

ANCIENT CERAMICS ASSET PACKAGE
FINANCIALIZATION PROJECT

古陶瓷資產包金融化專案



Yishu Yinhang Limited
藝銀有限公司

香港藝銀 2023 年春季交易會

March 1-31, 2023



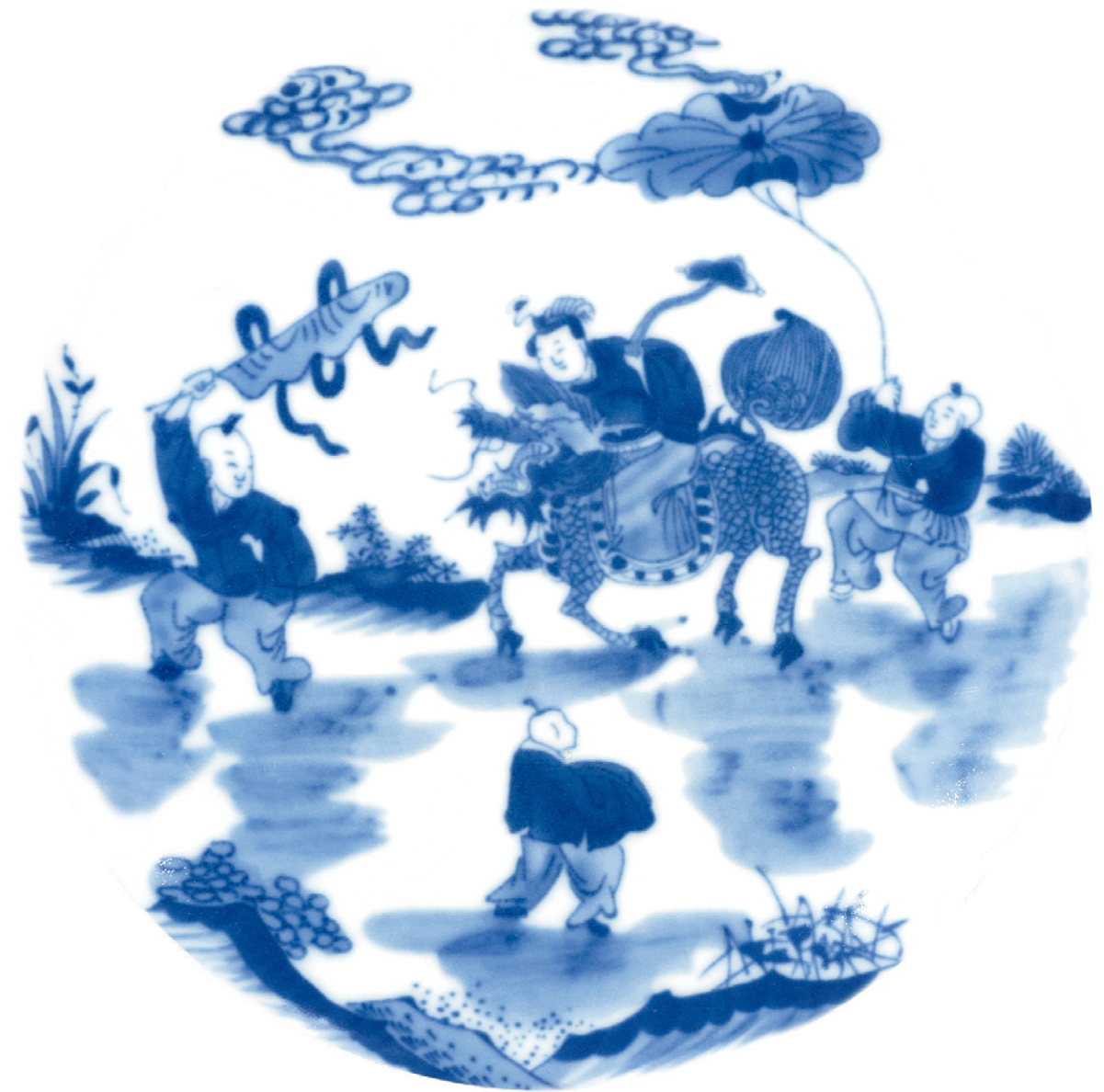
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中國歷代年表

CHRONOLOGICAL TABLE

IMPORTANT
CHINESE
ART

新石器時代 NEOLITHIC PERIOD 6500c-1700c BC	後漢 Later Han 947-950 後周 Later Zhou 951-960
夏 XIA DYNASTY 2100c-1600c BC	遼 LIAO DYNASTY 907-1125
商 SHANG DYNASTY 1600c-1100c BC	宋 SONG DYNASTY 960-1279 北宋 Northern Song 960-1127 南宋 Southern Song 1127-1279
周 ZHOU DYNASTY 1100-256BC 西周 Western Zhou 1100-771 BC 東周 Eastern Zhou 770-256 BC 春秋 Spring and Autumn Period 770-476 BC 戰國 Warring States Period 475-221 BC	金 JIN DYNASTY 1115-1234
秦 QIN DYNASTY 221-206 BC	元 YUAN DYNASTY 1279-1368
漢 HAN DYNASTY 206 BC-220 AD 西漢 Western Han 206 BC-8 AD 新 Xin 9-24 東漢 Eastern Han 25-220	明 MING DYNASTY 1368-1644 洪武 Hongwu 1368-1398 建文 Jianwen 1399-1402 永樂 Yongle 1403-1425 洪熙 Hongxi 1425 宣德 Xuande 1426-1435 正統 Zhengtong 1436-1449 景泰 Jingtai 1450-1456 天順 Tianshun 1457-1464 成化 Chenghua 1465-1487 弘治 Hongzhi 1448-1505 正德 Zhengde 1506-1521 嘉靖 Jiajing 1522-1566 隆慶 Longqing 1567-1572 萬曆 Wanli 1573-1619 泰昌 Taichang 1620 天啟 Tianqi 1621-1627 崇禎 Chongzhen 1628-1644
三國 THREE KINGDOMS 220-265 魏 Wei 220-265 蜀漢 Shu Han 221-263 吳 Wu 222-263	清 QING DYNASTY 1644-1911 順治 Shunzhi 1644-1661 康熙 Kangxi 1662-1722 雍正 Yongzheng 1723-1735 乾隆 Qianlong 1736-1795 嘉慶 Jiaqing 1796-1820 道光 Daoguang 1821-1850 咸豐 Xianfeng 1851-1861 同治 Tongzhi 1862-1874 光緒 Guangxu 1875-1908 宣統 Xuantong 1909-1911
晉 JIN DYNASTY 265-420 西晉 Western Jin 265-317 十六國 Sixteen Kingdoms 304-439 東晉 Eastern Jin 317-420	中華民國 REPUBLIC OF CHINA 1912-1949
南朝 SOUTHERN AND 北朝 NORTHERN DYNASTY 420-581 劉宋 Liu Song 420-479 南齊 Southern Qi 479-502 梁 Liang 502-557 陳 Chen 557-589 北魏 Northern Wei 386-534 東魏 Eastern Wei 534-550 北齊 Northern Qi 550-577 西魏 Western Wei 535-556 北周 Northern Zhou 557-581	洪憲 HONGXIAN (YUAN SHIKAI) 1915-1916 中華人民共和國 P. R. OF CHINA 1949-
隋 SUI DYNASTY 581-618	
唐 TANG DYNASTY 618-907	
五代 FIVE DYNASTIES 907-960 後梁 Later Liang 907-923 後唐 Later Tang 923-936 後晉 Later Jin 936-946	



專案理念及構思

文物是歷史文化的瑰寶，對於逾五千年歷史的中國而言更是國之重寶。文物藝術是人類從事物質生產活動與生活的智慧結晶，也是歷史發展、文明進步的標誌。文物藝術除歷史、美學、文化、民族價值外，更兼備金錢上的價值，成為商貿交易的重要工具。作為見證中國五千年文明發展歷史之一的中國陶瓷則更具獨特意義，且具廣泛的國際影響：中國的英文名稱—China便是源自「瓷器」一詞。在中國歷史上，陶瓷除供歷代皇家與普羅民眾使用外，更自唐、宋以來外銷東亞日本、韓國，東南亞，中東，歐陸諸國。不僅成為中國與這些國家重要的商貿交易商品，也對這些國家的陶瓷生產產生重大影響，為世界文明發展作出重要貢獻。

中國陶瓷在世界陶瓷發展的歷史上，一直以端莊典雅的造型，富麗雅緻的紋飾，色彩華美的釉彩與精湛的製作工藝獨領風騷。而作為「瓷中精粹」之官窯瓷器，更成為歷朝歷代皇家、官宦、商賈、藏家、文人競先追求的對象。時至當代，中國陶瓷藝術品在國際、國內市場上的價值節節攀升，成為熱門的投資保值的最佳選擇。而古陶瓷藝術品作為珍稀資源的金融化、證券化嶄新的資產管理模式，更對滿足人民精神文化的追求，促進藝術品的市場流通，提升社會經濟活力，具有積極意義。香港藝銀公司抱著這一嶄新的資產管理理念，首次隆重推出「古陶瓷資產包証券化」專案。專案以中國古陶瓷為主脈，旨在確真、確值的基礎上賦予古陶瓷藝術品的金融性、信用性、流通性的金融特質，增強藝術品資產流通，實現資產增值。

本次展出的中國古陶瓷藝術珍品，徵集自世界各著名拍賣公司的拍出品與國內外藏家收藏的精品。展出的藏品涵蓋戰國至清代的陶器、單色釉、彩瓷。幾乎見證了中國各個不同時期陶瓷發展史，極具代表性與歷史、文化、藝術價值。對此次專案所涉的展品，我們以資深專家學者目測驗證其真確性為主，並引進不損害陶瓷本體，由世界知名的法國索邦大學研發的先進「拉曼質子訊號光譜檢測」儀器和技術，確定古陶釉彩、胎質特徵，進一步作科學鑑證，務求確定其所屬年代、窯口等(有關此技術的報告，請參閱圖錄附錄)。

我們深切祈望是次專案，對進一步提升中國古陶瓷的收藏、鑑賞、投資及藝術品資產金融化管理、流通具有積極的意義與價值。

香港藝銀有限公司

李港龍 董事長

Project Statement

Art and cultural relics are the historical and cultural treasures of a nation and for China, a civilized country with a span of over 5,000 years of history, these art and historical artefacts are the pride of the nation. Historical and art relics are the crystals of material culture derived from life and activities of mankind, as well as landmarks of historical development and progressive civilization. In addition to historical, aesthetic cultural and national values, these gems also carry monetary value and are important tools in trade and commercial transactions. As evidence of the five thousand years of civilization of China, ceramics bear unique significance and have profound impact in the international arena. The English term “China” has its origin in the term “ceramic (Chine)”. In China, they were not only produced for and used by imperial court and celebrities, as well as daily wares used by the common folk, but also exported overseas to countries such as Japan and Korea in East Asia, Southeast Asia, Middle East and even Europe. Chinese ceramics have profound influence of ceramic industry in these regions, and made significant contributions to world civilization culture.

In the ceramic history of the world, Chinese wares are acclaimed by their classical and elegant forms, brilliant or exquisite decorations, luxuriant or subtle glaze colours and untrammelled technical production. The esteemed “*Guan*” or “official” wares are treasures consistently pursued for collection by imperial court, officials, business sector, collectors and literati through centuries. Nowadays, the value of these objects continue to grow rapidly in the international markets and are also hot items for investment. They could also serve as assets for mortgage through financial or investment management with corporations for exchange of money. Asset securitization of art objects could also enrich the spiritual and cultural life of people, promote transaction and communication in the art market and enliven economic vitality positively and progressively. Considering this, the Yishu Yinhang Ltd. put forward a fresh vision in the management of assets and first offers this “Ancient Ceramics Asset Package Securitization Project” with Chinese ancient ceramics as the core, basing on authentication of artefacts and affirmation of their values, with the ultimate aim to foster flourishing economy, free flow of ancient art objects, creditability and financial merits, as well as to enhance collection and investment values of these assets.

The refined Chinese ceramics featuring in this exhibition come from Mainland and Hong Kong collections, as well as from prestigious auction houses. They cover a wide variety ranging from ancient pottery wares, monochrome and polychrome wares from the Warring States period to the Qing dynasty, representing different periods of development in Chinese history, and illustrating high historical, artistic and cultural significance. We invite experienced experts and scholars to conduct visual inspection and also utilize advanced technology of “Raman Signature of Protonic Species for dating and authentication of ancient ceramics” with the use of spectrometer innovated by the acclaimed Sorbonne University of France to test the glaze and paste component elements of ancient ceramics to assure their dates, origins of kiln production (for the report of this new technology, please see the Appendix in this catalogue).

We sincerely hope that this unique project will further enhance collection, connoisseurship, investment and financial asset value of ancient Chinese ceramics with a proactive approach for making contributions.

Li Kong Lung

Chairman

Yishu Yinhang Limited

藝銀有限公司介紹

Yishu Yinhang Limited/藝銀有限公司，是皇朝遺珍文化產業集團有限公司附屬機構。註冊資本：港幣1億元。在2020年3月13日于香港政府工商註冊處正式批准成立。註冊地址：香港九龍麼地道64號香格裏拉大酒店地下2樓。

古陶瓷資產包證券化專案是Yishu Yinhang Limited/藝銀有限公司推出的第一個專案。計劃每一年推出兩個資產包專案。每一個資產包將包括50–100件中國古陶瓷，每一件古陶瓷都經過嚴格的科學檢測和目鑑專家的認可。在完成第三方專業評估和購買保險後，進行與金融機構，上市公司，機構投資者，家族基金等對接，換取現金或他們的流通股票。

Yishu Yinhang Limited/藝銀有限公司也計劃在適當的時候，以古玩資產作支撐，透過專業機構，發行如比特幣的自己數字貨幣：古董幣。

Yishu Yinhang Limited/藝銀有限公司將透過內部附屬公司：皇廷拍賣有限公司，進行古玩珍寶的流通，也安排展示展覽等活動進行私人洽購。也會透過專業經紀人把一些特別珍貴的古玩送拍到各大一級拍賣公司進行拍賣。

Yishu Yinhang Limited: An Introduction

Yishu Yinhang Limited is a subsidiary of the Royal Heritage and Cultural Industry Group Limited (Hong Kong) with a registered capital of 100 million. It was found and registered with the Registration and Licences Office of the Hong Kong Special Administrative Region on 13 March 2020 with the address at Lower Level 2 of the Shangri-la Hotel, 64 Mody Road, Kowloon, Hong Kong.

The Ancient Ceramics Asset Package Securitization Project is a fresh new project of the Yinshu Yinhang Limited. We plan to offer two major projects annually and this first Asset Package include about 50 to 100 ancient Chinese ceramics, with each of them verified by scientific testing and visual examination by specialists and experts. With a third-party evaluation and insurance arrangement, the package will be offered to financial corporations, listed companies, investment institutions, family foundations for consideration of exchanging the package with cash or tradable stocks.

With the reserve of antique packages, the Yishu Yinhang Limited also has plans to develop digital antique coin similar to the bitcoin.

Through its subsidiary company, the Royale Auctioneer Limited, the Yishu Yinhang Limited also promotes trading of valuable antiques and art objects through exhibitions or via professional brokers to submit to world-class auctioneers for auctions.



母公司：皇朝遺珍文化產業集團有限公司介紹

集團在文化藝術產業領域作出多元化發展,為配合有關發展需要,集團把文化產業分作三部分;以高瞻遠矚及首尾呼應方法,由商業模式推動中國文化及藝術品金融。

1. 檢測與鑑定 (皇朝遺珍古陶瓷鑑定有限公司)
2. 拍賣與展覽 (皇廷拍賣有限公司)
3. 藝術品金融 (藝銀有限公司+香港文化產權交易所有限公司)

下屬機構皇朝遺珍古陶瓷鑑定有限公司 (以下簡稱“本公司”)經歷多年對古陶瓷的研究,彙集中國、香港及法國著名的考古研究機構及光譜學專家合作交流,基於全面理解古陶瓷的固有特性,並結合科學方法和先進光譜分析技術的優勢,建立了皇朝遺珍古陶瓷綜合鑑定技術及ISO 9001品質體系認證實驗室。

皇朝遺珍古陶瓷鑑定有限公司擁有由拉曼光譜儀檢測古陶瓷“質子物質拉曼信號”的鑑定技術。該技術是與法國索邦Sorbonne大學物理系教授Philippe Colomban 的聯合研發成果。這成果也於2019年5月刊登在全球權威拉曼雜誌Journal of Raman Spectroscopy上。該技術是利用拉曼光譜儀測試“質子物質的拉曼信號”在古陶瓷的存在而斷定古陶瓷的真偽。

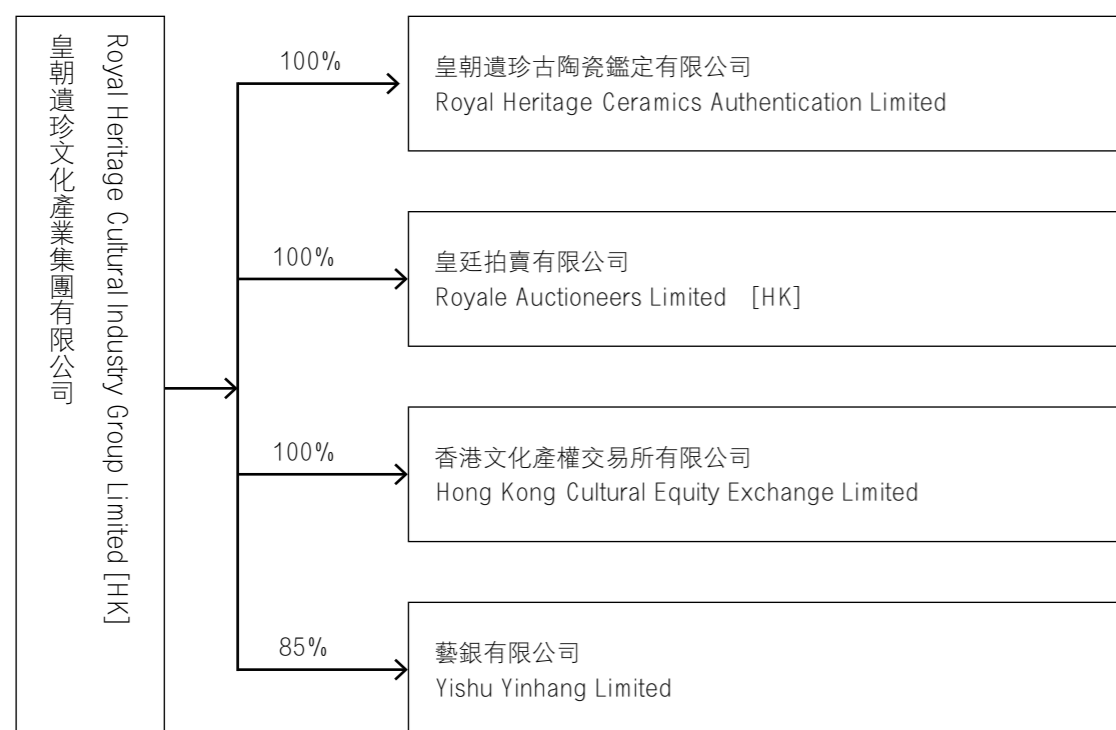
本公司另外一套高科技先進儀器“X-螢光光譜儀”於測試古陶瓷的釉面成分、更能準確地判斷古陶瓷的年代和窯口。這項鑑定技術對陶瓷是完全無損,而且經得起多次反復檢測。

本公司已成功申請ISO 9001:2008 品質管理體系認證,認證範圍為“提供X螢光分析和拉曼檢測的陶瓷無損測試”。

我們的目標是成為一所全球公認的古陶瓷鑑定實驗室、為中國古陶瓷鑑定真偽作出貢獻。

皇朝遺珍文化產業集團有限公司組織架構圖表

The structure of the Royal Heritage Cultural Industry Groups is as follows:



Parent Corporation: Royal Heritage and Cultural Industry Group Limited (Hong Kong) - An introduction

The Group strives to a diversified development in the arena of cultural and art industry with major sectors of cultural industry to project future progressive promotion of art and cultural finance through commercial mechanism in the following three areas:

1. Test and Authentication (Royal Heritage Ceramics Authentication Limited)
2. Auction and Exhibition (Royale Auctioneers Limited (HK))
3. Art and Finance (Yishu Yihang Limited, HK + Hong Kong Cultural Equity Exchange Ltd)

Its another subsidiary, the Royal Heritage Ceramics Authentication Limited (hereafter the company) invites Chinese, Hong Kong and French prestigious archaeological institutions and experts of Spectroscopy, to collaborate by basing on their solid researches and survey of different types of ancient ceramics, as well as scientific techniques and optical spectroscopy on the research and analysis of ceramics to devise a distinctive scientific method to authenticate ancient ceramics and obtained the ISO9001 Quality management system certification.

The company possesses the authentication technology of utilization of Raman Signature of Protonic Species for dating and authentication of ancient ceramics with the use of spectrometer. This new technology is the result of joint venture of Philippe Colomban, Professor of Physics of the Sorbonne University, France and other institutions. The technological finds were published in the world authority Journal of Raman Spectroscopy. The Raman spectrometer examines the Raman Signature of Protonic Species remains on ancient ceramics for dating and authentication. Our company also possess another high-tech X-ray Fluorescent Spectrometer to test and analyze the components and elements left on the glaze of ancient ceramics to ascribe the dating and kilns in producing ancient ceramics, and such tests can be repeatedly conducted and do not need to damage any parts of ceramics. Our company has successfully obtained the ISO 9001:2008 certification to credit such technology as X-ray Fluorescent Analysis and Raman harmless tests for ceramics.

Our ultimate goal is to provide a world recognized ceramic authentication laboratory to realize the authentication of Chinese ceramics.

