitive structure. Before his deep engagement with Chinese local communities, d'Entrecolles—like the majority of European individuals of his time—had been molded by the artistic and consumption norms of Europe's privileged social strata, regarding Chinese porcelain exclusively as a restricted high-end product and ornamental item set aside for noble families. Residents of European regions have frequently recorded the claim that “Chinese porcelain” was referred to as “white gold” and “oriental magic glass”—a high-end luxury good of such remarkable rarity and high monetary value that it surpassed the assessed worth of silver and even gold during the 17th–18th centuries [20]. Scholars of European art history have generally placed constrained focus on the ornamental charm, limited availability, and social status-signifying value of these ceramic items, for the most part overlooking their practical utility in daily food presentation and domestic household utilization. This mode of perception was essentially a consequence of the unilaterally constructed imagination and symbolic interpretation of Eastern craftsmanship objects that emerged within European social contexts. Overall, the extended and in-depth explorations of Jingdezhen's ceramic craftsmanship initiated by d'Entrecolles have taken shape via the interplay of external historical opportunities and internal subjective driving forces. As a point of departure for external factors, the state-level tactic of building an independent missionary network across Chinese territories during the rule of Louis XIV has provided the institutional foundation and practicable prerequisites for his journey to China and his access to the core zone of Jingdezhen's manufacturing premises. In the same vein, the aesthetic trend of “China fever” prevalent throughout Europe in the 18th century and the urgent demand for hard-paste porcelain production techniques in France have constituted the social and technical contexts that prompted him to focus on ceramic-associated researches. Turning to internal dimensions, d'Entrecolles was confronted with spiritual duties to fulfill missionary enterprises, and his on-site surveys in local communities exposed him to the cultural frictions between Chinese and European interpretations of porcelain's practical functions. These impetus components have converged to enable him to surpass the superficial European perceptions of Eastern porcelain articles,

directing him to recognize the comprehensive value of Chinese ceramics as a fusion of utilitarian purposes and artistic attributes. It is the multi-dimensional impetus of missionary responsibility, historical tides, technical necessities and cognitive shifts that distinguished him from other missionaries active in the same period, granting him the capacity to generate a structured, comprehensive and practice-focused documentation of Jingdezhen's porcelain production procedures, and cementing his status as a core contributor to the history of Sino-European ceramic technique interchange.

4. On-Site Investigation Excursion: Tripartite Viewpoints on Porcelain within the Pictorial Works of d'Entrecolles

Though prior scholars have primarily directed their attention to the two milestone correspondence pieces of d'Entrecolles, their analytical work frequently mirrors the stepwise, procedure-focused recordation of the porcelain manufacturing techniques of Jingdezhen put forward in the source documents, and suffers from a dearth of creative explanatory schemas [21].

On the contrary, the present chapter carries out synthesis and reconstruction of interpretative contents of d'Entrecolles'observational records, with the objective of exhibiting in the following sections the distinctiveness of his analytical standpoint in contrast to that held by other religious envoys. As one of the scarce Western scholars that gained entry to the central kiln zones of Jingdezhen throughout the 18th century, François-Xavier d'Entrecolles employed the special permission granted by his missionary post to carry out systematic inquiry during his extended stay in Jiangxi. Different from a large number of contemporary onlookers who confined themselves to superficial admiration of porcelain's external features or piecemeal journey narratives, d'Entrecolles placed the core of his work on the methodical recording of ceramic handicraft skills. Via regular trips to local firing workshops, in-depth communications with frontline pottery artisans, on-site inspection of the whole production workflow, and sorting of regional ceramic trade documentation, he has procured ancient Chinese artisanal manuscripts and combined experiential observations with documentary investigation. This method reached its peak in a holistic description of Jingdezhen's porcelain manufacturing craft, which comprises

three key scopes: the selection of raw materials, production workflows, and firing technologies [22].

The feature that sets the academic investigations of d'Entrecolles apart from the research undertakings of other missionaries active in Chinese territories is its deviation from unstructured exotic descriptions or piecemeal accounts of cultural phenomena. On the contrary, the distinctive value of his work resides in the internal logic underpinning his inquiry approaches and the conceptual system guiding his cognitive activities. Our identification of these characteristics draws upon the two milestone correspondences of his that are stored within the compilation of *Lettres Édifiantes et Curieuses de Chine* [23].

The present inquiry of this chapter has uncovered three interlinked outlooks that jointly shape the scholarly output of the researcher in question: a viewpoint rooted in technological dimensions, a social and cultural vantage point with a focus on the operations of civic life, and an angle of analysis pertaining to cultural transmission. These three interpretive frameworks lend mutual support to each other, giving shape to an integrated system of research that has no comparable counterpart in the period during which he conducted his investigations.