古陶瓷專家團隊成員

1. 承煥生教授 (復旦大學現代物理研究所教授)

畢業於復旦大學物理系，70年代末開始基於加速器的離子束作分析研究與應用並與合作者一起獲得兩項國家教育部科技進步獎，近年開展了科技考古研究課題，包括採用無損的質子激發X螢光技術進行中國古陶瓷研究與鑑定以及玉石種類與質地的鑑別研究等。他長期從事低能物理、離子束分析以及古陶瓷分析及其他科學考古方面的研究工作，已發表過近70篇論文。其中代表性論文為應用PIXE和多元統計方法鑑別成化青花瓷。

他曾擔任上海古陶瓷科學技術研究會副理事長。

Members of Ancient Ceramics Authentication Team

Professor Cheng Huansheng (Professor, Institute of modern physics, Fudan University) He graduated from the Physics Department of Fudan University and began to analyze and apply ion beam based on accelerator in the late 1970s. The collaborators won two science and technology progress awards from the Ministry of education.

In recent years, scientific and technological archaeological research projects have been carried out, including the research and identification of ancient Chinese ceramics and the identification of jade species and texture by using non-destructive proton excited X-ray fluorescence technology.

He has been engaged in the research of low energy physics, ion beam analysis, ancient ceramics analysis and other scientific archaeology for a long time, and has published nearly 70 papers. The representative paper is the application of PIXE and multivariate statistical methods to identify Chenghua blue and white porcelain.

He once served as vice president of Shanghai Ancient Ceramic Science and Technology Research Association.

2. Philippe Colomban 教授 (法國索邦大學物理系教授)

Philippe Colomban教授於1979年獲得法國皮埃爾與瑪麗居裏大學物理和化學雙博士學位，2004年擔任法國皮埃爾與瑪麗居裏大學反應動力學實驗室首席科學家，現任皮埃爾與瑪麗居裏大學納米材料光譜學實驗室領頭人。曾任多所大學訪問學者，受聘于日本韓國等多家科研機構擔任訪問科學家。Philippe教授目前為止發表學術論文681篇。Philippe Colomban教授在2017年12月6日受到北京故宮的邀請講學，題目：《早期法國軟陶和中國釉上彩的原位拉曼顏料分析》《General Overview on the on-site analysis of Enameled Glass, Early French Soft-paste Porcelain and Raman study of Chinese cloisonné》。Philippe教授結合自身多年文物保護領域研究經驗，將對文物的原位拉曼分析技術進行介紹。重點介紹最近在法國早期軟陶制品和中國明清釉上彩顏料中的研究成果，探討文物顏料的原產地分析，以及Philippe教授的試驗團隊開發出的一些獨有的使用技巧。

After an MSc in Ceramics, Glass & Cement Engineering (ENSCI-Sèvres) in 1975 and a MSc in Solid State Physics in 1976,



Philippe Colomban obtained in 1979 the Ph.D. Hab. degree (*Docteur es-Sciences Physiques*) from the Université Pierre-et-Marie-Curie. He was one of the firsts in the world to develop Sol-Gel routes for advanced optoelectronic PLZT ceramics. He studied then superionic conductors' structure and ion mobility. From 1989 to 1993 he was in charge of the new projects at the Materials Department of ONERA, the French Establishment for Aerospace Research and Development (Materials for rockets and missiles, aircraft engines, Sol-Gel routes, ceramic- or polymer-matrix composites, fibres, nanoparticle-based microwave absorbing materials and Functionally Graded composites...) and worked as Consultant at the French Establishment for Aerospace and Aeronautics (ONERA) for 10 further years. From 1994 to present, as CNRS Research Professor his research interests include Materials Science and Raman, IR and neutron spectroscopy (*in situ* analysis, fuel cells, electrolyzers, fibres/composites...). Attention is paid to the correlation between Raman parameters and mechanical and electrical (ionic, electronic) properties...as well to the identification of the technology used in ancient ceramics, glasses, paintings and buildings. Ph. Colomban published more than 500 peer-review papers and 10 patents, presented more than 100 invited talks. He is the Associated Editor of the Journal of Raman Spectroscopy and member of many Editorial Boards and CNRS Research Professor Emeritus at Sorbonne Université, Paris.

金融專家團隊

1.李港衛先生：政協湖南省委員(2008–2017)

李先生畢業於英國倫敦金斯頓大學，並進一步獲得了在澳大利亞科廷科技大學研究生文憑。李先生曾擔任安永會計師事務所（安永）合夥人及任職超過29年之久，是第一批率先進入中國的專業人士。他自1996年以來定居在上海和北京。李先生在安永中國發展的過程中先后擔任了以下重要領導職務：

- 安永中國業務發展總經理；
- 安永深圳的管理合夥人；
- 安永北京的管理合夥人；
- 安永中國日本企業服務業務部首席合夥人；
- 安永遠東區零售及消費品行業首席合夥人；以及
- 安永遠東區理事會成員。

李先生在安永被公認為一個成功的業務開發者。在業內被公認為一位企業融資，併購和海外上市等領域的專家。在安永的職業生涯中，他曾成功協助超過30多家企業在香港，中國及美國等地上市。一些著名的企業包括中國蒙牛，中糧集團，國美電器，小肥羊集團，海口美蘭機場，湖南有色集團，中國第一拖拉機.....等等都曾是他的服務客戶。

在他擔任安永遠東區零售及消費品行業首席合夥人角色中，他已被公認為行業表表者，並在這領域相關的研討會和論壇給予無數的演講。在這個崗位上，他曾多次在媒體發表過相關的文章，其中值得關注的文章如下列之：

- “中國零售商和消費品牌之成功之路”；
- “New Lap of Luxury” 奢侈品的樹立；
- “中國零售行業並購面觀”；以及
- “中國女性消費主義的興起”。

他在安永最後一個角色是安永遠東區理事會成員。成員是從四百多合夥人選出來的。理事會的責任是監管整個安永遠東區、包括大中華區的總體行政運作。

李先生目前擔任下列上市公司的獨立非執行董事：

- 超威動力控股有限公司（香港交易所代碼：00951）2010.7；
- 中國西部水泥有限公司（香港交易所代碼：02233）2010.8；
- 中國現代牧業控股有限公司（香港交易所代碼：01117）2010.11；
- 國美電器控股有限公司（香港交易所代碼：0493）2011.3；
- 雷士照明控股有限公司（香港交易所代碼：02222）2012.11；
- 雅士利國際控股有限公司（香港交易所代碼：01230）2013.11；
- 協鑫新能源控股有限公司（香港交易所代碼：0451）2014.5；
- 萬州國際有限公司（香港交易所代碼：0288）2014.8；以及
- 國泰君安證券股份有限公司（香港及上海交易所代碼：02611）2017.4。

李先生曾擔任下列上市公司的獨立非執行董事或非執行董事：

- 中信證券股份有限公司（香港及上海交易所代碼：06030）(2011.11 – 2016.5)；
- 中科生物控股有限公司（前身為“美麗家園控股有限公司”）（香港交易所代碼：01237）非執行董事兼副主席（2014.7 – 2015.9）；
- 中國太平保險控股有限公司（香港交易所代碼：0966）獨立非執行董事（2009.9 –2013.8）；

- 西藏水資源控股有限公司（香港交易所代碼：01115）(2011.7 – 2022.2)；
- 中國綠地潤東汽車集團有限公司（香港交易所代碼：01365）2014.8 – 2022.12)；以及
- Sino Vanadium Inc.（TSX）獨立非執行董事（2009.10 – 2011.12）

在社會服務方面，李先生曾擔任香港腎臟基金會的名譽核數師；香港兒童少年基金會和中國兒童少兒基金會理事。李先生還曾擔任后者基金會的監事會成員。李先生自2008–2017年起被任命為中國人民政治協商會議湖南省委員。2016年9月至2019年6月，李先生被任命為香港救助兒童會董事。

李先生是以下專業會計組織的成員：

- 英格蘭及威爾斯特許會計師協會會員；
- 澳洲特許會計師協會會員；
- 英國特許公認會計師協會會員；
- 香港會計師協會會員；以及
- 澳門註冊會計師協會會員。

Specialist Members of the Financial Team

Mr. Conway Kong Wai LEE, CPPCC Hunan China (2008-2017)

Graduated from Kingston University in London and further obtained his post graduate diploma at Curtin University of Technology in Australia. Mr. Lee served as a partner of Ernst & Young (EY) over 29 years and was one of the first batches of professionals pioneered into China. He was resident in Shanghai and Beijing since 1996 and held key leadership positions in the development of EY in China as follows:

- General Manager of Business Development of EY China;
- Managing Partner of EY Shenzhen;
- Managing Partner of EY Beijing;
- Head of Japanese Business Services of EY China practice;
- Industrial Leader of Retail and Consumer Products (RCP) sector of EY Far East (EYFE); and
- Elected Member of Council of EYFE

Mr. Lee is recognized as a successful business developer and expert in corporate finance, M & A, and overseas listings. In his career life with EY, he had successfully assisted over 30 corporations listed in HK, China and the US. Some of the noted corporations include China Mengniu; Cofco Group of Companies; Gome; Little Sheep Group, Haikou Meilan Airport; HNG; China First Tractor..... etc.

In his role as the Industrial Leader of RCP sector of EYFE, he had become a recognized leader in this field and had given numerous speeches in seminars and forums in this sector. Under this role, he had delivered a number of thought leadership papers in China, some of the notable ones are:

- The Path to Success for Retailer and Consumer Brands in China
- The New Lap of Luxury
- A Look at Merger & Acquisition in China's Retail Industry
- The Rise Of Female Consumerism in China

His last role before leaving EY was an elected member of the FE Council overseeing the operations of Far East Executives of EYFE area.

Mr. Lee currently serves as independent non-executive directors (“INED”) of the following listed companies:

- Chaowei Power Holdings Limited (HKEx 0951) since 2010.7;
- West China Cement Limited (HKEx 02233) since 2010.8；
- China Modern Dairy Holdings Ltd.(HKEx 01117) since 2010.11；
- Gome Electrical Appliances Holdings Limited (HKEx 0493) since 2011.3;
- NVC Lighting Holding Limited(HKEx 0222) since 2012.11;
- Yashili International Holdings Ltd. (HKEx 01230) since 2013.11;
- GCL New Energy Holdings Limited (HKEx 0451) since2014.5；
- WH Group Limited HKEx 0288) since 2014.8; and
- Guotai Junan Securities Company Limited (HKEx & SSE 02611) since 2017.4

Formerly, Mr. Lee also served as INED or non-executive director (NED) of the following companies:

- Citic Securities Company Limited(HKEx 06030)(2011.11- 2016.5);
- China Environmental Technology and Bioenergy Holdings Limited (formerly Merry Garden Holdings Limited) (HKEx 01237), as NED and Deputy Chairman (2014.7- 2015.9);
- China Taiping Insurance Holdings Company Limited (HKEx 0966), (2009.9 -2013.8);
- Tibet Water Resources Holdings Ltd. (HKEx 01115) (2011.7- 2020.2);
- China Greenland Rundong Auto Group Limited (HKEx 01365) since 2014.8-2020.12); and
- Sino Vanadium Corporation (TSX) (2009.10 - 2011.12)

On community services, Mr. Lee served as an honorary auditor of Hong Kong Kidney Foundation; The Children's Foundation in Hong Kong and The China Children and Youngster Foundation. Mr. Lee also served as a member of the supervisory council of the latter Foundation. Since 2008 Mr. Lee was appointed a member of Chinese People's Political Consultative Conference of Hunan Province in China until 31 December 2017. Since 9 September, 2016, Mr. Lee was appointed as a Trustee of Save the Children Hong Kong until June 2019.

Mr. Lee is a member of the following professional organizations:

- The Institute of Chartered Accountants in England and Wales;
- The Institute of Chartered Accountants in Australia;
- The Association of Chartered Certified Accountants;
- The Hong Kong Institute of Certified Public Accountants; and
- The Macau Society of Registered Accountants.

2.李大宏博士

李大宏博士1982年畢業於中國北京清華大學土木與環境工程工程系（學士）及 1989年畢業於加拿大多倫多大學土木工程系（博士）。

李博士具有超過25年專案及企業融資，並購及私募股權基金經驗，並在國內外參與完成了超過30個單項投資大於1億美元的債務及並購專案及更多較小專案。他的投融資專案大多中國與海外的跨境交易並涵蓋廣泛的領域，包括資源，基礎設施，航空，汽車，醫藥，城市發展，明星獨角獸，另類資產等。李博士參與的投資專案中包括美國伯克希爾哈撒韋60億美元收購以色列ISCAR公司，吉利汽8億歐元參股德國戴姆勒公司，大部分美國普惠公司投資中國專案，23億歐元部分並購荷蘭A&C公司等。近年來隨著中國經濟規模快速增大，全球經濟一體化不斷深入，中國企業快速獲得先進技術/品牌的需要，除繼續參與投資中國如合資專案、資產並購、明星高科技企業投資外，也參與諸多中國企業境外優質資產並購及投資，亦包括境外上市融資，債權融資，海航/安邦等海外資產重組。

李博士有超過十年世界銀行投資履歷經驗及其它國際金融機構的投融資經驗。同時也與海外私人金融機構，家族辦公室，家族信託等有深厚關係包括與多個位於紐約、倫敦、特拉維夫的猶太家族基金如羅斯柴爾德家族辦公室及五劍基金有著緊密的投融資合作。

李博士在其所投專案中曾任美國納斯達克上市公司（醫藥行業）執行董事，及現任香港上市公司（礦業）董事局主席。

Dahong Li, Ph.D

Dr. Li graduated from Tsinghua University (B.S) in Beijing China and University of Toronto (Ph.D), Toronto Canada.

Dr. Li has over 25-year experience in project and corporate financing, merge and acquisitions and private equity investment and has completed over 30 transactions of US\$100 million or bigger in debt financing and acquisitions and more smaller scale transactions. His financing experience involves mostly across border transactions between China and overseas and spreads across a wide range of sectors including resources, infrastructure, aviation, automobile, pharmaceutical, urban development, startup unicorns and alternative assets. Dr. Li has worked with Berkshire Hathaway in its \$6 billion acquisition of Israel's Iscar, Geely Automobile's Euro 8 billion investment in Daimler AG of Germany, most of investments in China and India from Pratt Whitney of the United States, Euro 2.3 billion partial acquisition of C&A of Netherland, among some of the investments and transactions. In recent years Dr. Li has also broked investments in existing share transaction or pre-IPO round of financing in some fast growing star unicorns based in China. Dr. Li has worked with the World Bank and Asian Development Bank for about 10 years. He also has a close tie and working relationship in international investments with several Jewish family offices and trusts based in New York, London and Tel Aviv, including Five Narrows Fund. Dr. Li was an Executive Director of a Nasdaq listed company and now serves as Chairman of the Board of a Hong Kong listed company, both as a result of his investment activities.

3.易永發先生

畢業於香港中文大學工商管理學系，他同時擁有英國特許公認會計師公會和香港會計師公會資深會員資格。易先生在倫敦和香港工作了超過38年，在企業融資、直接投資和財務審計方面有廣泛的經驗。

易先生曾經在香港及英國之安永會計師事務所工作多年，並曾於香港出任具香港及臺灣背景之數家投資銀行之主管職位。他曾經是香港證券及期貨事務監察委員會的註冊人，並曾經具有香港主板及創業板之保薦人和交易商資格。

易先生現時是五家香港上市公司的獨立非執行董事。分別為耐世特汽車系統集團有限公司（股票代碼1316），水發興業能源集團控股有限公司（股票代碼750），深圳市海王英特龍生物技術股份有限公司（股票代碼8329），滬光國際上海發展投資有限公司(股票代碼770)，和現代傳播控股有限公司（股票代碼 0072）。

易先生也曾經是於香港上市之中國民航資訊網絡股份有限公司(股票代碼0696)及於深圳證券交易所上市之成都市興蓉環境股份有限公司(000598.SZ)及北京中關村科技發展(控股)股份有限公司(000931.SZ)之獨立非執行董事。易先生分別於2010年3月, 2020年8月及2009年12月退任。

易先生過去還積極參與各類會議、研討會及香港會計師公會舉辦的培訓工作坊，並就中國企業在香港和海外上市的課題發表演講。他發表演講的城市和省份包括杭州、長春、廣州、哈爾濱、寧波、紹興、大連、南昌、長沙、上海、北京、廈門、寧夏、石家莊以及西安等。

Mr. Simon Yick

Simon Yick was graduated with a Bachelor degree in Business Administration from the Chinese University of Hong Kong and is the fellow members of both the Association of Chartered Certified Accountants in UK and the Hong Kong Institute of Certified Public Accountants. He has worked in HK and London with over 38 years with extensive experience in corporate finance, direct investment, and audit.

He has worked for Ernst & Whinney Hong Kong (now known as Ernst & Young) and Ernst & Whinney London for several years and had been the senior management of several Taiwan and Hong Kong based investment banking firms in Hong Kong and was a Registered Person under the Securities Futures Commission of Hong Kong and was qualified as a sponsor and dealer for both of the main board and GEM board of the Hong Kong Stock Exchange.

Simon is currently the independent non-executive director of five Hong Kong listed companies: Nexteer Automotive Group Limited, (Stock code 01316),China Shuifa Singyes Energy Holdings Limited (Stock code 750),Shenzhen Neptunus Interlong Bio-technique Holdings Company Limited (Stock code 8329), Shanghai International Shanghai Growth Investment Limited (Stock code 770) and Modern Media Holdings Limited (Stock code 072).

In addition ,Simon had also acted as the independent non-executive director of Travelsky Technology Limited (Stock Code: 696), and Chengdu Xingrong Environment Co.,Ltd (000598.SZ) and Beijing Centergate Technologies (Holding) Co. Ltd, (000598.SZ) being listed on the Shenzhen stock exchange and was retired in March 2010, August 2020 and December 2009 respectively.

Simon had also participated actively in the past as speaker in conferences, seminars, HKSA workshops and dinner gatherings for topics titled “Major consideration for Obtaining Listing by PRC Enterprises in Hong Kong”, “Listing on the Growth Enterprise Market - A Road to Success”, “Doing Business in the PRC” in Hong Kong and the PRC; the cities that seminars being held included Hangzhou, Changchun, Guangzhou, Harbin, Ningbo, Shaoxin, Dalin, Nanchang, Changsha, Shanghai, Beijing, Xiamen, Ningxia, Shijiazhuang and Xian.

法務專家團隊：郭葉陳律師事務所（KYC）

郭琳廣律師 銀紫荊星章，銅紫荊星章，太平紳士

郭葉陳律師事務所合伙人。郭葉陳律師事務所（“KYC”）是《亞太法律500强》以及《全球金融法律1000强》的律師事務所之一，是極少數獲得國際法律刊物評定的香港華資律師事務所。估計全港不超過10家香港華資律師事務所獲得此類評定。

郭律師的專業範疇包括企業融資、證券、收購與合并、直接投資、公司重組及公司拯救。他亦經常處理涉及監管機構對上市公司及董事進行的違規調查事宜，如內幕交易、市場失當行爲、違規會計手法、財務欺詐及違反上市條例等。郭律師近年亦多增了在礦業及資源業方面的參與。

他經常向美國公司、歐洲公司、國有企業、民營企業及香港公司提供有關業務、企業及法規方面的諮詢。

在近期出版之《錢伯斯亞洲》(Chambers Asia)、《亞太法律500强》(Asia Pacific Legal 500)及《PLC選擇律師?》(PLC Which Lawyer?)中，郭律師均被評定為在企業融資 / 公司法及商業法 / 收購合并業務方面杰出的律師，在《優秀律師名錄 – 香港》(Legal Who’s Who – Hong Kong) 中，郭律師亦被評定為企業融資方面杰出的律師。于2001/2002年及2004年，郭律師更被《亞洲法律業務》(Asian Legal Business)列為中國(包括香港)最有影響力的100名律師之一。

郭律師畢業于澳大利亞悉尼大學并先後獲得經濟學學士、法學學士及法學碩士學位。他後來亦就讀美國哈佛大學，取得哈佛商學院的高級管理課程文憑 (Advanced Management Program)。郭律師是香港執業律師，同時亦具有澳大利亞、英格蘭和威爾士及新加坡的執業律師資格。此外，他更具有英格蘭和威爾士的特許會計師資格及澳大利亞和香港的認可會計師資格。

郭律師在公共和社區服務方面同樣有豐富的經驗及杰出的成就，并先後獲香港特別行政區政府委任為太平紳士及頒授銅紫荊和銀紫荊星章。

郭律師任職多個政府諮詢機構及委員會的委員，現為證監會房地產投資信托基金委員會委員及威爾斯親王醫院管治委員會委員。

曾任獨立監察警方處理投訴委員會主席、交通諮詢委員會主席、消費者委員會副主席、香港聯合交易所紀律上訴委員會召集人、交通意外傷亡援助諮詢委員會主席、金融發展局內地機遇小組委員、土地及建設諮詢委員會委員、強制性公積金計劃諮詢委員會委員、競爭事務委員會委員、香港旅遊發展局委員、保險索償投訴委員會委員、香港會計師公會上市專家委員會委員、香港會計師公會企業融資委員會委員、世界貿易組織（WTO）投標投訴審裁組織委員及中國內地的廣西自治區政協委員會委員，也是香港校長中心創會會員。

曾經參與的專案

資本市場經驗

- 珩灣科技有限公司 – 代表保薦人為珩灣科技在香港聯交所主板上市的專案提供法律服務
- 代表中國機械設備工程在香港聯交所主板首次公開發售H股股份，募集資金超過39億港元，保薦人為中銀國際

- 代表靈寶黃金在香港以H股的形式于香港聯交所主板上市，集資近港幣9.89億元，保薦人為中銀國際
- 代表保薦人瑞銀（UBS）和嘉誠亞洲，為招金礦業股份有限公司在香港以H股的形式于香港聯交所主板上市，該公司最終的集資額約為港幣22億元
- 代表建滔化工分拆建滔積層板于香港聯交所主板上市，保薦人為高盛，最終的集資額約為港幣60億
- 代表四川新華文軒連鎖股份有限公司在香港聯交所主板首次公開發售H股股份，保薦人為中銀國際
- 代表依利安達以介紹形式在香港聯交所主板上市
- 代表保薦人高盛，為中國一家焦煤企業于香港聯交所主板進行上市，工銀國際為該專案的聯席保薦人
- 代表澳優乳業于香港聯交所主板進行上市，保薦人為麥格理和中銀國際
- 代表印尼一家礦業公司于香港聯交所主板進行上市，保薦人為摩根士丹利和匯豐銀行
- 代表一個國際電訊集團分拆其在中國的電子商貿業務于香港聯交所主板上市，保薦人為瑞銀（UBS）和德意志銀行

監管調查/合規經驗

- 香港上市公司及其董事 – 與未披露股價敏感消息及持有該股價敏感消息下進行的股權回購有關的香港聯交所質詢
- 香港上市公司 – 與可能發生的會計欺詐及停牌事件有關的香港聯交所質詢
- 保密客戶 – 與可能發生的董事內幕交易有關的香港證監會調查
- 保密客戶 – 與董事操控市場指控有關的香港證監會調查
- 保密客戶 – 對證監會在其調查牽涉股份配售的多項市場失當行為而對一家香港上市公司提出的指控進行抗辯。證監會最後終止調查
- 香港上市公司董事 – 證監會對涉嫌披露虛假或誤導性資訊以誘導買賣該公司股份的調查
- 香港上市公司董事 – 由于家庭成員買賣公司股份而導致的股東利益披露違規指控，事件涉及數以百計的聲稱違規行為。事件與證監會獲得和解，僅五個違規行為成立
- 香港上市公司董事 – 香港聯交所與公司招股書中的虛假聲明有關的紀律程式
- 上市公司董事和大股東 – 關於在禁售期內買賣股份的内幕交易指控
- 香港上市公司董事 – 證監會關於在公司首次公開發售中提供虛假或誤導性資料的調查，在商業罪案調查科(CCB)的調查和會面中向其提供諮詢
- 香港一家大型銀行的董事 – 引起公眾廣泛注意的證監會檢控。該檢控與聲稱董事故意違反股權披露義務相關
- 持牌法團董事 – 證監會對聲稱串謀進行虛假交易、操控價格和操縱股票市場以及提供虛假或誤導性資料的調查
- 投資銀行 – 證監會關於其在中國的業務活動被指已經違反中國法規的查詢和調查，以確定銀行是否合適繼續持有其在香港的牌照
- 持牌法團和其高級成員 – 證監會關於聲稱未能遵守客戶身份規則政策的調查。在客戶與證監會的會面中向其提供協助，并協助客戶回復證監會對提供檔和資料的要求
- 持牌法團和其主席/董事 – 證監會關於違反內部監控的調查，包括違反財務資源要求。就證監會擬議對董事的紀律處分而提供諮詢，向證監會提交檔，并導致該董事完全免除所有責任
- 持牌人 – 對證監會在其調查市場操縱活動中就提供虛假和誤導性資訊而提出的指控進行抗辯。指控被駁回，費用歸客戶所有
- 持牌人 – 證監會關於聲稱在提供給證監會的材料中提供虛假和誤導性資訊的檢控
- 香港的大型零售連鎖店 – 關於在其招股書中存在大量失實資料的指控，并積極地管理監管當局的跟進性調查
- 金融機構的董事總經理和行政總裁 – 就監管違規的指控作出抗辯，該指控與聲稱其對衝基金業務因為其離開了香港的對衝基金行政總裁的欺詐行為而倒閉相關
- 大型國際性會計師事務所及其合伙人 – 就證監會和香港聯交所對一家大型中國企業在其首次公開發售後不久便倒閉作

出的調查查詢而向一家大型國際性會計師事務所以及其合伙人提供諮詢

- 主要牽連人士 – 內幕交易審裁處程式，就可能的串謀行為和市場操控指控而提供諮詢并進行抗辯
- 一項首次公開發售中的保薦人 – 香港聯交所和證監會關於其中途告吹的首次公開發售專案中所作出的盡職調查是否充分的查詢

學歷及經驗

2014年10月至今：郭葉陳律師事務所(Kwok Yih & Chan)合伙人

2012年3月至2014年9月：金杜律師事務所(King & Wood Mallesons)執行管理合伙人（亞洲戰略及市場）

2004年10月至2012年2月：澳大利亞的萬盛國際律師事務所(Mallesons Stephen Jaques)中國大陸和香港辦事處，大中華區首席合伙人

1994 – 2004年：

郭葉律師行/美國的安達信國際律師事務所(Andersen Legal)創辦人/大中華區首席合伙人

美國的安達信國際律師事務所(Andersen Legal)的全球管理委員會委員（與美國的安達信會計師事務所(Arthur Andersen)聯盟的國際法律網路）

美國的安達信國際律師事務所(Andersen Legal)亞太區領導小組成員

Specialist of the Legal Team

Mr. Larry Kwok SBS, BBS, JP

Larry Kwok is a partner of Kwok Yih & Chan (“KYC”). KYC is an Asia Pacific Legal 500 and IFLR1000 law firm. Only a very few, estimated not more than 10, local Hong Kong law firms got such listing.

Larry’s practice covers corporate finance, securities, mergers and acquisitions, direct investments, corporate reorganisation and corporate rescue. He is also active in advising on regulatory matters such as insider dealings, market misconduct, accounting irregularities and violation of the Listing Rules. In recent years, he has also been increasingly involved in mining and resources sector.

He regularly provides business, corporate and regulatory advice to US and European corporations, PRC state-owned and privately-owned enterprises and Hong Kong corporations.

In recent editions of Chambers Asia, The Asia Pacific Legal 500 and PLC,, Larry was rated/recommended as a leading lawyer in Capital Markets / Corporate / M&A practice. He was recognised by The Legal Who’s Who - Hong Kong as a leading corporate finance lawyer and by Asian Legal Business in 2001/2002 and 2004 as one of the 100 most influential lawyers in China (including Hong Kong).

He graduated from the University of Sydney, Australia with double bachelor’s degrees in accounting/economics and laws respectively as well as a master’s degree in laws. He also obtained the Advanced Management Program diploma from the Harvard Business School. Larry is qualified to practise as a solicitor in Hong Kong SAR, Australia, England and Wales and Singapore. He is also qualified as a Chartered Accountant in England and Wales and a CPA in Hong Kong and Australia.

Larry also has a remarkable record of leadership and experience in public and community services. He is currently a Justice of the Peace appointed by the Hong Kong Government and has also been awarded the Bronze Bauhinia Star and Silver Bauhinia Star by the Hong Kong Government.

He has served regularly on Government boards and committees. He is currently a member of the Committee on Real Estate Investment Trusts of the Securities and Futures Commission and the Hospital Governing Committee of the Prince of Wales Hospital.

Previously, Larry was Chairman of the Independent Police Complaints Council and the Transport Advisory Committee, Vice-Chairman of the Consumer Council, Convenor of the Disciplinary Appeals Committee of the Hong Kong Stock Exchange, Chairman of the Traffic Accident Victims Assistance Advisory Committee, member of the Mainland Opportunities Committee of the Financial Services Development Council, Land and Development Advisory Committee, Mandatory Provident Fund

Schemes Advisory Committee, Competition Commission, Hong Kong Tourism Board, Insurance Claims Complaints Panel of The Hong Kong Federation of Insurers, Expert Panel on Listing and the Corporate Finance Committee of the Hong Kong Institute of Certified Public Accountants, and the Review Body on Bid Challenges under the World Trade Organization. He was a member of the PRC Political Consultative Committee (Guangxi). He is also a Founder of the Hong Kong Principals' Institute.

Recent transactions

ECM/IPO transaction experience

- Plover Bay Technologies Limited - advised the sponsor on its Main Board listing of the HKEx
- Representing China Machinery Engineering Corporation, a PRC state-owned enterprise undertaking international infrastructure projects, in its global offering of HK\$3.9 billion of H-Shares and IPO on the HKEx with BOCI as sponsor
- Representing Lingbao Gold on its HK\$989 million IPO and global offering of H shares on the Hong Kong Stock Exchange with BOCI as the sponsor
- Representing UBS/Cazenove as the sponsors on Zhaojin Mining's global offering of HK\$2.1 billion of H Shares and IPO on the Hong Kong Stock Exchange
- Representing Kingboard Laminates on spin-off and global offering of HK\$5.86 billion of shares and IPO on the Hong Kong Stock Exchange with Goldman Sachs as the sponsor
- Representing Sichuan Xinhua Winshare Chainstore in its global offering of H-Shares and IPO on the Hong Kong Stock Exchange sponsored by BOC International
- Representing Elec & Eltek in its listing on the Hong Kong Stock Exchange by way of Introduction
- Representing Goldman Sachs/ICBC as sponsors in an IPO of a PRC issuer in the coke business
- Representing Ausnutria Dairy on its IPO with Macquarie/BOCI as sponsors
- Representing the issuer in mining business in Indonesia on its IPO with Morgan Stanley/HSBC as sponsors
- Representing a major telecommunications group as a controlling shareholder in the spin off and IPO of its e-commerce business in the PRC with UBS/Deutsche Bank as sponsor

Regulatory compliance and investigations

- Hong Kong listed company and its directors - SEHK enquiries involving alleged non-disclosure of price sensitive information and share repurchases while in possession of such price sensitive information in breach of the Listing Rules
- Hong Kong listed company - SEHK enquiries involving possible accounting fraud and suspension of trading of shares
- Confidential client - SFC investigation involving possible insider trading by a director of a Hong Kong listed company
- Confidential client - SFC investigation involving alleged market manipulation by a director of a Hong Kong listed company
- Confidential client - defence of an SFC investigation of various alleged market misconducts involving a placement of shares of a Hong Kong listed company where the investigation did not proceed
- Director of Hong Kong listed company - Investigation conducted by the SFC into suspected disclosure of false or misleading information inducing transactions in the shares of the company
- Directors of Hong Kong listed company - Alleged breaches of SDI disclosure due to family members of a director buying and selling shares in the company, involving hundreds of alleged violations. The matter was settled with the SFC with only five violations
- Directors of Hong Kong listed company - Hong Kong Stock Exchange disciplinary proceedings in respect of mis-statement in the company's prospectus
- Directors and major shareholders of listed company - Allegations of insider dealing by trading shares during the embargo period
- Directors of Hong Kong listed company - SFC investigations for allegedly providing false or misleading information in connection with the company's IPO, advising them in CCB investigations and interviews
- Director of a leading bank in Hong Kong - Highly publicised prosecution by the SFC. The prosecution related to alleged wilful contravention of directors' disclosure obligations with respect to shareholdings
- Director of a licensed corporation - SFC investigations relating to alleged conspiracy to commit false trading, price rigging and stock market manipulation, and the provision of false or misleading information
- Investment bank - SFC enquiries and investigations relating to its business activities in the PRC alleged to have contravened PRC regulations, to determine the bank's fitness and properness to continue its license in Hong Kong
- Licensed corporation and its senior members - SFC investigations relating to alleged failures in complying with the client identity rule policy. Assisting clients in their interviews with the SFC and their responses to the SFC's requests for documents and information

- Licensed corporation and Chairman/director - SFC investigations into internal control failings, including a breach of financial resources requirements. Advising on proposed SFC disciplinary sanction on the director, making submissions to the SFC resulting in the director being completely absolved from all liability
- Licensed person - Defending against charges for giving false and misleading information by the SFC in their investigations into market manipulation activities. The charge was dismissed with costs to our client
- Licensed person - SFC prosecution for allegedly providing false and misleading information in a material particular to the SFC
- Retail chain in Hong Kong - Allegations of substantive mis-statement in its prospectus, and managing actively pursued investigations by regulatory authorities
- Managing Director and CEO of financial institution - Defending against allegations of supervisory failure in relation to collapse of its hedge fund business due to alleged fraud by the hedge fund CEO who had left Hong Kong
- Major international accounting firm and its partners - Advising a major international accounting firm and its partners on enquiries by the SFC and the Hong Kong Stock Exchange regarding investigations into the collapse of a major listed PRC enterprise not long after its IPO
- Primary implicated persons - Insider Dealing Tribunal proceedings advising and defending possible conspiracy and market manipulation allegations
- Sponsor of an IPO - Enquiry by the Hong Kong Stock Exchange and SFC concerning adequacy of its due diligence in an aborted IPO

Experience Highlights

- Oct 2014 - present: Partner, Kwok Yih & Chan
- Mar 2012 - Sept 2014: Managing Partner, Asia Strategy & Markets, King & Wood Mallesons
- Oct 2004 - Feb 2012: Managing Partner, Mainland China and Hong Kong, Mallesons Stephen Jaques (Australian firm)
- 1994 - 2004: Co-founder/Managing Partner, Greater China, Kwok & Yih/Andersen Legal (US firm)
- Member of Worldwide Management Committee of Andersen Legal (US firm) (legal arm of Arthur Andersen (US firm))
- Member of Andersen Legal Asia Pacific Leadership Group (US firm)
- 1985 - 1994: US/English international law firms, solicitor and partner (including Baker & McKenzie (US and global largest law firm), Simmons & Simmons (UK top 10 law firm), Andersen Legal (global top 10 law firm) and Mallesons Stephen Jaques (Australia's largest law firm), etc.)
- 1981 - 1985: Ernst & Young, Sydney

Larry is also qualified as a Chartered Accountant in England and Wales and a CPA in Hong Kong and Australia

評估機構介紹

皇廷拍賣 專營中國宮廷瓷器古玩, 融合了科學檢測及專家鑒定嚴謹接受拍賣品, 開創拍賣行業新標準, 可說是目前唯一實行古陶瓷拍賣品附有國際標準組織ISO認證機構檢測報告的拍賣公司。自宋代始, 古陶瓷一直占據藝術品收藏界的翹楚地位, 皆因真品難求, 價值不菲。與此同時仿品技術不斷提升, 市場上真假難辨, 所以必須依賴科學檢測去偽存真。按照國際慣例, 但凡涉及大金額交易的買賣, 例如鑽石及翡翠, 拍賣公司都要附上國際認可的GIA及翡翠證書, 這是給買賣雙方的信心保證。皇廷拍賣亦然, 為廣大的藏家提供真、精、美的古陶瓷藝術品。

Assessment and Evaluation Group: An introduction

Royale Auctioneer specializes in Chinese imperial porcelain and antiques, integrates scientific testing and expert identification to strictly accept the auction items, and creates a new standard in the auction industry. It can be said that it is the only auction company that implements the auction items of ancient ceramics with the test report of the ISO certification agency of the International Standards Organization. Since the Song Dynasty, ancient ceramics have always occupied a leading position in the art collection field, because authentic products are hard to find and valuable. At the same time, the technology of imitations continues to improve, and it is difficult to distinguish the true from the false in the market, so we must rely on scientific detection to eliminate the false and retain the true. In accordance with international practice, the auction company should attach internationally recognized GIA and jadeite certificates for all transactions involving large amounts, such as diamonds and jadeite, which is a confidence guarantee for both parties. The same is true of Royale Auctioneer, which provides authentic, refined and beautiful ancient ceramic artworks for the vast number of collectors.

藝術品保險

我們的資產包會透過知名保險公司進行藝術品保險。

Art Insurance

We will arrange insurance for the “Ancient Ceramics Asset Package Securitization Project” through major insurance companies.

EXHIBITION
ANCIENT CERAMICS ASSET PACKAGE
FINANCIALIZATION PROJECT
EXHIBITION IN HONG KONG
LOWER LEVEL 2
KOWLOON SHANGRI-LA HOTEL
March 1- March 31, 2023

古陶瓷資產包金融化專案 交易會
香港九龍香格里拉大酒店地下2樓
展覽時間：2023年3月1日 - 3月31日

Acknowledgement

Yishu Yinhang Limited are grateful for the indefatigable efforts to Royal Heritage Ceramics Authentication Limited devoted in handling abundant artifacts flooded in from our patrons. We are greatly impressed by their professionalism, impartiality and objectiveness they displayed in authenticating the genuineness of ceramics.

鳴謝

皇朝遺珍古陶瓷鑑定有限公司在這次古陶瓷資產包器物篩選上不辭勞苦為本公司鑑定了大量的藏品，并在鑑定過程中展示出的高度專業，公正和客觀準確令我們印象深刻。藝銀有限公司在此致以最高的謝意。

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1001

**A RARE GONGXIAN KILN
MARBLED-GLAZED PILLOW
WITH RAISED DRAGON,
PHOENIX, AND DOUBLE-FISH
PANELLING**

唐代 鞏義窯絞胎龍鳳雙魚紋脉枕

Appraised Value (評估價格):
HK\$380,000



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1003

**A CIZHOU SGRAFFITO FLORAL
AND TENDRIL MEIPING VASE**

宋/金 磁州窯團花纏枝梅瓶

Appraised Value (評估價格):
HK\$1,500,000



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1005

**A JIZHOU BOWL WITH
TORTOISE-SHELL MARKINGS**

宋 吉州窯玳瑁釉碗

Appraised Value (評估價格):
HK\$100,000



P 14

1007

**A GE-TYPE CELADON GLAZED
WASHER**

宋 哥窯葵口折腰洗

Appraised Value (評估價格):
HK\$3,000,000



P 18

1002

**A FINELY-CARVED YUE-TYPE
MISE CELADON EWER WITH
LID**

唐晚期 秘色系青釉刻花蓋壺

Appraised Value (評估價格):
HK\$1,500,000



P 6

1004

**A CARVED “YUE”MISE (SECRET
COLOUR) CELADON BOX AND
COVER**

北宋 越窯秘色瓷青釉刻花蓋盒

Appraised Value (評估價格):
HK\$1,500,000



P 12

1006

**PAPER-HAMMER VASE WITH
TWO EARS IN THE SHAPE OF
PHOENIX IN CELADON GLAZE
LONGQUAN WARE**

宋 龍泉窯青釉鳳耳紙槌瓶

Appraised Value (評估價格):
HK\$2,000,000



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1008

A RUYAO CELADON BOWL

宋代 汝窯青釉斗笠碗

Appraised Value (評估價格):
HK\$1,000,000



P 20

1009

**A DANGYANGYU "TWISTED
GLAZE" BOWL**

宋 當陽峪窯絞釉碗

Appraised Value (評估價格):
HK\$280,000



P 23

1010

**A YUEYAO OLIVE GREEN
COVERED INCENSE BURNER**

宋 越窯青釉香爐

Appraised Value (評估價格):
HK\$1,000,000



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1017

**A LONGQUAN CELADON
GLAZED COLUMNAR PEAR
SHAPED VASE**

南宋 龍泉窯青釉直頸瓶

Appraised Value (評估價格):
HK\$1,500,000



P 48

1018

**A XIKOUYAO LONGQUAN-TYPE
CELADON CENSER**

南宋 溪口窯龍泉鬲式爐

Appraised Value (評估價格):
HK\$1,200,000



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1011

A RUYAO CELADON BOWL

北宋 汝窯青釉敞口碗

Appraised Value (評估價格):
HK\$200,000



P 28

1012

**A RARE AND IMPORTANT
WHITE GLAZE YUHUCHUNPING
VASE WITH AN UNDERGLAZE
BISCUIT-FIRED DRAGON**

北宋 白釉龍紋玉壺春瓶

Appraised Value (評估價格):
HK\$1,200,000



P 32

1019

**A GUAN WARE FANGHU
HANDLED VASE IN CELADON
GLAZE**

南宋 官窯青釉八棱貫耳方壺

Appraised Value (評估價格):
HK\$5,000,000



P 52

1020

**A GUAN-TYPE MALLOW-
SHAPED BRUSH-WASHER**

南宋 官窯青釉六瓣葵口洗

Appraised Value (評估價格):
HK\$1,800,000



P 56

1013

**AN EXTREMELY RARE AND
IMPORTANT RU WARE
MEIPING VASE WITH LID**

北宋 汝窯蓋瓶

Appraised Value (評估價格):
HK\$13,800,000



P 36

1014

**A RU WARE CELADON TRIPOD
CENSER WITH A CARVED
MANDARIN DUCK LID**

北宋 汝窯青釉鴛鴦香薰爐

Appraised Value (評估價格):
HK\$1,200,000



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1021

**CHICKEN-LEG VASE
DECORATED WITH STRING
PATTERN IN GREEN GLAZE**

南宋 官窯粉青釉弦紋腿瓶

Appraised Value (評估價格):
HK\$2,800,000



P 58

1022

A GE-TYPE CELADON CENSER

南宋 哥窯雙耳小香爐

Appraised Value (評估價格):
HK\$1,200,000



P 60

1015

**A RARE RUYAO DEEP BELLY
TEA BOWL**

北宋 汝窯深腹茶碗

Appraised Value (評估價格):
HK\$2,800,000



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1016

**A LONGQUAN CELADON
WASHER**

南宋 龍泉窯粉青釉板沿洗

Appraised Value (評估價格):
HK\$1,000,000



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1023

**A RARE AND IMPORTANT
JUNYAO BOTTLE-NECK VASE**

金至元 鈞窯長頸瓶

Appraised Value (評估價格):
HK\$1,000,000



P 62

1024

**A LONGQUAN CELADON
ZHADOU SPITTOON**

元 龍泉窯梅子青渣斗

Appraised Value (評估價格):
HK\$1,000,000



P 64

1025

A LONGQUAN WARE DOUBLE-GOURD "HULUPING" VASE

元 龍泉窯梅子青釉點彩褐斑葫蘆瓶

Appraised Value (評估價格):
HK\$2,500,000



P 66

1026

A LARGE BLUE AND WHITE JAR (GUAN) WITH LOTUS LEAF DESIGN AND ANIMAL MASK EARS

元 青花獸耳荷葉紋大罐

Appraised Value (評估價格):
HK\$3,000,000



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1033

A BLUE AND WHITE DRAGON BOWL

明宣德 青花雲龍紋鉢

Appraised Value (評估價格):
HK\$5,000,000



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1034

A BLUE AND WHITE "CHICKEN'S HEART" BOWL

明宣德 青花纏枝花卉紋鷄心碗

Appraised Value (評估價格):
HK\$1,000,000



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1027

A BLUE AND WHITE PHOENIX AND FLORAL YUHUCHUNPING VASE

元 青花鳳凰牡丹圖八方玉壺春瓶

Appraised Value (評估價格):
HK\$2,800,000



P 70

1028

A BLUE AND WHITE DRAGON CUP WITH STAND

明早期 青花折枝龍紋盞托

Appraised Value (評估價格):
HK\$1,000,000



P 72

1035

A BLUE AND WHITE DICE BOWL DEPICTING A TRAVELLING GROUP OF CONCUBINES

明宣德 青花《妃子出遊圖》骰子碗

Appraised Value (評估價格):
HK\$3,800,000



P 89

1036

A BLUE AND WHITE "PHOENIX" TEAPOT

明宣德 青花鳳紋竹節執壺

Appraised Value (評估價格):
HK\$3,800,000



P 92

1029

A BLUE AND WHITE MEIPING

明永樂 青花折枝花果圖梅瓶

Appraised Value (評估價格):
HK\$5,800,000



P 74

1030

LARGE PLATE DECORATED WITH DESIGN OF A LOTUS BOUQUET IN UNDERGLAZE BLUE

明永樂 青花一把蓮大盤

Appraised Value (評估價格):
HK\$1,500,000



P 76

1037

A BLUE AND WHITE DRAGON PATTERN BRUSH WASHER

明宣德 青花團龍紋荷葉洗

Appraised Value (評估價格):
HK\$4,800,000



P 94

1038

PLATE DECORATED WITH DESIGN OF DRAGON AMIDST WAVES IN UNDERGLAZE BLUE

明宣德 青花海水龍紋盤

Appraised Value (評估價格):
HK\$1,500,000



P 96

1031

A RARE BLUE AND WHITE CHRYSANTHEMUM DISH WITH LYCHEE DECORATION

明宣德 青花荔枝紋碟

Appraised Value (評估價格):
HK\$3,000,000



P 78

1032

A SKY BLUE AND WHITE CHRYSANTHEMUM DISH WITH A FIVE-CLAWED DRAGON MOTIF

明宣德 霽藍龍紋菊花盤

Appraised Value (評估價格):
HK\$2,000,000



P 82

1039

A BLUE AND WHITE "THREE FRIENDS" PLATE

明成化 青花三友圖盤

Appraised Value (評估價格):
HK\$1,800,000



P 98

1040

STEM-CUP DECORATED WITH DRAGONS AMIDST CLOUDS IN UNDERGLAZE BLUE

明成化 青花雲龍紋高足杯

Appraised Value (評估價格):
HK\$3,800,000



P 100

1041

A YELLOW- GROUND GREEN ENAMELLED "PEONY" DISH
明正德 黃地綠彩花卉紋盤
Appraised Value (評估價格):
HK\$2,000,000