4.1 Technological Perspective: Scientific Analysis of Raw Materials and Firing Techniques

During the course of his archival collation and academic investigation, d'Entrecolles has surpassed the cursory assessments of the external features of Jingdezhen porcelain, having employed a logical and evidence-based methodology to perform in-depth dissection of the techniques of ceramic manufacture with notable strictness of reasoning. The first step of his inquiry comprised the exploration of the physical and chemical attributes of ceramic feedstocks, with accurate delineation of the core traits of "baibuzi" (refers to "petuntse"), is a traditional Chinese ceramic material. It is a type of feldspathic micaceous porcelain stone, crushed, washed, and formed into small white bricks for porcelain body preparation. It is often mixed with kaolin to produce high-quality porcelain.) and "kaolin" (a pure white, low-iron clay mineral, essential for porcelain, named after the Gaoling village in Jingdezhen, China.). Within his correspondence penned in 1712, he

clearly characterized baibuzi as "weathered rock containing quartz, feldspar, and mica, soft and plastic in texture," while recording that kaolin was "white as powder, resistant to high temperatures without deformation".

This depiction mirrors the transition of a conceptual framework that d'Entrecolles attempted to give an account of the formation of porcelain via features of minerals and the functional performance of materials, instead of ascribing the porcelain of China to mysterious handicraft skills or coincidental empirical practice [24]. In the conduction of investigation into the procedures of manufacturing and kiln operation, d'Entrecolles has implemented decomposition of the firing cycle into four distinct phases, specifically "preheating, temperature rise, high temperature, and cooling". By observing real-time variations in the shade of kiln fire and the condition of ceramic blanks, he has built up a correlative relationship between the tint of flame, the heat level inside the kiln, and the responsive changes of the porcelain body, putting forward the assertion that "a pale blue-white flame" signals the most favorable high-temperature condition for the firing process.

The systematic inspection of thermal shifting dynamics has stood as an early instance of utilized scientific methodology within the investigation of conventional craft-making practices, setting d'Entrecolles apart from both Chinese craftspersons who depended on experience-derived knowledge and European connoisseurs who centered on artistic worth solely. As French ceramic history researcher Patrick Germond remarked, the technical archival records compiled by d'Entrecolles "provided Europe with the first accurate scientific account of hard-paste porcelain production, laying the groundwork for the industrialization of European ceramics"[25]. In a supplementary vein, he has completed the documentation of formulation proportions of porcelain stone and kaolin, standard kiln measurements, detailed colorant combinations, stacking arrangements, shaping implements, and firing apparatuses. To take a concrete case, he has identified the formulation ratios of kaolin to petuntse (1:1 for fine porcelain, 4:6 for medium porcelain, and 1:3 for common porcelain), noted standard kiln dimensions (approximately 3.66 meters in height and 7.32 meters in depth) with five observation holes on the vaulted roof, recorded precise pigment mixtures for green

glaze and calcination procedures for cobalt blue pigment, and outlined strict kiln-stacking layouts that arranged wares by quality to ensure even heat distribution. Further, he has delivered tangible assessments of vessel contours and ornamental approaches, categorizing daily-use wares, scholar's studio items, and decorative porcelain, and differentiating underglaze blue, overglaze polychrome, gilding, and relief decoration with explicit technological descriptions.

4.2 Social and Cultural Standpoint: First-Hand Narrative of the Division of Labor within the Ceramic Manufacturing Sector and Traditional Folk Customs

Outside the bounds of his logical investigation of porcelain making techniques, the correspondence penned by d'Entrecolles additionally supplies the singular vantage point of an outside onlooker regarding the regional societal setting and popular everyday existence shaped by the porcelain manufacturing sector of Jingdezhen, building up a remarkable standpoint for the examination of civic culture in the Qing dynasty. Propelled by the colossal size of the ceramic handicraft industry—an economic sector that earned Jingdezhen the designation of the “porcelain capital of the world”—the municipality had formed a greatly professionalized and hierarchically organized occupational framework. This interconnected operational system comprised mineral excavators procuring unprocessed materials, clay processing practitioners purifying porcelain stone, body fabrication craftspeople forming utensil shapes, decorative painters applying ornamentation to finished bodies, kiln operation personnel supervising the firing processes, and trade practitioners enabling domestic and cross-border commercial exchange, and in the same timeframe, every social class within Jingdezhen relied upon the porcelain production trade for their means of subsistence, with the day-to-day activities, work timetables, and survival approaches of local inhabitants deeply interwoven with each phase of ceramic manufacture.