P 102

1042

A WUCAI/ DRAGON WASHER
明萬曆 五彩雲龍火焰紋六瓣葵口折沿洗
Appraised Value (評估價格):
HK\$1,600,000



P 104

1049

A DOUCAI/ BOTTLE VASE (DU PING) WITH FLORAL PATTERNS
清乾隆 斗彩纏枝花卉紋雙耳扁肚瓶
Appraised Value (評估價格):
HK\$1,500,000



P 128

1050

FLASK WITH FOUR LOOPS IN UNDERGLAZE BLUE DECORATED WITH DESIGN OF CHILDREN PLAYING IN A GARDEN IN PANELS IN FENCAI/ ENAMELS
清乾隆 青花開光粉彩庭院嬰戲圖四繫扁壺
Appraised Value (評估價格):
HK\$1,000,000



P 130

1043

AN OXBLOOD RED GLAZED SEAL-PASTE BOX
清康熙 霽紅釉印泥盒
Appraised Value (評估價格):
HK\$100,000



P 108

1044

A BLUE AND WHITE COVERED BOWL WITH DRAGON DESIGN
清雍正 青花龍紋蓋碗
Appraised Value (評估價格):
HK\$500,000



P 112

1045

A BLUE AND WHITE FLORAL FACETED VASE
清雍正 青花牽牛花紋倭角雙耳瓶
Appraised Value (評估價格):
HK\$1,000,000



P 114

1046

A FAMILLE ROSE BAMBOO-NECK MALLET VASE WITH GNARLED BRANCHES AND PEACH BLOSSOMS
大清雍正年制款 粉彩折枝桃花盤口竹節瓶
Appraised Value (評估價格):
HK\$1,600,000



P 116

1047

A DOUCAI/ BOWL WITH FLORAL PANELS (A PAIR)
清雍正 斗彩團花紋碗 (一對)
Appraised Value (評估價格):
HK\$1,800,000



P 120

1048

A BLUE AND WHITE DISH DEPICTING A BOY RIDING A QILIN MYTHICAL BEAST
清康熙 青花童子騎麒麟盤
Appraised Value (評估價格):
HK\$300,000



P 124



MASTERPIECES OF CERAMICS
LOTS 1001-1050

1001

A RARE GONGXIAN KILN MARBLED-GLAZED PILLOW WITH
RAISED DRAGON, PHOENIX, AND DOUBLE-FISH PANELLING
Tang Dynasty (618-907)

Provenance

A private Hong Kong collection, acquired in 2013 from an antique shop on
Hollywood Road, Hong Kong

H: 16.7 cm L of upper side: 16.7 cm L of base: 17.7 cm

Appraised Value (評估價格) : HK\$380,000

唐代 鞏義窯絞胎龍鳳雙魚紋脈枕

高：16.7厘米 面長：16.7厘米 底長：17.7厘米

來源

香港私人收藏，2013年購藏於香港荷理活道古玩店



該器造型厚重，正面中間凹陷，兩頭微微上翹，呈凹弧形。通身施棕黃釉為地色，釉內有木紋紋飾，為絞釉泥紋。一側有堆塑三彩雙魚淺浮雕，為雙魚共一魚頭，構思巧妙。魚身施綠釉。一側有堆塑菱形花瓣四朵，亦施綠釉。一端面飾堆塑鳳鳥紋，施綠釉，另一端則飾龍紋。底部靠近端面有圓孔兩個。

絞胎是唐代流行的陶瓷裝飾技巧之一。日本奈良大安寺曾發掘出唐絞胎器的碎片⁽¹⁾。唐代北方多個窯場，包括鞏縣窯，均曾燒製絞胎器。

鞏縣窯擅長燒造三彩陪葬器物。唐三彩曾盛行著稱於時，作為王公貴族墓中的陪葬陶瓷，其鉛釉能防水，主要釉彩為褐、綠、黃及奶白色，釉料來自銅(綠色)及鐵(褐及白色)。相比較後期使用高嶺土的龍泉瓷及景德鎮瓷，成本更平。其雖有燒製較小器物如脈枕、睡枕，但主要是燒製人物、動物等大型塑像，首先燒造部件，再拼合經第二次燒造而成。

枕在隋代(581–618)開始生產，唐代繼續，宋磁州窯更大量燒製。美國紐約大都會藝術博物館藏十三至十四世紀磁州窯「張家造」款瓷枕可資參考。枕可以是其他物料如木、石、銅、竹所造，而絞胎則是仿其他材質肌理。枕有涼頭暖足溫效用，令人安睡；而枕上紋樣多象徵驅邪除惡、安神寧靜的作用，如此枕上雙魚枕代表連理和諧，龍鳳紋則代表權力地位，睡醒後可以身心安泰。

硬枕可以避免過度酣睡，但唐代醫家孫思邈推薦軟枕更為舒適，可以在硬枕上放軟墊是最佳選擇。因此很多枕均是素面便是為要鋪上軟墊。

2017年4月3日佳士得拍賣一件褐黃釉枕(號 87)，而在2011年3月23日拍出一件原Gerald M. Greenwald藏品編號16的八角形素燒彩繪頸枕(號 1310)均可資參考。

註 Notes:

(1) Illustrated in Seikai toji zenshu, Tokyo, 1976, vol. 11, p. 252, no. 237

The sturdily-potted body rising from a flat base to a concave ridge, applied with a marbled orange and amber colour “twisted glaze” resembling woodwork pattern, featuring sancai-coloured raised rondures in green, carved in the shape of an hour-glass, front panel depicting two intertwined carp with a single head in green glaze, one end decorated with a fiery feathered phoenix, the final panel with a fierce dragon, and the back edge studded with four identical clover-shaped bosses. Two holes are found on the base.

Marbling, known as jiaotai in Chinese, was a popular decorative technique on ceramics of the Tang dynasty. Tang marbled pillow shards have been found at the site of Daian-ji Temple in Nara, Japan (1). Such marbled pillows were made at a number of kiln sites in north China, including the Gongxian kiln in Henan province.

Gongxian kiln site was one of the pre-eminent manufacturing hubs for famous sancai funerary wares during the Tang dynasty. Sancai (three-colour) glaze ceramics are arguably the most revered of all Tang dynasty ceramics due to their use in imperial tombs and unique waterproof lead-based glazes. Sancai figures were primarily decorated using brown, green, yellow and creamy off-white colours, which were derived from the use of colouring agents copper (green) and iron (brown and white). These glazes covered biscuit-fired white clay, which was cheaper to manufacture than the more elegant kaolin found at later kiln sites such as Longquan and Jingdezhen. Although smaller pieces were made, for example this arm rest / pillow, sancai ceramics primarily took the form of figural statues of varying sizes, and were thus fired twice: first in sections, and second following assembly.

The origins of ceramic pillows can be traced to the Sui dynasty (581-618) and continued into the Tang, with notable production during the Song dynasty at Cizhou, where the majority of ancient extant neck-pillows derive; see several examples from the Metropolitan Museum of Art from Cizhou from the 13th-14th century Zhang Family workshop. Pillows could also made of wood, stone, copper or bamboo, and the marble “twisted glaze” on this piece reflects the replication of other materials within ceramic design. Specifically, ceramic pillows were believed to have a cooling effect, as it was believed that a cool head and warm feet was provided the best condition for sleeping. Pillows would often be decorated with special or symbolic motifs to ward of bad dreams and evil spirits, as well as to bring peace and comfort; the double-fish motif on this piece, for example, represented a couple’s fulfilling nuptial unions, while the dragon and phoenix embodied power and rebirth, no doubt important symbols of awakening each morning.

Although hard surfaces were often utilized to dissuade against oversleeping, it is also worth noting that the Tang-era Taoist sage and physician, Sun Simiao, specifically recommended a soft pillow for sleep; thus, it is entirely possible that a soft pad was placed on the hard pillow. Thus, the lack of decoration on top of these vessels in many cases may have been intentional.

Compare this sancai / twisted glaze pillow with an amber-glazed marbled example sold at Christie’s, April 3rd, 2017, lot 87. Also compare the biscuit-fired and painted medallions to a hexagonal neck-pillow from the Gerald M. Greenwald Collection, number 16, sold at Christies, 23 March 2011, Lot 1310.

1002

A FINELY-CARVED YUE-TYPE MISE CELADON EWER WITH LID
Tang Dynasty (618-907)

Provenance

Sold at Royale's Hong Kong, 27 November 2017, lot 201

H: 17.3 cm D of mouth: 4.3 cm D of base: 8.1 cm

Appraised Value (評估價格) : HK\$1,500,000

唐晚期 秘色系青釉刻花蓋壺

高：17.3厘米 口徑：4.3厘米 底徑：8.1厘米

來源

香港皇廷拍賣，2017年11月27日，編號：201



此器圓鼓腹，有小蓋，蓋呈寶相蓮座狀。鼓腹上部一側為壺嘴，壺嘴呈圓柱狀上翹，流口部分向下傾斜。鼓腹一側為壺柄，柄為二圓柱並攏呈拱型粘貼於鼓腹之上，與壺嘴高度一致。器腹兩側有對稱堆塑淺浮雕龍紋，鱗甲分明，展翅怒目，三爪箕張，形相威猛。整壺造型古樸雅致，施秘色青釉，光澤柔潤，反映唐晚期秘色瓷風格。

九世紀時生產的秘色瓷相信是為宮廷燒製，釉質滑膩，呈黃綠或藍綠色，為越窯最精美的青瓷。其製作年代甚短，祇在唐(618-907)及五代(907-960)燒製。其名稱「秘色」或來自這種瓷器為宮廷秘製而其技巧及配方，千百年來不為人知。直至1987年，陝西法門寺地宮出土一批秘色瓷，印證文獻記載，才揭示秘色瓷真相。在中國陶瓷史上其地位超然，為九至十世紀最受稱譽和多彩多姿的瓷器。秘色瓷也對宋代各種青釉瓷如汝瓷及十一世紀高麗青瓷產生深遠影響，但由於其後採用含鐵和鈦量較低的釉料燒造，呈色則偏藍。

The globular body finely potted is rising from a splayed foot, tapering to a small lobed lid incised with lotus petals lappets, continued with a band of hook shaped and S-shaped motif incision on the foot of the lid, with a short bent spout opposite to a rounded C-shaped handle, featuring raised decoration of a sinuous three-clawed dragon with incised scales, a striking face, small wings, and outstretched arms and legs, applied with a thick shiny grey-green glaze, reflecting the distinctive features of mise celadon wares of the late Tang dynasty

Yue wares are believed to have been court wares in Imperial China as early as the 9th century. The mise glaze, also known as "mysterious colour", is characterized as a smooth but thin glaze of either yellowish-green or bluish-green. "Mysterious-colour Porcelain", a term coined in the late Tang dynasty to refer to Yue ware celadon of the highest quality at the time. Mysterious-colour porcelain was only produced for a relatively short period of time, mainly in the late Tang dynasty (618-907) and the Five dynasties Period (907-960). The name probably comes from the fact that these wares were used for tribute to the imperial court and rarely seen by ordinary people, and the recipe and techniques were considered secrets. For centuries, people wondered what exactly "mysterious-colour porcelain" is? It was not until 1987 that a large cache of miseYue wares from the excavation of such wares along with written record at the Famen Temple in Shaanxi province confirmed that it actually refers to the Yue ware celadon of that period. Mysterious-color porcelain holds a very important place in the history of Chinese ceramics. It is the most appreciated and sophisticated ceramic ware of the 9th and 10th centuries. More importantly, it laid the foundation for the various types of celadon, such as the Ru ware, of the subsequent Song dynasty (960-1279). Yue wares are thought to have influenced Korean celadons by the 11th century, but these were bluer due to the use of low-iron and low-titanium glazes.

1003

A CIZHOU SGRAFFITO FLORAL AND TENDRIL MEIPING VASE
Song (960-1279)/Jin Dynasty (1115-1234)

Provenance

A private US collection, gift from an elder in the 1970s

H: 56.5 cm D of mouth: 4.5 cm D of base: 12.5 cm

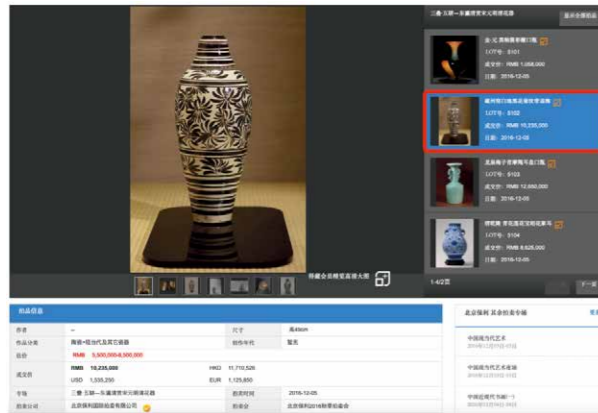
Appraised Value (評估價格) : HK\$1,500,000

宋/金 磁州窯團花纏枝梅瓶

高：56.5厘米 口徑：4.5厘米 底徑：12.5 厘米

來源

美籍華人私人收藏，得自50年前長輩餽贈



同類瓷器曾經在2016年12月05日於北京保利國際拍賣有限公司
拍出RMB 10,235,000。

Similar porcelain was sold in Beijing Poly International
Auction Co., Ltd. on December 05, 2016 for RMB
10,235,000.



梅瓶小口呈椎形，白地。口沿下方飾三角紋。短頸，頸肩相距容不下一指。整瓶修長，削肩。器身通飾剔花黑釉纏枝花卉枝蔓紋，紋飾錯落繁複。削肩上飾蕉葉狀紋十二瓣，呈伏狀；接近底部亦有十二瓣蕉葉紋，呈立狀。底呈灰色，寬邊，中部呈凹陷圓形。

磁州窯在唐代開始燒製陶瓷，在北宋至元代產量增加，北方多個窯場均有燒造磁州窯器。磁州窯未列五大名窯，但其式樣繁多，風格渾厚，流行一時。燒造方法是在灰白胎上塗化妝土，再施以刻、劃、剔花等技巧裝飾。其型制多樣，包括人物形枕至梅瓶各種器形，也是中國陶瓷史上首先採用彩釉裝飾的器物。

剔花技巧較為繁複，先在胎上敷施淺色，再敷蓋深色化妝土，然後刻紋飾輪廓，剔去底層露出淺色胎體。細緻紋樣如花蕊、葉脈等則以尖銳工具或梳篦刻劃。此件碩長梅瓶可能是分段燒造，再接合而成。

同類梅瓶可參閱日本大阪東方陶瓷博物館藏伊勢家收藏飾以牡丹紋的一件⁽¹⁾；美國紐約大都會藝術博物館所藏刻花梅瓶⁽²⁾；Mr. and Mrs. Walter Sedgwick舊藏一件，曾於1936年在倫敦「中國藝術國際大展」中展出，見展覽圖錄，頁121(號1248)，現為大英博物館收藏；2018年3月21日佳士得拍賣非常相似，但體積較小，飾以牡丹紋的一件(號516)。

註 Notes:

(1) Illustrated in The Museum of Oriental Ceramics, Osaka (ed.), *The Enchanting Chinese Ceramics from the Ise Collection*, Japan, 2017, pp. 84-5, no. 26

(2) Illustrated by S. G. Valenstein in *A Handbook of Chinese Ceramics*, New York, 1989, p. 93, pl. 88

The tall, steep body rising from a flat, circular base with no foot, tapering to a small, thick neck with a conical, raised concave rim resembling a lid, the exterior carved using sgraffito technique and applied with deep dark brown glaze on a creamy ground, featuring a vivid and stunning scene of splayed blossoming *tu'anhua* flowers amongst spindling tendrils and broad foliate scroll, the base and neck decorated with band of overlapping leaf lappets, the rim with a geometric herringbone motif. The base exposes greyish colour of biscuit.

Cizhou wares (or *Cizhouyao*) were first manufactured during the Tang dynasty, but primarily produced between the 11th-14th centuries during the Northern Song (960-1127) and Yuan dynasties (1279-1368) at kilns across northern China. The variation within *Cizhou* wares, which while not counted within the Five Great Kilns due to the enormous breadth of its production, is noteworthy, although almost all begins with a simple thick white or black glaze over a slip atop light gray stoneware, followed by decoration incised, carved, and combed into the white slip ground. The staggering diversity of forms, ranging from figural neck-pillows to *meiping* vases, is unique for this time period, as is the external decoration, which comprises the first use of enamel in the history of Chinese ceramics.

The very difficult technique of sgraffito used to produce the design on this vase involved the application of a pale slip to the unfired stoneware vessel, followed by a dark slip. The outline of the decoration was then incised through the dark top layer and the background area of the design was cut away to reveal the pale slip beneath. Details, such as stamens and leaf veins, were also incised through the dark upper layer either with a fine point or a comb-like instrument. The thin colourless glaze could then be applied and the vessel fired. This *meiping* vase, too, was likely fired in two pieces and set following its removal from the kiln.

A similar *Cizhou* sgraffito *meiping* vase decorated with bold peony scroll is in the Ise Collection, The Museum of Oriental Ceramics, Osaka ⁽¹⁾. Another *Cizhou meiping* vase with similar carved decoration in the collection of The Metropolitan Museum of Art, New York ⁽²⁾. A third, formerly in the collection of Mr. and Mrs. Walter Sedgwick, and now in the British Museum, was included in the International Exhibition of Chinese Art, London, 1936, p. 121, no. 1248. Finally, a near-identical *Cizhou* sgraffito *meiping* vase, although slightly smaller and thicker with peony design, was sold at Christie's, 21 March 2018, lot 516.

1004

A CARVED "YUE" MISE (SECRET COLOUR) CELADON BOX
AND COVER
Northern Song Dynasty (960 - 1127)

Provenance
Sold at Royale 's Hong Kong , 27 November 2017, lot 209

H: 10.4 cm D of mouth: 15.4cm D of base: 12.3 cm

Appraised Value (評估價格) : HK\$1,500,000

北宋 越窯秘色瓷青釉刻花蓋盒

高：10.4厘米 口徑：15.4厘米 底徑：12.3厘米

來源
香港皇廷拍賣，2017年11月27日，編號：209

此蓋盒為子母口扣合。蓋面平整微弧，蓋緣下擴成母口，盒為子口。整蓋盒內外均施單一秘色淺綠青釉，釉色勻淨古拙而柔潤。蓋面有淺刻凸弦紋三周，弦紋內為淺刻蓮花紋及如意雲紋，流暢自然。蓋與盒邊緣為直腹，盒折腰收腹。盒口沿下部有淺刻水波紋一周及凸弦紋一道。弦紋之下飾淺刻花葉紋一周。盒底有高圈足，圈足呈喇叭狀。圈足外有凸凹弦紋二道。圈足內底平整，周邊有九個小長方形支釘。支釘露胎，胎質灰白。

早在九世紀唐代，越窯已生產秘色瓷作為宮廷瓷器，多施以秘色青釉，釉色勻稱潤澤，呈黃綠或藍綠色。陝西法門寺地宮曾出土一批用作禮祭用器的秘色瓷，名聞遐邇。越窯青釉瓷也對高麗和伊斯蘭陶瓷產生相當影響。

The ovoid tapering body rising from a ringed, concave foot with a flat base, culminating in a slightly ringed rim with no lip meeting the flat lid, the lid rising to a rippled circular top, pried with a light green celadon glaze thickly applied with lustrous gloss with a touch of archaic flavour. The lid decorated with an elaborate floral array blossom wreathed by two enormous ruyi leaves and a lotus blossom enclosed by three borders in relief, the sides of the lid and the rim of the body decorated with repeating motifs of swirls, the body incised with a staggered motif of elegantly-carved leaves enhanced with the incised lotus leaf base. The high trumpet ringfoot is decorated with two relief and carved borders, and at the interior base are nine spur marks exposing the greyish-white biscuit.

Yue wares are believed to have been court wares in Imperial China as early as the 9th century in the Tang dynasty. The mise glaze applied to many Yue wares, translated as "secret colour", is characterized as a smooth but thin glaze of either yellowish green or bluish-green. A large esteemed cache of mise Yue wares of the Tang dynasty were found at Famen Temple, Shaanxi Province, where these wares were most likely used for ritual purposes. This glaze of Yue wares were thought to have inspired both Korean ceramics as well as early Islamic wares.



1005

A JIZHOU BOWL WITH TORTOISE-SHELL MARKINGS
Song Dynasty (1127-1289 AD)

Provenance
Sold at Royale 's Hong Kong , 29 November 2016, lot 1624

H: 5.6 cm

Appraised Value (評估價格) : HK\$100,000

宋 吉州窯玳瑁釉碗

高: 5.6厘米

來源
香港皇廷拍賣, 2016年11月29日, 編號: 1624

吉州窯始於晚唐, 興於五代、北宋, 極盛於南宋, 而衰於元末, 距今已有 1200多年的歷史。宋時, 永和陶瓷業興旺, 「辟坊巷街三市」, 「七十二條花街」。錦繡鋪有幾千戶, 百尺層樓萬余家。吉州窯是中國古代黑釉瓷生產中心之一。所產瓷器種類繁多, 已發現的瓷形有120余種。按胎釉可分為青釉瓷、乳白釉瓷、綠釉瓷、黑釉瓷、彩繪瓷、雕塑瓷和玻璃器等。其中吉州窯的兔毫斑、鷓鴣斑、玳瑁斑和剪紙貼花盞被譽為國寶。雖然吉州窯傳世品很多, 但像這樣完整、漂亮的宋吉州窯玳瑁釉碗, 並不多見。

The body rising from an unglazed circular raised foot with a flat base, culminating in a wide rim with no lip, partially-covered with a thick black glaze featuring an orange tortoise-shell pattern over light brown clay.

Jizhou Yao originated during the late Tang period. Became very popular until Five Dynasties and Northern Song Dynasty and reached the climax during the Southern Song Dynasty slowly faded end of Yuan Period. Jizhou wares got various different shapes over 120 forms and glaze types varies from celadon, white glaze, green glaze, black glaze and glasswares. While Jizhou "hares fur" and "tortoise-shell" markings pattern is extremely rare and treated as National Treasure.



1006

PAPER-HAMMER VASE WITH TWO EARS IN THE SHAPE OF PHOENIX IN CELADON GLAZE LONGQUAN WARE Song Dynasty (960 - 1279)

Provenance
A private Hong Kong collector

H: 25 cm D Of mouth: 8.7 cm D: 8.7 cm

Appraised Value (評估價格) : HK\$2,000,000

宋 龍泉窯青釉鳳耳紙槌瓶

高：25厘米 口徑：8.7厘米 底徑：8.7 厘米

來源
香港私人收藏



此瓶盤口，長直頸，溜肩，直筒腹下收，圈足，整體造型規整優美，比例協調簡約而雅拙。頸部對置反身鳳形半環雙耳，雙鳳以模印成形，冠羽貼器飄動，長頸外伸，羽翅平舉，身軀與器頸垂直相接，使鳳耳更具曲線美。此器形制因似造紙打漿所用槌具，亦稱紙槌瓶，為龍泉青瓷典型器形。青釉凝厚如玉，呈色妍雅，反映龍泉窯青瓷「青如玉、明如鏡、聲如磬」的特色。在紹興宋六陵遺址的發掘中曾出土過龍泉鳳耳瓶片，可見此類器物曾是南宋皇室陳設之官窯器，為宋龍泉瓷中的珍稀品種。

宋龍泉窯器素來受海外藏家所喜愛，日本有兩件龍泉窯鳳耳瓶乃皇室之物，一件定為日本國寶級文物，也是現存鳳耳瓶中最精美的一件，為日本大阪府和泉市久保惣紀念美術館所收藏。另一件銘「千聲」為日本重要文化財，現藏於日本的陽明文庫。兩件得名皆出自十七世紀時日本後西天皇「搗月千聲又萬聲」詩句的敕銘，大意是這瓶一拿出來便能贏得千萬口同聲的讚歎，足見此類鳳耳瓶之珍貴。

This vase has wide mouth, long and straight neck, slanting shoulder, straight and cylindrical belly tapering downwards and ring foot. It is delicately potted with a touch of simplicity and subtleness. The neck is decorated with two symmetrical molded ears in the shape of phoenixes with crowns, feathers and wings skilfully rendered in flying posture, enhancing the vividness of the birds. The vase looks like a paper-hammer, which is a tool making paper, thus it is named paper-hammer vase, and is a representative type of Longquan wares. The celadon glaze is lustrous and pure, resembling the quality of jade, which testifies to the description of Longquan ware as “green as jade, bright as mirror, sound as scores of the chime musical instrument”. In the six mausoleum sites at Shaoxing, shards of similar wares were unearthed, showing that these wares were imperial objects for display in the court in the Southern Song dynasty and were rare wares produced by the Longquan kiln in the Song dynasty.

Longquan celadon wares of the Song dynasty are popular connoisseurs' items. There are two pieces collected by the former Tenno's royal family in Japan. One of them is ranked national treasure and collected by Kubosu Memorial Museum, Izumi and the Osaka City Government, which represents the most acclaimed vase with phoenix ears extant. The other piece is named “Thousand Chants” and ranked as important cultural property, currently collected by Yome Bunko. The titles of both pieces are derived from imperial inscription “hitting the moon for a thousand and thousand times” composed by Tenno Go-Sai, referring to that once any piece is shown, it would won of praises from thousands of viewers, revealing the rareness and superb value of such vases.

A GE-TYPE CELADON GLAZED WASHER Song Dynasty (960-1279)

Provenance

A private Hong Kong collection, acquired in 2012 from an antique shop on Hollywood Road, Hong Kong

H: 6.8 cm D of mouth : 21.7 cm D of base: 8.6 cm

Appraised Value (評估價格) : HK\$3,000,000

宋 哥窯葵口折腰洗

高：6.8厘米 口徑：21.7厘米 底徑：8.6厘米

來源

香港私人收藏，2012年購藏於香港理活道古玩店

此碗淺腹敞口圓唇，碗內呈圓底狀。外壁呈微弧形。圈足。該器裏外通身施滿釉，器裏器外釉開片佈滿全身。釉開片紋為淺黃色。碗內底部有黑褐色斑點，亦有一個「介」字。圈足內釉色稍淺，呈淡青色。圈足內釉裂紋為淺黃色，亦有一敲鑿成點點組成的「五」字。圈足為棕褐色。此器胎壁較厚實，有土滲痕跡。器物造型規整，色澤沉厚古樸。

哥窯是宋代五大名窯之一，在陶瓷史中享有盛名。其窯址未嘗發現，但元代文獻記載宋代在浙江龍泉附近有章氏兄弟各主窯事。兄長燒製深褐色而帶開片瓷器的窯場稱「哥窯」，其弟則主事燒造藍綠色釉的瓷器。

哥窯是採用杭州附近臨安山區的紫黑色或深褐色瓷泥為胎，其最受稱許在燒製是熱能令釉層膨脹迫裂成獨特的褐色開片，呈現交錯的裂紋，稱為「金絲銀線」；釉色則呈灰象牙綠。杭州宋宮殿遺址附近老虎洞曾出土遺存，相信是如官窯器般為宮廷而燒製的瓷器。

如仿宋代五大名窯一般，明清兩代，尤其在雍正(1722 – 1735)、乾隆(1735 – 1796)朝多仿燒哥窯器。然而形如淺碟，的這件洗極為少見，與宋朝哥窯及後世仿品，型制呈四葉形或五葉形的器物殊有不同。紐約大都會藝術博物館藏一件稜口平底的類似器物。其他私人及博物館亦藏有菱花形的洗可資參考，如香港敏求精舍展出的一件宋四葉形洗⁽¹⁾、臺灣故宮博物院藏的宋五葉形洗⁽²⁾、北京故宮博物院藏的宋官窯六葉形洗⁽³⁾等。

The finely-potted shallow body with curved wall rising from a pronounced circular foot, culminating in a flared rim with a slight lip, applied with a dark ivory grey celadon glaze suffused with a network of an intense russet-brown crackle. In the center of the bowl is a character “jie”. The interior of the ringfoot is glazed in pale green and with yellow crackles and a character “wu”. The thick wall of the bowl has earth suffusions and the whole ware is finely potted with deep and subtle glaze colour.

As one of the Five Great Kiln wares of the Song dynasty, Ge Wares occupied an important place within ceramic history and production during this period. As of writing, no specific kiln site has been ascribed to the production of Ge wares, but a historical tradition developed during the Yuan dynasty tells of the two Zhang brothers working near Longquan, Zhejiang Province. One, the “elder brother”, developed a darker brown glaze with crackles (Ge ware), while the younger Zhang created a blue-green glaze not unlike those coveted during the later Southern Song dynasty.

Ge Ware were unique amongst Chinese ceramics due to the use of dark brown clay or purpleish-black clay from the Lin’an mountains surrounding Hangzhou for their firing. The most notable characteristic of Ge wares was their unique brown crackle, which was achieved through thermal expansion post-firing and was emphasized through multiple layers of glaze. The combination of thicker dark lines and thinner brown lines seen in the glaze on this brush washer is known as “gold thread and iron wire.” As well, Ge wares were typically decorated with a greyish ivory or even greyish green glaze. Based on the excavation of Ge ware wasters from the Tiger Kiln within the imperial palace of Hangzhou, it is believed that Ge wares may have been manufactured directly for royal consumption alongside Guan ware.



Like other wares from the Five Great Kilns manufactured during the Northern Song dynasty, Ge wares were replicated by potters during the Ming and Qing dynasties, most notably during the Yongzheng (1722 -1735) and Qianlong (1735 – 1796) periods. However, the rounded, dish-like shape of this piece makes it exceptionally rare within both original Song and replicated Qing Ge ware brush washers, which are typically fired with cinquefoil or octagonal lobes or feature an undulating rim. One similar example with a flat base and a slightly lobed rim is housed in the Metropolitan Museum of Art, New York. Also, compare several lobed examples of Ge or Guan-manufacture wares from institutions and private collections worldwide, including a Ge-glazed quatrefoil brush washer dating to the Song dynasty exhibited in a Min Chiu Society exhibition (1); a Ge-glazed cinquefoil cup in the National Palace Museum, Taipei, and a hexafoil brush washer in the Palace Museum, Beijing, designated as Guan(3).

註 Notes:

(1) Illustrated in Selected Treasures of Chinese Art: Min Chiu Society Thirtieth Anniversary Exhibition, Hong Kong, 1990, pp. 252-253, no. 111 and illustrated in Selected Treasures of Chinese Art: Min Chiu Society Thirtieth Anniversary Exhibition, Hong Kong, 1990, pp. 252-253, no. 111

(2) Illustrated in Ko Ware of the Sung Dynasty, Book II, Hong Kong, 1962, pl. 42, pp. 121-122

(3) Illustrated in Porcelain of the Song Dynasty (II), The Complete Collection of Treasures of the Palace Museum, Hong Kong, 1996, p. 23, pl. 18

1008

A RUYAO CELADON BOWL
Song Dynasty (960-1279)

Provenance

A private Hong Kong collection, acquired in 2013 from an antique shop on Hollywood Road, Hong Kong

H : 4.7 cm D of mouth: 18.2 cm D of foot: 7 cm

Appraised Value (評估價格) : HK\$1,000,000

宋代 汝窯青釉斗笠碗

高：4.7厘米 口徑：18.2厘米 底徑：7 厘米

來源

香港私人收藏，2013年購藏於香港荷理活道古玩店



同類瓷器曾經在2019年04月02日於北京匡時國際拍賣有限公司
拍出HKD 14,750,000。

Similar porcelain was sold in Beijing Kuang Shi
International Auction Co., Ltd on April 02,
2019 for HKD 14,750,000.



此碗大敞口，窄沿，斜直腹緊收，碗底圈足。碗內底有凹陷圓圈，與圈足同大。圈足小，底部有小支釘三個。胎質灰白細膩。整器內外均施天青釉，有釉裂細紋開片。

汝瓷細膩青翠如玉，釉色純淨，均勻地施於全器，包括斜壁及口沿而不滴。汝瓷傳世極少，高度多不逾30厘米。明、清兩代亦仿燒汝瓷，各有成就特色。專家曾對清涼寺出土汝官窯瓷片作檢測，在結晶體化學物理、埋藏斷層基礎上，以X光螢光、衍射，高溫、電子、電子放射、目測等作檢視分析，對瓷片結構，燒製技術和視覺效果間的關係作深入研究，首次鑒定汝釉是屬分離結晶層和重色的合成物。

此碗較淺、敞口，與其他博物館收藏器型較圓渾汝瓷在型制上頗有分別，但與其他宋窯場的器物也有共通之處。2005年3月29日蘇富比拍賣的龍泉青釉碗(號317)與日本大阪東方陶瓷博物館所藏一件吉州窯黑釉木葉紋碗可資參考，或證此淺碗為茗飲茶碗。

The wide, finely-potted body splaying outward from a small raised circular ringfoot with three spur-marks toward a slightly incised rim with a small lip, applied with a sky blue-green celadon glaze with slight crazing and abrasions typical for *Ru* wares. The base exposes the greyish-white biscuit.

Ru ware is also distinct for its jade-like gloss, which is owed to the semi-vitrified partially-enamelled glaze that evenly covers every inch of the surface, including the rim and curvature. Surviving *Ru* items are a very small number, and all of small sizes-under 30 cm in height. There are imitations from the Ming (1368-1644) and Qing (1644-1911) dynasties, which are artistically sophisticated in their own right, and bear characteristics of their respective times. Green-glazed porcelain shards excavated from Qingliangsi *Ru Guan* kiln site in Henan province were adopted as test samples. Based on the physico-chemical foundation for crystallization and phase separation of *Ru* glaze, the correlation among composition, microstructure, firing technique and visual appearance has been investigated by means of energy-dispersive X-ray fluorescence, X-ray diffraction, high temperature microscope, field emission electron microscopy and transmission electron microscopy. For the first time, the study demonstrates that *Ru* glaze is typical of crystalline-phase separated glaze with a dual colouring mechanism.

Although the form of this bowl is unknown in previously-identified *Ru* ware vessels at other museums, which typically sport a rounder body, this flared, saucer-like bowl in fact finds common ground with many bowls from other kiln sites thrown during the Song dynasty. Note a *Longquan* celadon bowl sold at Sotheby's, 29 March 2005, lot 317, as well as a black *Jizhou* ware bowl with an inlaid leaf from the Museum of Oriental Ceramics, Osaka, Japan. The form of these bowls suggests that this *Ru* ware saucer was meant as a tea bowl.

1009

A DANGYANGYU "TWISTED GLAZE" BOWL
Song Dynasty (960-1279)

Provenance

A private Hong Kong collector, acquired in 2013 from an antique shop on Hollywood Road, Hong Kong

H: 5.5 cm D of mouth : 12.7 cm D of base: 4.1 cm

Appraised Value (評估價格) : HK\$280,000

宋 當陽峪窯絞釉碗

高：5.5厘米 口徑：12.7厘米 底徑：4.1厘米

來源

香港私人收藏，2013年購藏於香港荷理活道古玩店





碗口稍內斂，薄沿，弧腹內收至碗底，內底呈圓狀，無釉，圈足施釉，胎質呈細膩白色。通器施仿絞胎綠釉及黑褐色流淌紋，流麗自然。

當陽峪窯位於山西邊界的河南修武縣，主要燒製磁州瓷，因產量極多而未被列為宋五大名窯。其生產年代在北宋至元代，十一至十四世紀之間。磁州窯場散佈各地，燒製瓷器種類豐富，由早期在灰白色器身化妝土施黑白釉發展至在上飾以刻劃花、篋劃花紋。品種包括人物形枕、梅瓶等；其型制、紋飾非常獨特，亦是最早以彩釉飾瓷的窯場。

當陽峪窯陶瓷的多樣化包括此件絞胎釉碗。絞胎是唐代流行的裝飾技巧。以前曾認為是受剔犀漆器影響，但近年學者考證其可能是受到波斯薩珊王朝或敘利亞大理石紋大理石紋玻璃器的啟發。此技法利用兩種色的泥土互覆或盤絞，又或絞纏兩種色的化妝土，再施透明琥珀釉或黃釉燒成。阿富汗、韓國考古發掘均曾有絞胎器出土。

宋代以後絞胎陶瓷漸次衰落，由其他釉彩技巧取代。北京故宮博物院藏有獸足絞胎器。2015年3日佳士得亦曾拍賣一件黃釉絞胎器(中國陶瓷及藝術品拍賣，號3232)。

The deep rounded sides rising from a prominent raised small circular foot with an unglazed base exposing the white fine biscuit, culminating in a thin, narrow rim, applied with an apple-green “twisted glaze” with a naturalistic flavor, featuring with progressive lighter shade of greenish yellow hue towards the rim, covered with dense network of russet-brown streaks like veins resembling marbled stone or woodwork.

The Dangyangyu kiln site is located in Xiuyu in Henan Province on the border of Shanxi Province. Dangyangyu is known primarily for the production of Cizhou Wares, which while not counted within the Five Great Kilns due to the enormous breadth of its production, were primarily manufactured between the 11th-14th centuries during the Northern Song (960 – 1127) and Yuan dynasties (1279 – 1368). The variation within Cizhou wares, likely based on geography, is noteworthy, although almost all begin with a simple thick white or black glaze over a slip atop light gray stoneware, followed by decoration incised, carved, and combed into the white slip ground. The staggering diversity of forms, ranging from figural neck-pillows to meiping vases, is unique for this time period, as is the external decoration, which comprises the first use of enamel in the history of Chinese ceramics.

This variation clearly carries into the production of this bowl. “Twisted glaze”, or jiaotai, was a popular decoration technique applied to Tang dynasty ceramics. Although formerly thought to be derived from the tixi multi-colored lacquer tradition, recent scholarship finds the inspiration to have more likely come from marbled glassware imported from Sassanid Persia and Umayyad Syria. This technique was achieved either by the layering or folding together of two differently-coloured clays or by using two differently-coloured slips, which were then covered with an amber or transparent pale-yellow glaze. Jiaotai ceramics have been found in excavations as far afield as Afghanistan and Korea.

Jiaotai glazed ceramics are exceptionally rare later than the Song dynasty, which made way for even more innovative wares and glaze experimentation. A Tang dynasty marbled jar with prominent paw-shaped legs is found in the Palace Museum Collection, Beijing. Additionally, a rare yellow-glazed marbled pottery dish was sold at Christies in March, 2015 (Lot 3232: Fine Chinese Ceramics and Works of Art).

1010

A YUEYAO OLIVE GREEN COVERED INCENSE BURNER
Song Dynasty (960-1279)

Provenance

A private Hong Kong collection, acquired in 1997 from an antique shop in Macao

H: 20.9 cm D of mouth: 1.4 cm D of base: 9.2 cm

Appraised Value (評估價格): HK\$1,000,000

宋 越窯青釉香爐

高: 20.9厘米 口徑: 1.4厘米 底徑: 9.2厘米

來源

香港私人收藏, 1997年購藏於澳門古玩店



該器為上下器組成，中間為子母口扣合。上部為蓋，頂部為一小瓶，瓶底有一小圓形荷葉狀小盤托舉頂部小瓶。荷葉紋小盤之下為直頸，立於覆扣碗狀香爐之上。頂部小瓶與器身均有若幹三角形及不規則形鏤孔。下部為爐托，口沿呈荷葉形托盤伸展於器身之外。托盤之下為碗狀器底，上飾淺刻劃花葉紋。碗狀器上有對稱圓孔。圈足外撇，圈足內有支釘痕跡八個，支釘呈小長方形，緊靠圈足邊。胎質灰白、細膩。此器造型典雅，青釉晶瑩，器型設計獨特，為越窯佳品。

北宋五大名窯及南宋龍泉窯、景德鎮窯興起前，越窯及邢窯是兩處燒製單色釉的主要窯場。早在兩世紀，浙江越窯已燒造仿古代金屬器物的陶瓷。六世紀晚期更開始燒製宮廷及宗教用器。

越窯擅以木灰、瓷土和石灰石混合來燒成獨特橄欖綠釉。越窯器主要為炆器，為首類在龍窯中以攝氏1000度燒製的陶瓷。由於調釉的技術和型制釉色類似，其被視作南宋青釉瓷的前身。其中有一種譽為「秘色」瓷極為精美，釉色呈藍綠，令人想起龍泉窯器，並曾在陝西法門寺出土，名聞遐邇。

越瓷多飾方刻劃花紋樣，包括花葉紋如牡丹、蓮、菊以及魚、龍及其他人物、禽鳥紋等。這件香薰爐為當代類似鼎的典型香爐造型，造型在某程度受玉壺春瓶影響。紐約J.J. Lally東方瓷收藏一件可資比較，器型或為仿陪葬用的甕。高麗君主亦鍾愛青瓷，包括香薰爐，首爾國立博物館藏的一件可為參考(國寶95)。

The body fired in two parts fitting each other, the semispherical base rising from an everted ringfoot and culminating in a flared horizontal rim with four undulations at each corner forming the shape of a clover, embellished with detailed incision on the foliate, the body of the lid, incised with several decorative holes, rising semi-spherically towards a conical handle in the shape of a yuhuchunping vase with floral motifs, the exterior lightly carved with similar floral and lingzhifungus motifs as the base, applied uniformly with an olive-green glaze. Inside the everted ringfoot are eight spur marks with the greyish-white biscuit exposed.

Yue wares (or Yueyao) are one of two major monochrome ceramic types (the other being Xingyao) manufactured prior to the establishment of both the Five Great Kilns of the Northern Song dynasty as well as the enormous kiln-sites of Jingdezhen and Longquan in the Southern Song dynasty. Yue wares were first manufactured at the Yue kiln site in Zhejiang Province as early as the 2nd century in imitation of Chinese metalworks, and by the end of the 6th century were commissioned as palace-wares and as religious donations.

Yue wares are known for their distinct olive-green glaze, produced from a recipe using wood ash, clay, and ground limestone. Yue wares, primarily stoneware ceramics, were some of the first Chinese ceramics to be fired within dragon-kilns, reaching temperatures as high as 1000 degrees Celsius. Due to the region of manufacture and similarities in glaze technologies, Yue wares are typically considered the ancestor of later Southern Song dynasty celadons. A particularly refined horde of Yue ware ceramics, known as "mise Yue Wares" (secret colour Yue wares) were excavated from Famensi (the Holy Famen Temple), Shaanxi Province, with a lighter bluish-green glaze more reminiscent of later Longquan wares.