In his 1712 letter to Père Orry, d'Entrecolles provided vivid quantitative and qualitative accounts of this industrialized city ‘Jingdezhen comprises eighteen thousand households, most of which belong to porcelain merchants who occupy spacious mansions and employ an

astonishing number of workers... The town has a population exceeding one million, consuming over ten thousand dan of rice and more than a thousand pigs each day’. Notably, he also observed that even ‘the blind and disabled could find employment pounding clay, a detail that underscores the porcelain industry’s remarkable capacity to absorb labor across all segments of society and the extraordinary sophistication of its industrial chain, which was inclusive labor market was unparalleled in pre-modern Chinese industrial cities.

D'Entrecolles also documented the coexisting production systems of ‘imperial kilns’ (official porcelain workshops run by the imperial court in ancient China. In Jingdezhen during the Qing dynasty, they produced fine wares exclusively for the royal family and official use, operating alongside privately-owned folk kilns.) and ‘private kilns’ (refer to privately owned porcelain workshops run by ordinary craftsmen and merchants. Their products were sold freely on domestic and overseas markets for civilian use, forming the main part of Jingdezhen’s porcelain industry.), as well as the bustling urban life driven by porcelain trade. He painted vivid scenes of ‘straight, crisscrossing streets lined with crowded houses, where porters shout constantly to clear a path and the spectacular nightly vista of flames and smoke enshrouding the entire city like a massive furnace. These details not only capture the dynamism of a pre-modern industrial city but also reveal the symbiotic relationship between porcelain production and urban development—where economic activity, social interaction, and cultural identity converged to create a unique civic life.

In contrast to the technological perspective’s the civic culture lens transcends industrial production to integrate the porcelain industry with local livelihoods, customs, and social structures. By depicting Jingdezhen as a city ‘built and sustained by porcelain.’ d'Entrecolles elevated his letters beyond mere technical records, endowing them with immense value for the study of regional social history and folk culture [26]. His accounts offer a rare external perspective on the inner workings of a Qing-era craft metropolis, illuminating how an industrial sector could shape every facet of urban life—from labor markets and practices to urban planning and daily social interaction.

4.3 Cultural Communication Perspective: Technological Transference and Civilizational Dialogue between Chinese and Western Porcelain Traditions

The Age of Discovery witnessed a profound expansion of material tastes among European elites, who developed an intense fascination with Chinese porcelain as both luxury commodity and exotic art form. By contrast, Throughout the 18th century, European ceramic production remained trapped in a state of epistemological and technical stagnation. There is no doubt that Chinese porcelain producers held an unchallenged supremacy because European artisans and chemists failed to crack the Chinese porcelain formula, creating the most significant technological and industrial divide of the early modern period between East and West [27].

Prior to d'Entrecolles, European attempts to decipher Chinese porcelain relied almost exclusively on reverse engineering of finished artifacts, leading to speculative theories—such as the belief that porcelain was made from “crushed seashells and eggshells” or “burnt bone ash”.

His letters “transformed Chinese porcelain from an object of mysterious admiration into an intelligible industrial process,” thereby laying the groundwork for the European porcelain revolution [28]. It is obvious that Jingdezhen had evolved by the Kangxi era into a mature industrial complex defined by two irreplicable core technologies:

- (1) the binary body formula “The binary body formula” refers to the classic porcelain-making recipe unique to Jingdezhen, which mixes porcelain stone “baibuzi” and “kaolin” in a specific proportion to prepare porcelain bodies. This compound material system laid a solid foundation for the fine texture and high fire resistance of Chinese hard-paste porcelain.] which conferred unparalleled whiteness, plasticity, and thermal stability;
- (2) the high-temperature reduction firing technique, which enabled vitrification at temperatures above 1,300 °C and produced the characteristic jade-like translucency coveted across Europe.

Beyond repeated on-site visits to kilns and direct interviews with master potters, he rigorously consulted Fuliang Xianzhi (the official local chronicle of Fuliang County. It records local history, geography, and especially the porcelain industry, including imperial and private kiln

systems.), the definitive local gazetteer, extracting data on kiln regulations, material procurement, and dynastic ceramic policies. D'Entrecolles uniquely cross-validated indigenous craft narratives with archival evidence, producing a “hybrid epistemology” that merged scientific empiricism with Chinese artisanal traditions.

As a result, d'Entrecolles astutely recognized not only the technical supremacy and cultural difference of Jingdezhen porcelain but also the epistemic gap between Chinese craft empiricism and European scientific rationality, enabling the cross-continental transmission of a sophisticated industrial technology while simultaneously fostering a deeper European understanding of Chinese material culture and social organization.

5. A Comparative Analysis of Missionaries' Perceptions of Chinese Ceramics

During the Qing Dynasty, French missionaries traveled to China one after another and acted as vital intermediaries for the exchange of material culture and technology between China and Europe. Though Joachim Bouvet, Jean de Fontaney and François-Xavier d'Entrecolles were dispatched by Louis XIV and served the imperial court during the Kangxi reign, their research perspectives, observational scopes and core focuses on Jingdezhen porcelain differed fundamentally.