Yue ware ceramics often featured incised decorations – common motifs include leaves, flowers such as peonies, lotus-blossoms, and chrysanthemums, fish, phoenixes, and other figures. The unique incense burner above features some influence from a ceramic vessel style yuhuchunping vase, although the shape of the vase is typical to contemporary cauldron (ding) shaped censers of the period; compared with an example shown at the J.J. Lally collection of Oriental Art in New York, it is possible that this vessel was modeled from a funerary urn. Alternatively, cultural interaction with the easterly Korean Goryeo dynasty (918 -1392), also known for its' rulers penchant for olive-green celadons and elaborate incense burners - see National Treasure 95, found in the National Museum of Korea in Seoul – may have inspired the shape of this vessel.

A RUYAO CELADON BOWL
Northern Song Dynasty (960-1127)

Provenance

A private Hong Kong collection, acquired in 1997 from an antique shop on Hollywood Road, Hong Kong

H: 5 cm D of mouth: 10.7cm D of base: 3.6 cm

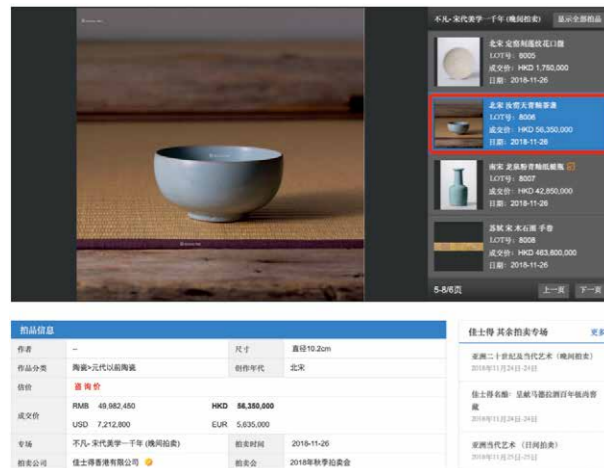
Appraised Value (評估價格) : HK\$200,000

北宋 汝窯青釉敞口碗

高：5厘米 口徑：10.7厘米 底徑：3.6厘米

來源

香港私人收藏，1997年購藏於香港荷理裏活道古玩店



同類瓷器曾經在2018年11月26日於佳士得紐約有限公司拍出HKD 56,350,000。
Similar porcelain was sold in Christie's New York Limited on November 26, 2018 for HKD56,350,000 .



此碗敞口，斜直腹緊收碗底。碗內底部積釉形成小圓圈。底部圈足內有支釘三枚。露胎，胎質深褐色，圈足內亦施釉。整碗通施天青釉，通身有釉裂蟹爪紋，並有土滲痕跡。造型古樸，釉色柔潤，清雅怡人。

汝瓷於北宋在河南汝州開始燒製，為中國陶瓷史上最享盛譽的官窯器。北宋僅享年祚僅二十餘年，因此汝瓷祇有少於100件傳世，如鳳毛麟角，珍罕異常。

汝瓷在政局紛亂，但在藝術昌盛的北宋晚期創燒，據說由是政令靡敗，但書畫兼擅的宋徽宗的一夢而啓發。他夢見傾盆大雨後，雲中顯露出一線天青。夢醒後徽宗撰詩敘夢，並命窯官燒造類似顏色的瓷器。迷惘的窯工燒製多種樣瓷，但徽宗並不滿意，直至汝窯成功燒成色如雨後天青的瓷器。汝瓷釉色又被譽卵青，但未能述其美。其色在光線下有如燦金流光，而在陰影下又呈溫潤柔雅的泛藍色，優美至極。

汝瓷極其珍罕，難覓真品以資比較。大英博物館 Percival David 收藏的一件具清乾隆帝刻銘汝窯碗 (PDF 3)，台灣故宮博物院藏有一件汝窯荷葉碗及英國維多利亞·亞爾拔博物館藏一件高麗朝年間(1100-1150)青釉碗亦施類似汝瓷釉色及開片 (C523-1918)，均可資參攷。

The body splaying outward from a small raised circular foot with three spur-marks tapering towards an unglazed brown flared rim, applied with a greyish blue-green celadon glaze with russet-brown crazing, with slight pooling in the interior of the vessel. The glazed interior base exposes the deep brownish biscuit. The bowl is finely potted with soft and lustrous glaze, exuding lyrical beauty.

Named after its origin—the official kiln in Ruzhou, Henan Province, the *Ru* porcelain ware started its production in the Northern Song dynasty and is recognized as the best of its time as well as in the entire history of Chinese ceramics. As the Northern Song production spanned a mere 20 years, less than 100 pieces have survived to date. This rarity makes *Ru* wares even more precious.

The *Ru* stoneware dates back to the later years of Northern Song, a period of political chaos but artistic resurgence. Its invention is said to be inspired by a dream of Emperor Huizong (1082-1135), an incompetent ruler but highly accomplished calligrapher and painter. One night the emperor saw in his sleep an occult shade of blue through a rift in clouds after a downpour. Upon waking up, he wrote about this scene in a poem, and instructed his potters to make porcelain of the colour as described. The order had craftsmen across the land scratching their heads. Samples trickled in, but all were turned down by the monarch, until the kiln in Ruzhou produced the desired grayish blue glaze resembling the sky after rain. When talking of the nuanced colour of *Ru* ware, another often used reference is the shell of duck egg. Neither can, however, fully depict its complexity and volatility. Under bright sunshine, the stoneware displays a golden touch on a celadon base; under dim light, the bluish tint becomes more pronounced.

As *Ru* wares are exceptionally rare, very few authenticated *Ru* bowls existed for comparison. Evaluate the glaze and shape of this bowl compared to a *Ru* ware bowl found in the British Museum's Percival David Collection (PDF 3) inscribed with a poem by the Qianlong Emperor (1735-1796). Also compare to a delicate lotus-shaped bowl in the National Palace Museum, Taipei. Finally, compare to a *Ru* style Goryeo (Korean (1100-1150)) celadon bowl with a similar glaze colour and crackle housed in the Victoria and Albert Museum (C523-1918).



1012

A RARE AND IMPORTANT WHITE GLAZE YUHUCHUNPING
VASE WITH AN UNDERGLAZE BISCUIT-FIRED DRAGON
Northern Song Dynasty (960-1127)

Provenance

A private Hong Kong collection, acquired in 1994 from an antique shop, in
Tokyo, Japan

H: 25.5 cm D of mouth: 8 cm D of base: 8 cm

Appraised Value (評估價格) : HK\$1,200,000

北宋 白釉龍紋玉壺春瓶

高：25.5厘米 口徑：8厘米 底徑：8厘米

來源

香港私人收藏，1994年購於日本東京古玩店



該器平口外撇，束頸無肩，頸腹相連。腹下部外鼓。圈足較厚，圈足內平底，底部有深褐色釉斑。胎質細膩緊湊，呈灰白色。整器外壁施象牙白釉，釉較厚。器腹胎上飾五爪龍紋繞腹，龍首昂立，細鱗，姿態飛揚威猛。龍頸及首及器身釉色剝離，呈淺黃色。亦有土滲痕跡。

玉壺春瓶流行於宋、元朝，在唐代為廟宇水器，後用作酒器及花器。造型特色是下腹鼓漲、細長頸及撇口，呈S形。2016年6月14日蘇富比曾拍賣一件(號730)，可資參考。

白釉器在北朝(約420–589)開始燒造，其質素和口碑在唐晚期逐漸與三彩器齊名。邢窯器曾在北齊(約 550–577)一度燒造，其名本源自河北邢州，包括四處主要窯場如祁村、崗頭村等。邢器胎薄，施微泛青色白釉。此器則較粗厚，可能是敷施化妝土。邢器放在匣鉢內以接近後世瓷器燒造的溫度燒成。唐陸羽曾將邢窯器(北方器)和越窯器(南方器)相比較，譽之為如雪如銀。白釉器未被列為北宋五大名窯瓷器之一，除非其與是特定個別窯口如定窯、官窯器相關。邢窯漸為河北南部燒製的定窯取代，未能確定其後尚有燒造瓷器。

邢、定窯啓發供宮廷用及外銷的青白瓷的生產出現。青白瓷以高嶺土為胎，能燒成堅實細緻的瓷器，再施透明青白釉在還原焰燒成。歐亞大陸遺存不少青白瓷，如中國使節上貢匈牙利路易大帝作為餽贈。青白瓷亦在東南亞泰國、柬埔寨、越南等地考古中發現。

江西湖田窯及景德鎮窯亦燒製白瓷及青白瓷，承襲同時代定、磁州、耀州窯風格紋樣及燒造如三彩器的塑像等。此器素胎上的龍紋，可能是受到磁州窯釉下素胎雕花陶瓷的影響。

此件獨特罕見的瓷器可能是分兩次施釉和燒製而成。龍紋是在透明釉胎體施化妝土雕刻後燒製，再在其上敷一層厚釉再次燒窯，因此龍紋除部份如鱗甲及髮鬚外，其餘都不在器壁上凸起，與早期磁州窯器的削走化妝土露出釉胎的剔花技巧頗有分別。蘇富比在2015年3月拍賣較後期的化妝土紋樣青白釉玉壺春瓶可資比較。

中國科學院高能學院以宋至清一萬八千塊瓷片樣本進行檢測研究，對此瓶結構元素加以鑑定而確證其年代及在景德鎮燒製。

The finely potted pear-shaped body swelling from a concave circular foot with an unglazed base showing brownish spots, white greyish biscuit and thick ringfoot . tapering gracefully towards a slender neck and culminating in a trumpeting rim with a slight lobe, The exterior applied with an ivory white translucent glaze slight crazing over top the biscuit-fired image of an ornate striding stylized serpentine dragon with impressively detailed scales, and fierce facial features, with slight crackling on the neck and head of the dragon, as well as the body.

The yuhuchunping vase form was consistently one of the most coveted Song and later Yuan dynasty form. Yuhuchunping vase was transformed in use from a water vase used in temple rituals during the Tang dynasty to a more widespread wine vessel during the Song and flower vase in the later dynasties. The form is characterized primarily by a swelling lower body tapering to a narrow neck before flaring to a wide trumpet mouth, which produce an elegant S-shaped profile. Compare the form of a similar Northern Song yuhuchunping vase offered at auction at Sotheby's, 14 June 2016, lot 730.

White-glazed monochrome stoneware was first produced during the Northern Dynasties period (420-581), but it was only during the later centuries of the Tang dynasty where monochromes began to equal sancai (three-colour) imperial wares in both quality and prestige. Xing or “Xingyao” wares had previously been manufactured as early as the Northern Qi dynasty (550-577), and are in fact named after a specific region in Hebei Province rather than a single kiln site; four distinct Xing ware kiln sites have been identified in this region, including Qiqun and Gangtai village. Xing wares were primarily white stonewares, potted with thin walls and painted with a layer of colourless glaze with a tinge of blue. The piece above, which appears coarser, may have required the application of a layer of slip prior to glazing. Xing wares were fired with wood within saggars (holders), and notably reached a temperature almost equal to that of later porcelain firing. In his book “The Classic of Tea” (762), writer and tea-master Lu Yu contrasts the production of Xing (which he associates with Northern China) and olive-glazed Yue wares (Southern China) to snow and silver.

Despite their elegant form and master craftsmanship, white-glaze wares were not considered one of the Five Famous Wares (also known as the Five Great Kilns) of the Northern Song dynasty unless they were specifically aligned with a kiln, for example Ding or some rare cases of Guan wares. It is likely that the Xing kilns were supplanted by the similarly-produced Ding wares, also produced in southern Hebei. It is not clear whether Xing wares were produced after the establishment of Ding kiln.

An additional Song white-glazed ware derived from both Xingyao and Ding, Qingbai, were arguably the first types of porcelain to be produced on a large scale both for domestic and imperial use as well as export. Qingbai wares were constructed from fine-grained kaolin porcelain stone, the sturdiness of which supported more delicate ceramic forms. Qingbai wares were then painted with a thin, glassy blue-green glaze with hints of iron within a reduced fired kiln to achieve a perception of translucency. White-glaze wares are also found as export wares across Eurasia, notably in Hungary where it was received as a gift from a Chinese embassy by Louis the Great (1342-1382), and have been found in archaeological excavations across Southeast Asia in Thailand, Cambodia, and Vietnam.

White-glaze porcelains were also produced at kiln sites such as Hutian and Jingdezhen (both Jiangxi Province), for example as Qingbai wares, and borrowed motifs and styles from contemporary Ding, Cizhou, and Yaozhou wares, but also attempted to replicate figural statuary in porcelain similar to sancai funerary figures found in earlier Tang dynasty tombs. As such, the biscuit-fired slip dragon found atop this piece was likely inspired by techniques adopted from the manufacture of Cizhou wares, which were some of the first vessels to feature raised underglaze decoration.

A rare and unique example, this piece was likely fired twice, and was thus applied with two layers of glaze. The dragon appears to have been applied as a slip and biscuit-fired over a clear glazed body, while a thicker translucent glaze was applied over both the vessel and decoration and fired a second time. Thus, the dragon is not raised above the level of the vessel's walls apart from a few sections of the scaled body and whiskered mouth. This differs slightly from sgraffito techniques used in earlier Cizhou wares, where the slip has been cut away to expose the original glazed layers. See an example of a later Qingbai yuhuchunping vase with more typical slip decoration sold at Sotheby's in March 2015, lot 102.

Authenticity Note: A compositional test was conducted on this piece at the Institute of High Energy Physics at the Chinese Academy of Sciences which verified it's given age, dynastic period, and manufacture at Jingdezhen based on a comparison between this vessel and 18,000 shards fired between the Song and Qing dynasties.

1013

AN EXTREMELY RARE AND IMPORTANT RU WARE MEIPING
VASE WITH LID
Northern Song Dynasty (960- 1127)

Provenance

A private Hong Kong collection, acquired in 2012 from an antique shop on
Hollywood Road, Hong Kong

H: 23.5 cm D. of mouth: 4.8 cm D. of base: 6.3 cm

Appraised Value (評估價格) : HK\$13,800,000

北宋 汝窯蓋瓶

高：23.5厘米 口徑：4.8厘米 底徑：6.3厘米

來源

香港私人收藏，2012年購於香港荷理活道古玩店



該瓶為有蓋套合，蓋呈筒狀，底微撇，倒扣瓶口，將瓶頸包裹其中。瓶圓肩弧腹，肩寬底小，線條柔美。周身通施天青釉，色澤柔潤。釉內有灰色小白點，亦有土滲痕跡。圈足內施釉，圈足口唇處有三個細小橄欖狀支釘痕在圈足口唇處。香灰胎質、細膩。此器造型獨特，圓潤古樸，釉色純正，造型端莊而優美恬靜。

宋汝窯器極為珍罕，為宋五大名窯之一，現祇有約87件傳世。其燒製年代早於官窯，為上貢宮廷瓷器，官窯並生產前稱為官窯。十三世紀文獻曾著錄宋政和及宣和年間開始燒製官窯瓷器。其後千百年間黃河泛濫、宋舊都開封(古稱汴梁)被淹沒，令宋窯址無法發掘，然而在1986年，在寶豐清涼寺發現可能是汝窯遺址的窯址。

汝窯燒製官窯器及民用瓷，北宋晚期因宮廷嫌棄定窯器有芒口，因此在汝州設立窯場燒造宮廷用器。汝窯祇在宋哲宗至宋徽宗(1086 - 1106) 二十餘年間生產瓷器，其後因女真入主開封建金朝(1115 - 1234)而沒落。由於汝瓷極為珍罕而備受珍藏，如清宮藏有汝瓷珍品，乾隆帝亦賦詩吟詠，甚至在底部鐫刻詩文，如北京故宮博物院藏有一件具1777年刻銘的汝窯碗。蘇富比專家Regina Krahl指稱乾隆帝可能曾在現存87件中的22件上題刻詩文。

珍罕汝瓷在其後，尤其是在清雍正、乾隆朝多所摹仿，一些博物館更誤認仿品為宋代真正汝瓷。1980年代以降，曾發掘出景德鎮的仿汝瓷窯址，出土精品堪與汝瓷真品媲美。乾隆皇帝亦曾將一件雍正時期仿汝瓷器誤認為汝瓷而加以詩文題識。

當時及後世均譽稱汝瓷為最精北方青瓷，因其上貢宮廷器，所以造工非常精審。宋人周輝在《清波雜誌》載：「汝窯宮中禁燒，內有瑪瑙末為（油）釉，唯供禦揀退，方許出賣，近尤難得。」記載反映汝瓷為宮廷用器。北宋與南宋交替時，女真入主首都杭州而致散失毀壞。其用瑪瑙末為（油）釉亦因汝州附近有瑪瑙礦發現而得到證實。瑪瑙末令釉色更明亮潤澤，成為窯工製作禦器的最大成就。

汝瓷釉經多次敷施，避免口沿和底部出現如定瓷的芒口，在較小約2米長的饅頭窯燒成，常有3至5個支

釘痕，明人稱為「芝麻釘」。其釉厚膩而不流，色呈天青、灰青或卵白，有細開片，色澤柔潤如堆脂。

汝瓷型制不多，Regina Krahl在87件乾隆收藏的器物中綜合出20種型制，其分別並無大異。宋周密《武林舊事》載：張府節「進奉汝窯，酒瓶一對、洗一、香爐一、香合一、香球一、盞四隻、孟子二、出香一對、大奩一、小奩一。」汝窯禦器體積不大，通常不高於50釐米，口徑在10至16釐米間，此器亦與此雷同。汝瓷胎體薄如冰，釉色如湖水天青及呈卵白，或稱為「蛋殼藍」J。英國大英博物館Percival David Collection藏汝窯玉壺春瓶高20釐米，為汝瓷中最大之一，器型沿襲宋代玉壺春瓶。雖然汝瓷多素淨小巧，但寶豐清涼寺出土汝官窯瓷片亦反映汝窯工匠有所創新，曾燒製創新型制和採用複雜堆塑、刻花、鏤空等技巧，惜無珍品傳世。另一汝窯遺址亦在河南汝州張公巷發現，惜亦無全器留存。

四處窯場器物或為汝窯承傳對象，包括浙江越窯青瓷、陝西耀州青瓷、河南民窯及窯址未明的柴窯。汝窯亦可能採用其他如定窯的燒瓷方法，並予以改善，掩蓋芒口。越窯和耀州窯將全器浸釉再加燒製的技巧，或亦為汝窯所沿用。

清亡國後至民國故宮博物院成立前，發生一場可能由意圖掩飾其盜宮廷珍寶的太監縱火，燒毀紫禁城宮殿的災難，導至庫藏被毀。一間外判商後從遺物中找回一些已損傷的汝瓷及明成化彩瓷，亦堪足保存收藏，在傳世87件汝瓷中，有15件屬這批器物，現見於國內外收藏。

在西方，1935至1936年在倫敦皇家藝術學院舉行的「中國藝術國際展覽會」，中國首次借出十件展品令汝瓷公諸於世。當時西方藏家已有收藏汝瓷，而著名的Sir Percival David及 George Eumorfopoulos的藏品也在展中展出。Sir Percival David有機會審視第一手資料及汝瓷真品，令他在東方陶瓷學會專刊中發表對汝瓷研究的重要文獻。

汝瓷真品、清代仿品及現代仿品令編製汝瓷清單有所必要，而此器應當編入其中。汝瓷現多藏於各大博物館，包括臺灣故宮博物院(21件)、大英博物館(17件)，大部份在Percival David展館；北京故宮博物院(15件)、上海博物館(8件)、瑞典Rohsska Museum, Gotheburg

(2件)、而北京國家博物館、天津藝術博物館、日本大阪東方陶瓷博物、香港藝術館、美國Cleveland Museum of Art、Philadelphia Museum of Art、St. Louis Art Museum、英國維多利亞·亞爾拔博物館及牛津大學 Ashmolean Museum 則各藏一件。

隨著私人庋藏曝光，傳世汝瓷數或會有所增加。

在此清單內，有7件是在1940年代以來在拍賣中拍出(1 - 7)。

本目錄著錄這件，結合定窯豐碩梅瓶型制，在汝瓷中絕無僅有，當為中國陶瓷史中孤例。

註 Notes:

(1)A yuhuchunping vase from the Eumorfopoulos collection, now in the Sir Percival David Collection in the British Museum, Sotheby's London, 28th May 1940, lot 135

(2)A “narcissus basin” with metal rim from the Ataka Collection, now in the Museum of Oriental Ceramics, Osaka, Sotheby's London, 17th March 1959, lot 26, and 24th February 1970, lot 1

(3)A brush washer from the K. S. Lo (羅貴祥) Collection, now the sole Ru ware piece in the Hong Kong Museum of Art, Sotheby's London, 15th April 1980, lot 140

(4)A dish from the Stephen Junkunc III Collection, now in the private collection of Au Bakling, Christie's New York, 3rd December 1992, lot 276

(5)A reduced dish from the Stephen Junkunc III Collection, now in a private collection, Christie's New York, 29th March 2006, lot 401

(6)The lobed brush washer from the Alfred Clark Collection, now in a private collection, Sotheby's Hong Kong, 4th April 2012, lot 101

(7)A Ru ware brush washer from the Le Cong Tang Collection, now in a private collection, Sotheby's Hong Kong, 3rd October 2017, lot 5, which sold for a record 294,287,500 HKD (36.06 million USD)

The smooth, voluptuous body rising from a concave base with a slight circular foot, featuring three spur-marks, tapering toward a short, thick neck with a slightly lipped rim, topped by a convex, cylindrical lid with a slight flare at its base, applied liberally with a greyish-blue celadon glaze suffused with dense network of tiny needlepoint mottled abrasions, earth suffusions and distinct crackles indicative of traditional Ruyao firing techniques. The whole ware is potted with a refined and archaic form and subtle glaze color, exuding elegance and tranquility.

Ru ware, of which approximately 87 pieces have survived through the entirety of antiquity, were representative of China's Five Great Kilns: Ding, Ru, Jun, Guan, and Ge. Ru wares were the first “official” wares commissioned by the Northern Song imperial court, and were thus known as guanyao prior to the establishment of later “Guan” ware. The 13th century scholar Gu Wenjian, in his text *Miscellaneous Notes While Basking in the Sun*, notes that “between the reigns of Zhenghe and Xuanhe (1111-1119 CE), the Capital began to fire wares for itself, calling these “official kilns”. Unfortunately, the Yellow River has overflowed countless times over the last millennia, and the ruins of the Song capital at Kaifeng, Henan Province (ancient Bianliang) has been buried as far as six meters deep, so archaeological investigation of the original kiln sites is very difficult. However, in 1986, proper kiln remains were excavated at Qingliangsi, Baofeng, Henan province (see below).

Ru wares include the products of both official and private kilns. During the late Northern Song dynasty (early 12th century), the rulers came to dislike the unglazed rims of the Ding wares fired for imperial use, and no longer commissioned them. Instead, the court established new porcelain kilns in Ruzhou to fire wares for imperial use. These kilns only fired porcelain for twenty years between the reigns of Emperor Zhezong and Emperor Huizhong (1086 – 1106), but were abandoned due to burgeoning war with the emerging Jurchen Jin dynasty (1115 – 1234) who eventually came to rule over Kaifeng. Thus, Ru ware is exceptionally rare, although some examples have been preserved elsewhere, for example at the Qing court which collected these determinedly. The Qianlong Emperor, for example, wrote numerous poems in praise of his collection of these official Ru wares, and at times inscribed their bases, as is the case with a bowl found at the Palace Museum in Beijing with an inscription dated 1777. Arguably, notes Sotheby's expert Regina Krahl, the Qianlong Emperor in fact “appropriated” Ru ware by having twenty-two of the eighty-seven extant pieces engraved with his poems.



The forms and glaze of Northern Song Ru wares, much like other Song pieces, were also imitated (in a process known as *fang gu* or “copying of the ancients”), especially during the Yongzheng and Qianlong Periods (18th century) of the Qing dynasty. The rarity of these pieces is highlighted by the misidentification of many imitation wares in museum collections, incorrectly attributed to the Song. Later Ru kiln sites established at Jingdezhen have been excavated since the late 1980s, and have unearthed several comparably beautiful later pieces which have been used as comparisons for original Ru pieces. Qianlong himself is known to have mistook an imitation piece for an authentic Song dynasty Ru ware, and had a poem inscribed on a Yongzheng copy.

In the eyes of contemporaries, as much as in the present, Ru celadon was the highest quality northern celadon ever produced in China. Because it was intended for imperial use, the craftsmanship of Ru wares was highly exacting. Zhou Hui, the author of *Qingbo zaji*, “Miscellaneous notes on Pure Waves”, notes that Ru wares were “glazed with agate dust: only those not selected for imperial use were allowed to be sold, and lately they are extremely hard to obtain.” This quote reflects two realities: the first is that the majority of Ru wares remained in Imperial collections, and thus may have been destroyed following the abandonment of the capital for Hangzhou during the transition from Northern to Southern Song dynasty (c. 1127). The second is the use of agate, which is confirmed by the excavation of agate mines surrounding Ruzhou. Agate dust was mixed into the glaze of Ru wares, increasing its glossy surface, which provides yet another example of the special care and ingenuity that Ru potters took when creating wares for the court.

The glaze was applied in several layers, and due to the

dislike of Ding wares by the Song court was assured to continue overtop each rim and at the base. Ru wares were fired in small bun-shaped (*mantou*) kilns less than 2m long and were propped upon between 3-5 small metal spurs. This firing technique left small unglazed oval spots; these were warmly known by Ming dynasty connoisseurs as “sesame seeds”. The glaze itself was thick and full, its color light bluish green resembling green jade, and has at times been classified as “sky-blue”, “pale-blue” and “egg-blue” (*qing*). The entire surface was finely crackled with tiny and natural fissures/ablation, and its flow has been compared to “lard dissolving not flowing” or “thick unctuous glaze texture”. Like jade, this glaze has at times been known as “mutton fat”.

Ru wares are not highly varied in shape; Regina Krahl notes of the 87 pieces owned by the Qianlong Emperor, only twenty physical forms were identified with little sculptural variation between them. The writer Zhou Mi (c. 13th century), in his text *Wulin jiushi* (Stories from Old Wulin) describes how Zhang Jun, a high official, had won the emperor’s favor in 1151 by offering him a tribute of sixteen Ru wares, including a liquor bottle, basin, censer, box, incense ball, cup, container, censer, and large and small make-up holders. Imperial wares were mostly small pieces of delicate craftsmanship, regularly shaped, usually not taller than 50cm, with a diameter at the mouth between 10 -16cm; thus, the piece above fits perfectly within this category. The bodies of these tribute vessels are thin and smooth, the glaze resembling the waters of a cold, icy lake reflecting the blue sky (“duck’s eggshell blue”). A 20cm tall Ru ware *yuhuchunping* vase in the British Museum’s Percival David Collection, for example, represents one of the largest Ru ware vessels, and based on the appropriation



and evolution of the *yuhuchunping* vase form during the Song dynasty may in fact represent one of the final (and thus newest) original pieces of Ru ware. That said, besides a large number of sherds of typical Ru *guanyao* vessels that were recovered from the Qingliangsi site at Baofeng, the excavations have also shown that the potters were more ambitious than the heirloom pieces let one to believe. Whereas virtually all extant pieces of Ru official ware are small and plain, the kilns experimented with many complicated sculptural forms, openwork designs and detailed engraved decoration, of which no complete examples are preserved, or may ever have left the kilns. Other more recently excavated kiln sites are now sometimes mentioned in this context as possible official kilns of the Northern Song period, in particular the Zhanggongxiang kilns also in Ruzhou, Henan province (Beijing 2009), but almost no extant heirloom pieces can be matched to those manufactories.

Scholars believe that there are four possible precursors to Ru wares, which emphasize how potters borrowed elements from other wares to create the perfect imperial ceramics: the Yue celadon of Zhejiang; the Yaozhou celadon of Shaanxi; the private kilns of Henan, and the Chai kilns, the location of which are unknown but are documented within texts. The other possibilities are known through comparisons; for example, Ru wares heavily draw from the technological innovations of Ding wares, yet perfect their

defects. The Song court also had tributary relationships with the Yue and Yaozhou kilns, and it is thus apparent that both the celadon glaze colour itself as well as the technique of dipping the entire vessel into the glaze prior to firing.

In 1923, after the fall of the Qing dynasty (1644-1911) and before the opening of the Forbidden City as a public museum, a fire at one of the palace halls which was supposedly deliberately planted by eunuchs in an attempt to hide many of the objects stolen during the tumultuous depopulation of the Qing court, destroyed a storage area where ancient works of art had been kept. From the burnt remains that were cleared by an outside company only some Ru wares, and some polychrome (*doucai*) porcelains of Chenghua mark and period (1465-1487) were apparently deemed worth keeping in spite of damage done to their glazes. Thus, fifteen fire-damaged pieces are among the eighty-seven Ru pieces preserved worldwide.

In the West, the identity of Ru ware came to be known through the International Exhibition of Chinese Art at the Royal Academy of Arts, London, 1935 - 1936. The Chinese Government lent ten examples identified as Ru ware; however, at this point several Western collectors already owned pieces of Ru ware, and thus pieces from the collections of Sir Percival David and George Eumorfopoulos were also included in the exhibition. The opportunity to inspect first-hand and to handle so many Ru pieces led David to study the historical sources and to publish his ground-breaking ‘Commentary on Ju [Ru] Ware’ in the *Transactions of the Oriental Ceramic Society* right after the exhibition.

The rarity of Ru wares and the precarity of both Qing dynasty imitations and modern forgeries has required the creation of an accurate list of extant Ru wares, to which this piece should inevitably fall within. Almost all of these pieces are found in museums: 21 pieces in the National Palace Museum, Taipei; 17 in the British Museum, with most in the Percival David Museum; 15 in the Palace Museum, Beijing; 8 in the Shanghai Museum, 2 in the Röhsska Museum, Gothenburg, Sweden, and one each in the National Museum of China (Beijing), Tianjin Municipal Art Museum; Museum of Oriental Ceramics (Osaka), Hong Kong Museum of Art; Cleveland Museum of Art, Philadelphia Museum of Art, St. Louis Art Museum, Victoria and Albert Museum, and the Ashmolean Museum (Oxford). This number will inevitably increase as more pieces from private collections are identified.

Among this list, only seven Ru vessels have ever appeared at auction since 1940 (1 – 7).

The piece above, embodying the bulbous *meiping* form originally invented by contemporary Ding potters, currently has no equal of known Ru wares, and is thus unique within the history and lore of Chinese ceramic production.

1014

A RU WARE CELADON TRIPOD CENSER WITH A CARVED MANDARIN DUCK LID

Northern Song Dynasty (960 – 1127)

Provenance

Sold at Royale's Hong Kong, 29 November 2016, lot 1607

H: 21.5 cm

Appraised Value (評估價格) : HK\$1,200,000

北宋 汝窯青釉鴛鴦香薰爐

高：21.5厘米

來源

香港皇廷拍賣，2016年11月27日，編號：1607



筒形爐身立於三獸足上，敞口，附蓋，圈底高身，淺刻蔓草紋。蓋塑成立體鴛鴦形狀，翹首展翅，羽毛刻劃簡樸。全器敷施橄欖青釉，膩厚勻淨，呈開片。此爐造形生動自然，反映宋代崇尚清淡雅致，溫潤如玉的美學追求。

汝瓷原在北宋時已首都開封城外窯場燒製宮廷官用瓷器。南宋時繼續在官窯生產，至十二世紀女真金人主中原而被毀，為後世推重為官窯瓷器之佳皋。

香薰爐源於漢朝以前的青銅器，至漢朝大為盛行，主要是因為崇尚道家，追求成仙信仰所驅使。博山爐是漢代最流行的型制之一，鏤空飾以仙山福地、東王公、西王母等仙人紋樣，焚香煙霧裊裊飄溢，恍如進入仙境。香薰爐主要為皇家、貴族持用。唐宋以後瓷業興盛，瓷製香薰用器應運而生，廣為宮廷、士大夫以至文人使用，更為宮殿、文案必備器物。瓷質香薰爐亦見於歷代瓷器及宋汝瓷，形制均由焚香爐體及動物蓋鈕組成，以托盤作為儲灰之用。蓋鈕多以動物、禽鳥、鴛鴦、狻猊、獅獸、仙山等為飾，鏤空令香氣溢出，除觀賞外更有淨化空氣、除蟲辟味的效果。鴛鴦為中國藝術的常見紋樣，寓意夫妻和諧、情深愛切、相伴不離。

The body of the burner rising from three claw-footed legs to a short cylindrical trunk, with a flared rim with a subtle lid, the lid rising from a circular base incised with repeating tendril motifs, adorned with a small Mandarin Duck statuette with a smoothly-shaped body incised with feathers, a carved beak and feet, and trapezoidal wings, applied with lustrous thick olive green celadon glaze with signs of crazing. The form and decorations of this censer are finely rendered, reflecting the pursuit of simplicity and naturalism in the aesthetics of the Song dynasty.

Ru wares, originally manufactured in kilns outside the Northern Song dynasty capital of Kaifeng, continue at the Guan kilns of the Southern Song dynasty prior to the fire destruction of the Ru kilns by the Jurchen invaders of the 12th century, and became a symbol of early Song artistic elegance in later dynasties.

Censer originated from the ancient bronze ware, and became very popular in the Han dynasty as the imperial family and nobles believed in Daoist legends and pursued immortality. Large number of boshan censers appeared in the Han dynasty, which were often decorated with motifs such as the King of the East, the Heavenly Mother of the West and immortals' dwellings in the mountains. When burning incense, the smoke comes out and disperse in the air, as if leading people strolling to immortal land. Censers were commonly used by members of the imperial family members and nobles. With the rise of ceramic industry in the Tang and Song dynasties, censers were further used as daily wares for nobles, officials and the literati class as objects in palaces or on scholar's tables. Ceramic censers were also fired at various kilns including the Ru kiln, the form of which is made up of a censer's body, a lid often modelled in the shape of animals and birds and a tray which is for collecting incense ash. The lids are often in the form of animals and birds such as mandarin ducks, mythical animals, lions, wild beasts or immortals in mountains. Openings on the lid will disperse smoke and fragrance and other than for practice use, the smoke could also wipe away insects and bad smell, good for health consideration. Mandarin ducks are appealing decorative motifs in Chinese art, with a blessing for the harmony of a couple walking hand in hand, wishing their love lasting forever.

A RARE RUYAO DEEP BELLY TEA BOWL Northern Song Dynasty (960-1127)

Provenance

A private Hong Kong collection, acquired in 2012 from an antique shop on Hollywood Road, Hong Kong

H: 6.1 cm D of mouth: 10.4 cm D of base: 6 cm

Appraised Value (評估價格) : HK\$2,800,000

北宋 汝窯深腹茶碗

高：6.1厘米 口徑：10.4厘米 底徑：6厘米

來源

香港私人收藏，2012年購藏於香港荷理活道古玩店



該碗直腹微收，直沿，內底平。內外通施天青釉，有自然釉裂開片，亦有土滲痕跡，周身釉內有淺灰色斑點及桔皮斑。圈足外撇，底部有支釘痕三枚。胎質細膩，呈灰白色。該碗造型厚重古樸，釉色潤澤，為代表性汝瓷。

茶碗為汝瓷中華美的品類，此器造型與釉彩相襯，釉色純淨柔膩，經千百年而不變，反映汝瓷的珍罕素質。汝瓷在歷史上是宮廷用器及士大夫藏家度藏的重器，在北宋開燒製。明代始有定、汝、官、哥、鈞宋五大名窯之稱，以汝窯居首，其在十一世紀至十二世紀初南宋時仍為藏家所受珍愛，明清帝王更命瓷場仿燒以明麗潤澤天青釉色著稱的仿品。汝瓷多屬小巧之器，如茗飲之器、筆洗、香爐、小盒等。

汝瓷在北宋徽宗時製作達至高峰。徽宗並非明主聖君，但其藝術品味及成就卻為世公認。他命官員編纂古物圖籍，又在殿堂陳列藝術精作，更推重道家宗仰。汝瓷之珍貴在於其是宮廷特別指令訂造的官瓷，並非僅供上貢。

南宋官窯瓷器基本上摹仿汝窯的燒造技巧、釉彩及型制。明代宣德朝更以景德鎮白瓷仿

The finely-potted body rising from a raised circular foot and culminating in a vertical rim with no lip, applied with a blue-green celadon glaze with hints of russet brown featuring a slight crackle and several small prickly marks all over resembling the mandarin peel texture, the underside with slightly flared base with three delicate ‘sesame-seed’ spur marks. The biscuit is greyish grey with refined quality. The bowl is thickly potted with an archaic and stern form, representing the features of Ru ware.

Ru Kiln Tea Bowl, which is a unique and elegant interpretation of the unique elegance and warmth of Ru Kiln imperial porcelain. The shape of this vessel is matched with the glaze colour. Its glaze is pure, smooth and silky. It has remained elegant after hundreds of years of vicissitudes, which fully reflects the beauty of this rare and famous porcelain. Chinese culture has a long history, and among the ceramics of the past generations, Ru porcelain has always been regarded as a standard by the royal family and literati collectors. Recognized as one of the rarest and most valuable of all Chinese ceramics, were produced as the official court wares during the late Northern Song dynasty. In the Ming and Qing dynasties, there were the “five famous kilns”, referring to the Ru kilns and the Guan, Ge, Ding, and Jun kilns. But among the five major kiln families, Ru kiln is still the leader. It is precisely because of the status of the imperial porcelain of Ru kiln that it is still favored by collectors from the end of the 11th century to the beginning of the 12th century. Not only was the Southern Song dynasty court eager for Ru porcelain, the monarchs of the Ming and Qing dynasties also cherished it, and ordered skilled craftsmen to copy this rare sky green glaze. Ru wares are primarily defined by their icy-blue or sky-blue celadon glaze, and are found primarily as small pieces, for example tea-drinking vessels, brush washers, censers, or as small containers.

The peak of Ru ware production was in the reign of Song Emperor Huizong. He was not a good man of the world, not the best emperor in the record of Song History, but his appreciative, artistic and aesthetic attainments have long been concluded. During his reign, he regarded simplicity and elegance as the prestige, which has a profound influence on later generations. He ordered people to compile catalogues for the antiques in the palace, and

燒宋汝瓷釉色，珠山明遺層出土瓷器可證。

清乾隆帝對汝瓷青眼有加，可參考臺灣故宮博物院汝瓷皮藏⁽¹⁾及北京故宮博物院皮藏⁽²⁾。雍正亦鍾愛汝瓷。除上引兩幀分別作於1728年及1729年畫作外，督窯官唐英(1682–1756)的著錄亦可印證，他在1735年著《陶成紀事》，臚列五十七種御瓷，其中包括汝瓷。

汝瓷至今仍為世所重。傳世87件汝瓷中，有兩件值得注意和互作比較，包括大英博物館Percival David所藏的蓮花座高足杯及英國維多利亞·亞爾拔博物館藏的圓杯座但無足的汝窯杯。

註 Notes:

(1)*Good Taste: The Taste of Emperor Qianlong's Ceramics*, page 68-91 no. 10-22 (Taipei: 2012) (Picture 3 a, b)

(2)*The Collection of Cultural Relics and Treasures in the Palace Museum 32: Porcelain of the Song Dynasty (Part 1)*, page 2-3, No. 1 and page 8-9, No. 7 (Hong Kong: 1996)

customized a large number of fine art works for the palace temples. His reputation for Daoist religion spread like wildfire, creating a famous cultural prosperity in Chinese history. Ru porcelain is significant because, compared to tribute porcelain, they may be the first batch of ceramics customized by the court.

Undoubtedly, the official porcelain fired in the early Southern Song dynasty is still logically imitated the firing of Ru porcelain is mainly reflected not only in the shape and glaze, but also in the same continuous firing technology. Until the Ming dynasty, Ru porcelain in the Northern Song dynasty was still attracting attention. During the Xuande period, the Jingdezhen imperial kiln porcelain workers even tried to imitate the Ru glaze of the Song dynasty with Jiangxi white porcelain. Relevant evidence has been unearthed in the Xuande stratum of Zhushan.

The emperors of the Qing dynasty also had bluish eyes on Ru porcelain. The Qianlong imperial title of Ru porcelain can be said to this. The National Palace Museum in Taipei has an incredible collection of Ru wares (1), as well as the collections of the Palace Museum in Beijing are esteemed (2) for reference There is sufficient evidence to show that Emperor Yongzheng had a special liking for Ruyao in the Song dynasty. In addition to the above-mentioned two paintings depicting the court in 1728 and 1729, the works of Tang Ying (1682-1756), the famous imperial kiln superintendent, can also be verified. In the last year of the Yongzheng period (1735 AD), Tang Ying wrote “Tao Cheng Chronicle Stele.” The inscription lists fifty-seven types of imperial porcelain. Among them, it is mentioned that the Song Ru kiln ware is “Imitated the copper bone without pattern Ru glaze.

Throughout the ages, Ru Kiln in the Northern Song dynasty has been famous all over the world, and it is still prosperous today. Among the eighty-seven surviving pieces of Ru ware, two comparable cups of similar design and glaze now exist in museum collections. Compare the shape and form of the cup to a lotus cup-stand stem cup in the Percival David Collection of the British Museum, as well as a similar piece with a round cup-stand and no stem at the Victoria and Albert Museum.

1016

A LONGQUAN CELADON WASHER
Southern Song Dynasty (1127-1279 AD)

Provenance
Sold at Royale 's Hong Kong , 30May 2017, lot 1032

D: 12.8 cm

Appraised Value (評估價格) : HK\$1,000,000

南宋 龍泉窯粉青釉板沿洗

口徑: 12.8厘米

來源
香港皇廷拍賣, 2017年5月30日, 編號: 1032

板沿洗、也叫折沿洗。器物斂口出唇，口沿在比例上甚寬，微內斜壁，折底，矮圈足。整體器物的線條簡約大氣，有濃重的官窯風格，南宋官窯也有這種器型，這也反襯南宋官窯與龍泉大窯在設計上兩者有密切關係。這種折沿洗，數量與其他形式的龍泉作品相比要罕見的多。傳世品基本是入貢大內，除了皇家收藏，存世並不多，十分珍稀！可參照臨宇山人的龍泉窯板沿洗。

The cylindrical body rising from a tapered circular foot with an unglazed base, culminating in a wide trumpeting flared rim, applied with a smooth, thick greyish-green celadon glaze, the rim in imitation of ancient Chinese bronzework.



1017

A LONGQUAN CELADON GLAZED COLUMNAR PEAR
SHAPED VASE
Southern Song dynasty (1127-1279)

Provenance
Sold at Royale's Hong Kong, 29 November 2016, lot 1621

H: 14.5 cm

Appraised Value (評估價格) : HK\$1,500,000

南宋 龍泉窯青釉直頸瓶

高：14.5厘米

來源
香港皇廷拍賣，2016年11月29日，編號：1621

此瓶敞口，口沿略外撇，直長頸，斜弧腹，小圈足，淡青色釉，釉厚如堆脂，釉色粉青偏藍。胎質堅硬厚實，口沿釉較薄。整器秉承了這一時期一貫的素雅風格，器型典雅厚重，釉色勻淨清純，反映龍泉窯的典雅風格。

The short, rounded body swelling from a flat, circular unglazed base, rising to an elegant, wide and long cylindrical neck with a slightly lipped rim, applied with a beautiful thick mutton-fat monochrome blue-green celadon glaze. The vase is modelled with an elegant and classical form, with glaze colour pure and lyrical in tone, reflecting the typical classical style of Longquan wares of the Song dynasty.