Most contemporary missionaries merely recorded porcelain as exotic artworks, trade goods or imperial curiosities, without delving into core firing techniques and industrial operations. This contrast fully demonstrates the distinctive academic value of d'Entrecolles' investigations.

Joachim Bouvet (1656–1730, French missionary, “King's Mathematician to” China (1688), Kangxi's Western science tutor, key figure in the Chinese Rites Controversy (figurism and Sino-French cultural/diplomatic exchange.), a French who arrived in China in 1687, served closely alongside the Kangxi Emperor (Kangxi Emperor 1654–1722, personal name Aisin-Gioro Xuanye. His long reign witnessed cultural prosperity and extensive exchanges between China and Western missionaries.). Nearly all his writings centered on state affairs, imperial life and Sino-Western diplomacy. While he frequently mentioned Jingdezhen porcelain in his correspondence, he regarded it solely as a precious imperial artifact and a diplomatic gift for royal exchanges. His

accounts mainly praised porcelain's elegant luster and rare materials, paying no attention whatsoever to ceramic craftsmanship. Unlike d'Entrecolles, Bouvet never explored the core techniques such as the formula of kaolin and porcelain stone or high-temperature reduction firing. Nor did he show interest in kiln workers' daily labor and the division of labor within the ceramic industry. His perspective remained entirely detached from actual porcelain production.

Jean de Fontaney (1656–1730, also known by his Chinese courtesy name Mingyuan, was a French missionary who arrived in China in 1687 and passed away in Beijing in 1730. He long served at the imperial court of the Kangxi Emperor.), who came to China in the same period as Bouvet, held a similar superficial view of porcelain and defined it primarily as a commodity for overseas trade. In his letters, he briefly noted that Chinese porcelain was highly sought after by European nobles and ranked among the key bulk goods of maritime trade. His fragmented remarks were attached to records of foreign commerce. He conducted no field observations on porcelain manufacturing procedures or kiln operations, and ignored the connection between the ceramic industry and local people's livelihoods. For Fontaney, porcelain was nothing more than a medium of mutual benefit between empires, with its craft essence left unexamined.

The three missionaries adopted divergent research priorities due to their different identities and missions. Bouvet viewed porcelain from the perspective of imperial aesthetics, while Fontaney interpreted it as a commercial product for foreign trade. In sharp contrast, d'Entrecolles established a comprehensive research framework integrating craftsmanship, culture and economy. Breaking the limitations of one-sided and superficial records prevalent among his contemporaries, he conducted thorough investigations covering core ceramic technologies, local social life and Sino-foreign trade. His research vision and academic depth far surpassed those of other missionaries of his era.

6. Conclusion

French missionaries active in China throughout the 17th and 18th centuries, the majority perceived Jingdezhen porcelain merely from superficial dimensions. They viewed these fine

wares as imperial collectibles, diplomatic gifts and tradable goods, concentrating solely on their visual aesthetics and commercial circulation value. Few of them ventured into actual kiln sites, nor did they delve into core firing techniques, industrial division of labor and the living conditions of local communities linked to porcelain production.

Against this backdrop, François-Xavier d'Entrecolles stood out remarkably. Thanks to his long-term residence in Jingdezhen, he extensively visited both official and private kilns, communicated with local craftsmen, and verified his observations against local classics including Records of Fuliang County. By establishing an integrated analytical framework covering ceramic craftsmanship, folk culture and Sino-Western trade, he resolved the major technical dilemma faced by European artisans, who had long tried to replicate Chinese hard-paste porcelain simply by studying finished products. Undoubtedly, he became an indispensable bridge for the two-way exchange of ceramic technology and culture between China and Europe in the early Qing period. By contrast, d'Entrecolles was the first Western scholar to systematically introduce the complete porcelain-making procedures of Jingdezhen to Europe through a combination of field investigation and documentary research. His two well-known letters on ceramics are far more than scattered travel accounts; instead, they constitute authoritative early documents that record manufacturing details and depict local social realities.

From a broader perspective on Sino-Western cultural exchange, d'Entrecolles' research on Jingdezhen porcelain embodies the prevailing trend of early modern European exploration of Eastern craftsmanship. More importantly, his writings have preserved intact records of Qing-dynasty ceramic technologies and grassroots social life in Jingdezhen. His unique research perspective and rigorous field-based methodology fully reflect his remarkable academic insight. To this day, his works still serve as valuable historical sources and offer meaningful enlightenment for further studies on Qing ceramic history and missionary-related Sino-Western communication.

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