1018

A XIKOUYAO LONGQUAN-TYPE CELADON CENSER
Southern Song Dynasty (1127-1279)

Provenance
Sold at Royale's Hong Kong, 30 May 2017, lot 1034

D: 5.5 cm

Appraised Value (評估價格) : HK\$1,200,000

南宋 溪口窯龍泉鬲式爐

直徑: 5.5 厘米

來源
香港皇廷拍賣, 2017年5月30日, 編號: 1034

香爐寬頸，敞口，厚唇，鼓腹，三足，底無釉。器身施橄欖綠釉，大小開片遍佈全器。器型仿新器時代至周代的陶鬲及青銅鬲，古樸渾厚。

2011年在浙江龍泉溪口瓦窯垟和小梅鎮窯址發現了燒制黑胎青瓷的龍窯遺跡，出土了大量黑胎青釉瓷器標本，燒制時代集中在宋代。特徵是黑胎、紫口鐵足、胎骨厚薄不一，青色釉，深淺不一，開片呈淺白色斷紋類似哈密瓜紋。在年代和特徵上與明清文獻所載的哥窯相吻合，參與論證專家普遍認同「文獻中的哥窯」這一結論。

目前為止發現完整器物極少，而龍泉地區的小梅窯遺址出土的殘器直接佐證了該類器物的存在，紫金土黑胎、釉下白色開片、口沿釉下泛紫與哥窯記載相同。

The ovoid body swelling from a tripod of slightly-flared legs with unglazed bases and edges, tapering slightly to a wide neck and culminating in a flared rim with a thick lip, applied with an olive green glaze with both crazing and light-green crackles, potted in the style of ancient Chinese bronze and pottery li tripod of the Neolithic to the Zhou dynasty with an archaic flavour.

In 2001, dragon kiln sites for firing celadon wares with black biscuits in the Song dynasty were found at yayaoyang, Xikou, Longquan, Zhejiang. Distinctive features include thick or thin paste, purple mouth and iron foot, and celadon glaze with whitish crackles, which seems matching with the descriptions of the Ge wares in historical documentations as concluded by various ceramic experts after studies and discussion. Excavated artifacts are limited, but the shards unearthed at the Xiaomeiyao site may serve as artifacts for these wares with purplish-black paste, white crackles under the glaze, and the purplish colour under the rim, which match the features of Ge wares in historical records.



1019

A *GUAN WARE FANGHU* HANDLED VASE IN CELADON
GLAZE
Southern Song Dynasty (1127-1279)

Provenance
Family legacy
Sold at Royale's Hong Kong, 27 November 2017, lot 221

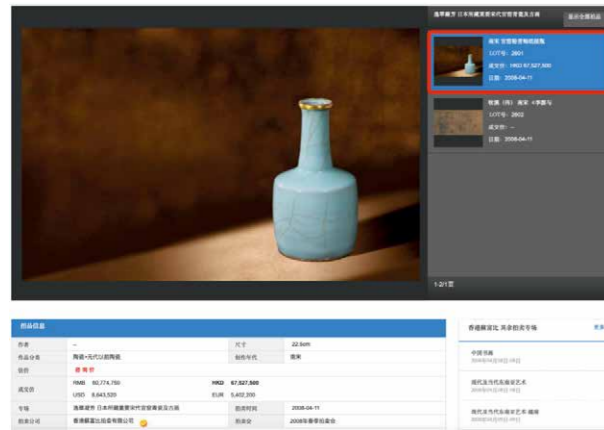
H: 27 cm

Appraised Value (評估價格): HK\$5,000,000

南宋 官窯青釉八棱貫耳方壺

高: 27厘米

來源
家族遺留
香港皇廷拍賣, 2017年11月27日, 編號: 221



同類瓷器曾經在2008年04月11日於香港蘇富比拍賣有限公司拍
出HKD 67,527,500。
Similar porcelain was sold in Sotheby's Hong Kong Limited
on April 11, 2008 for HKD 67,527,500.



該器物八方口、雙管耳、微撇足，無沿，底足露胎，器形穩重端莊。素胎燒成後經多次施釉入窯燒制而成。釉色天青，釉彩肥厚溫潤，釉面褐色開片自然，層次分明。百倍放大鏡微觀，釉下以大小不等，深淺不等的密集氣泡組成。多項指標完全符合南宋官窯的製作工藝和特徵。目前市面多見明清和近現代仿品。此完整精緻南宋官窯貫耳瓶留傳極為稀少，具有很高的鑒賞收藏價值。

方壺型制沿自商周青銅酒器。飾以龍紋、饕餮紋、鳳紋和生活場景的方壺也見於隨葬品。此種貫耳瓶也用作「投壺」遊戲，投擲箭枝以博彩之用。作為上貢宋代朝廷的瓷器，僅有方壺是沿襲古代如鼎、觚、琮等的青銅器、玉器式樣。

The faceted pear-shaped body rising from an octagonal raised foot with an unglazed base, slightly tapering to a thick octagonal neck with no rim or lip, featuring two cylindrical hollow handles, applied with a light blue glaze with intense russet-brown crackles. Under microscope magnification, air bubbles in varying sizes and shapes are found under the glaze. The distinctive features of this *hu* vase testify to the period characteristics of the Southern Song dynasty. There are many replicas and copies of *Guan* ware produced from the Ming dynasty to the present, and this intact *guan* vase which is delicately and finely potted is very rare with high value of collection.

Fanghu shaped vessels are derived from ancient *hu* bronzes of the Shang and Zhou dynasty, which were typically used as wine vessels. Such type of vase was used for a game in which arrows were thrown into the vase to bid scores. Typically tomb items, *hu* vases were cast with images of dragons, phoenixes, *taotie* animal masks and even scenes of daily life. As was tradition for ceramics presented to the Song dynasty court, the *hu* vase is only one of a handful of shapes derived from ancient Chinese bronze and jade, including *ding*, *gu* and *cong* vessels.



1020

A GUAN-TYPE MALLOW-SHAPED BRUSH-WASHER
Southern Song Dynasty (1127-1279)

Provenance

Sold at Royale 's Hong Kong , 27 November 2017, lot 223

D: 16.3 cm

Appraised Value (評估價格) : HK\$1,800,000

南宋 官窯青釉六瓣葵口洗

口徑: 16.3厘米

來源

香港皇廷拍賣, 2017年11月27日, 編號: 223



此南宋官窑洗，六瓣葵花式，浅腹，敞口，圈足。棱角含蓄，器身随沿起伏，柔美绵延。涩足无釉。施釉天青微蓝，色泽温润澄澈，开片冰裂自然相缀，宛若宝玉，简约雅绝，浑然天成。葵瓣式器形，轮廓线条柔美绵延，简约雅绝，乃最具代表性之南宋造形。

本葵瓣洗瓷胎纤薄端正，造形利落精确，线条优美流畅，青釉凝厚至口沿处渐薄，秣纤之间，令人爱不释手。釉色天青透蓝，光泽莹辉，触感滑润。造形简雅，无冗缀饰，仅以自然冰裂疏朗相衬，无瑕至美，更加突显瓷匠巧艺，全器宛若以晶透玉石雕成，巧夺天工。南宋续烧如此朴雅之器，而非追求虚华之色，足证两宋皇家品味与风格之延续。

The pronged leaf-like brush washer potted with six lobes, body rising from a wide, circular foot, culminating in an undulating hexagonal rim with a slight inward lip, the exterior applied with a pale green celadon glaze, with visible crackles and crazing, the crackles highlighted in light brown.

1021

CHICKEN- LEG VASE DECORATED WITH STRING PATTERN
IN GREEN GLAZE

Southern Song Dynasty (1127 - 1279)

Provenance

A private Hong Kong collector

H : 21.8 cm D of mouth : 4.6 cm D: 6.6 cm

Appraised Value (評估價格) : HK\$2,800,000

南宋 官窑粉青釉弦紋腿瓶

高：21.8厘米 口徑：4.6厘米 底徑：6.6厘米

來源

香港私人收藏



唇口，粗直頸，折肩，長腹漸斂，圈足。

通體施青釉，無紋飾，腹部以凸起的弦紋作裝飾，遍佈開片。足底無釉，呈露「鐵褐色」胎。釉色厚潤如脂，幽雅素淨。

南宋官窯瓷既繼承了河南汝官窯的造型端莊簡樸之精華，又吸收了南方越窯、龍泉窯等名窯的釉質渾厚的特點。北藝南技的結合，創造了我國青瓷史上的頂峰。南宋王朝覆滅之後，官窯被毀，工匠失散，技藝失傳，故傳世官窯器十分稀少，如鳳毛麟角。

此瓶釉色澤、質感，器型均體現了宋人「淡雅、簡約」的審美意趣，其原料、配製、上釉和窯燒皆恰到好處，品相完好。此器型制修長拙樸，可能是受遼(907 - 1125)、金(1115 - 1234)的陶瓷造型影響。

The bottle has everted mouth, thick straight neck, long belly tapering downwards and ring foot.

The whole body is in green glaze without designated decorations but the belly is bordered with relief string patterns, and base of the ring foot is unglazed, exposing the biscuits in rusty-brown colour. The colour of glaze is thick and lustrous and pure.

Wares produced by the imperial kiln in the Southern Song dynasty adopted the graceful and simple form of official Ru wares produced in Henan, and absorbed the distinctive feature of thick and brilliant glaze of the Ru and Longquan wares. The assimilation of production techniques of the kilns in North and South China brought the progressive development of ceramic porcelain wares to new heights in the history of China. After the fall of Southern Song dynasty, official kilns were destroyed, all the craftsmen dispersed, and the skills could no longer be sustained. Extant official wares produced then became very rare and unusual.

The colour tone of the glaze, texture and form of this vase demonstrates the aesthetic value of elegance and simplicity of the Song dynasty. The mixture and quality of glaze and firing techniques were skilfully mastered to achieve a high standard. The form of this ware is slim and simple, likely influenced by the ceramic wares produced in the Liao (907 - 1125) and Jin (1115 - 1234) dynasties.

1022

A GE-TYPE CELADON CENSER
Southern Song Dynasty (1127 – 1279)

Provenance
A private US collection, gifted from an elder in the 1970s

H: 7.1 cm

Appraised Value (評估價格) : HK\$1,200,000

南宋 哥窯雙耳小香爐

高: 7.1厘米

來源
美籍華人私人收藏, 1970年代長輩餽贈



小香爐侈口薄沿, 胎質厚實。內外均施灰青色釉, 器身通體深褐色開片。器身兩側有對稱長方形雙耳。圈足, 器底施釉呈褐色, 有支釘痕五枚。

陶瓷香爐歷史源遠流長。宋代香爐型制如此件者沿襲自古青銅鼎, 亦可用作酒器。香爐型制並無定制, 沿自商周時代器物如方或圓鼎等, 撇底或立於三足上, 摹仿酒器如尊時又以獸形為對象, 包括牛、虎、犀或龍等。北京國家博物館藏西漢 (西元前 206 - 西元 8 年) 的一件鎏金犀形青銅器。此爐上雙耳亦仿效青銅器。

宋及以後仿青銅器的香爐多具鼎的三足, 如南宋至清龍泉窯及景德鎮窯燒製仿官窯的爐。1989年11月14日香港蘇富比曾拍賣一件褐黃釉及有開片的香爐 (號9)。一件南宋龍泉窯長頸瓷及一件直壁碗亦敷施如此件的金黃色彩釉, 可資比較⁽¹⁾。

此外, 美國大都會藝術博物館藏一件宋代金黃釉、附耳的鼎形香爐 (館藏編號 17.118.27a,b) 亦可資參考。



註 Notes:

(1) Illustrated in Longquan Yao Qing Ci (Celadons from Longquan Kilns), Taipei, 1998, p. 139, pl. 106, and p. 170, pls. 141-1 and 141-2

The sturdy, bulging body rising from a slightly convex circular base with ringfoot to a wide, thin rim with a slight loop, featuring two rectangular handles, applied with a grey-green celadon glaze with intense dark brown crackles. The base is glazed with five spur marks.

Censers are one of the oldest continuously manufactured ceramic forms. Song dynasty censers such as this one derive from the form of Chinese ritual bronze cauldrons which, if not appropriated for incense, were often used as wine vessels. Censers imitating bronzework are not confined specifically to any specific assigned shape, although during the Shang and Zhou Dynasties (c. 1600 – 700) these vessels (ding, , or otherwise) were either circular or square, propped up on a splayed circular base or either a tripod or tetrapod of long legs. In rare cases, for example when fired in imitation of bronze zun ritual drinking vessels, censers were manufactured in the shape of animals, including oxen, tiger, rhinoceros and dragons. A more recent example fired during the Western Han dynasty (206 BC – 8 AD) features gilt bronze carved in the shape of a rhinoceros, and currently resides in the National Museum of China, Beijing. The most notable imitation of ancient Chinese bronze forms on this vessel comes from the two faux-handles carved to imitate metalwork.

The majority of extant examples of censers modelled after bronzework during the Song dynasty onwards indeed feature a short, tripod base, and have primarily survived as Guan ware imitations fired at Longquan or Jingdezhen during the Southern Song and Qing dynasties respectively. A censer of related form with crackled, brownish-hued glaze was sold at Sotheby's Hong Kong, 14 November 1989, lot 9. A Longquan long-necked bottle and a bowl with vertical side walls, each with golden-brown glaze and attributed to the Southern Song period can also be served for comparison⁽¹⁾ respectively.

Finally, a tripod incense burner with delicately cusped body, upright S-curved handles, mock-ring embellishments, and a golden-brown glaze in the collection of the Metropolitan Museum of Art, New York, is attributed to the Song dynasty (960-1279) and has been identified as Guan-type ware (accession number 17.118.27a,b).

1023

A RARE AND IMPORTANT *JUNYAO* BOTTLE-NECK VASE
Jin/Yuan Dynasty (13th century)

Provenance

Sold at Royale's Hong Kong, 30 May 2017, lot 1041

H: 28 cm D of mouth: 5.3 cm D of base: 6.7 cm

Appraised Value (評估價格) : HK\$1,000,000

金至元 鈞窯長頸瓶

高：28厘米 口徑：5.3厘米 底徑：6.7厘米

來源

香港皇廷拍賣，2017年5月30日，編號：1041

此瓶小圓口，口沿未施釉。頸部至肩部急內收，頸部為最細處，呈倒立梨形狀。削肩鼓腹，圈足。通身施藏青紫色單色釉，施釉勻淨及呈細斑，並有細微釉裂開片。其造型獨特，器型規整，釉色沉厚，為宋五大名窯中鈞窯特色。

鈞窯在河南禹州，自唐代開始創燒，至宋代大盛，為五大名窯之一，釉色獨特，包括各種紫紅色及形如火焰晚霞般的「窯變」釉色。如此瓶近口處的紫藍釉色是由於釉彩混入稻草大而燒成，為鈞窯瓷的獨創釉色。這種釉彩為後世官窯瓷及廣東石灣陶瓷所做效，並衍生其他釉色如清代的「爐鈞」釉等，直至今日而不衰。

The plum-shaped body swelling from a circular foot with an unglazed base, tapering to a slanting shoulder and long, convex neck with a lipped unglazed rim, applied with a speckled dark blue glaze turning bluish-purple along the neck. The vase is potted in a refined manner with subdued glaze color, illustrating a feature of Jun Kiln, one of the five famous kilns in the Song dynasty.

The Jun kiln was located at Yuzhou, Henan, which began its ceramic production since the Tang dynasty and noted in particular for its unique glaze colour ranging from red, blue to purple, as well as the most esteemed "flambe" colour similar to the colour of evening glow or fire. The unique and beautiful blue-purple fusion found in many Jun wares, in this one featured near the rim, was attained with the infusion of straw ash into the glaze prior to firing. Such as the case with many Song dynasty ceramics imitations were popular as imperial commissions till the Qing dynasty to contemporary, as well as ceramic wares produced by the Shiwan kiln in Guangdong. It also inspired the production of other glazes such as "robin's egg" glaze in the Qing dynasty.



1024

A LONGQUAN CELADON ZHADOU SPITTOON
Yuan Dynasty (1279-1368)

Provenance
Sold at Royale's Hong Kong, 27 November 2017, lot 246

H: 9.7 cm

Appraised Value (評估價格) : HK\$1,000,000

元 龍泉窯梅子青渣斗

高: 9.7厘米

來源
香港皇廷拍賣, 2017年11月27日, 編號: 246

此器敞口微外翻, 頸部內收, 腹部渾圓外鼓。圈足較高。深腹圓底, 圈足露胎, 胎呈醬褐色, 平底, 底內亦施釉。此器造型規整, 色澤柔潤。通身施梅子青單色釉, 施釉凝重, 給人以穩重安靜之感。

渣鬥又稱唾壺, 晉代開始出現, 用作盛載涎痰、食物殘渣如魚骨等, 歷代均有製作。此渣鬥可能是放置於檯上使用。

The wide, ovoid body rising from a slightly concave foot with glazed base, slightly tapering to a wide neck with a lipped rim, applied with a thick light green glaze with subtle colour. The spittoon is roundly potted with thick plum green glaze, exuding a stern aesthetic appeal.

Zhadou spittoon is used for containing sputum or other wastes such as fish bones or food wastes. It was produced as early as the Jin dynasty (265 – 420) and continues through centuries. This one may have been used as a table top jar for food slops and tea dregs.



A LONGQUAN WARE DOUBLE-GOURD "HULUPING" VASE
Yuan Dynasty (1279-1368)

Provenance

Sold at Royale's Hong Kong, 30 May 2017, lot 1031

H: 24.2 cm D of mouth: 3.9 cm D of base: 6.8 cm

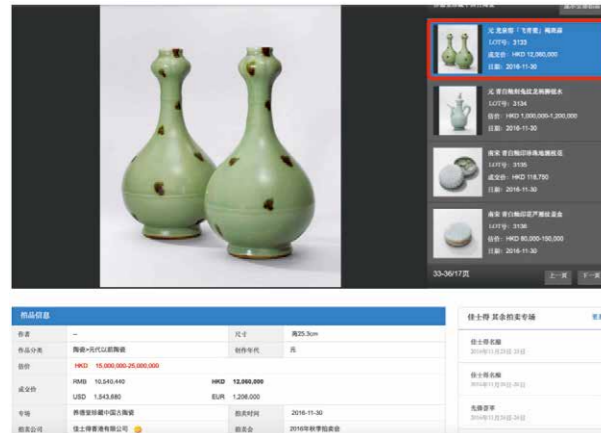
Appraised Value (評估價格): HK\$2,500,000

元 龍泉窯梅子青釉點彩褐斑葫蘆瓶

高: 24.2厘米 口徑: 3.9厘米 底徑: 6.8厘米

來源

香港皇廷拍賣, 2017年5月30日, 編號: 1031



同類瓷器曾經在2016年11月30日於佳士得香港有限公司拍出 HKD 12,060,000。

Similar porcelain was sold in Christie's Hong Kong Limited on November 30, 2016 for HKD 12,060,000 .

此瓶為葫蘆狀。上半截小口削肩鼓腹，下半截圓形鼓腹。小圈足，圈足底露胎，胎質灰白，圈足底內施釉。整瓶通身施梅子青單色釉，施釉厚重勻淨，器身亦呈深褐色不規則流淌斑點作為裝飾，非常獨特。瓶造型線條優美流暢，釉色精純柔潤，體現宋代美學崇尚清麗雅逸的精神及龍泉窯瓷色潤如玉的特色。

葫蘆形狀特別，有如產婦鼓腹部，因此寓意子孫昌盛、瓜瓞綿綿。明清以來，成為陶瓷、工藝、書畫的流行題材，備受喜愛



The elegant body rising from a flat foot with a circular unglazed base and ringfoot exposing the greyish-white biscuit, to two lobes, one with round globular belly and one pear-shaped with a slanting shoulder separated by a small cylindrical taper, and culminating in a lipped rim. The body decorated with a thick blue-green celadon glaze resembling the color of plum, dotted with several precisely painted drips of dark brown glaze which further enhance the aesthetic appeal of the vase. The linear configuration the gourd-shaped vase is curved fluently with even and lustrous celadon glaze, revealing the essence of Song aesthetics and represents a refined example of Longquan wares noted for a color like jade.

The form of gourd is unique, looking like the belly of a pregnant woman, and thus symbolic of prosperous offspring for generations. It has become a popular decorative motif and theme for ceramics, crafts and painting and is highly esteemed.

1026

A LARGE BLUE AND WHITE JAR (*GUAN*) WITH LOTUS LEAF DESIGN AND ANIMAL MASK EARS
Yuan Dynasty (1279-1368)

Provenance

A private Hong Kong collection, acquired in 1997 from an antique shop in Macao

H: 37.5 cm D of mouth: 16.1 cm D of base: 19.3 cm

Appraised Value (評估價格): HK\$3,000,000

元 青花獸耳荷葉紋大罐

高: 37.5厘米 口徑: 16.1厘米 底徑: 19.3厘米

來源

香港私人收藏, 1997年購於澳門古玩店



此大罐直口束頸，方口沿下有青花回紋一周，束頸處亦有青花菱紋一周。削肩鼓腹，肩有對稱堆塑立體張鼻露齒獸耳。肩飾纏枝蓮紋器身主題紋飾蓮塘景色，蓮葉、蓮花、水草穿插其間，疏密有致。荷葉之下有錢紋一周。器底飾寶相花紋一周，寶相花獨立分開。為元代寶相花紋之特點。平底有二層臺，內凹陷為一小平底圓圈，圈內有淡青色釉散落。胎質灰白，細膩，露胎部分呈淡黃色，有微弱火石紅痕跡。

元代江西景德鎮窯場成為瓷業重鎮，最重要發展和成就就是在十四世紀早中期採用鈷藍料成功燒製青花瓷。當時景德鎮窯使用的鈷藍料來自伊朗一帶，通過蒙古族佔據由土耳其至中國的絲路輸入。配製釉料後上胎，在攝氏1280至1300度燒成。這種鈷藍料令青花呈色深淺變化多端。元青花紋樣殊為獨特，幾乎沒有兩件瓷罐完全一樣。元青花瓷如盤、梅瓶、罐多體積較大，如這罐一般，可能受到商周禮器影響。青花瓷生產反映中國陶瓷由素瓷發展到彩瓷，由青花開始擴至其他彩繪，如此罐的青花蓮塘紋便呈示單色彩繪的多彩多姿。各種元青花紋樣如鴛鴦、孔雀、麒麟、雲龍也包含不同寓意。如鴛鴦象徵婚姻美滿、愛情永固；孔雀代表富貴榮華；鳳凰居百鳥之首，祥和安樂；麒麟帶來和平盛世；龍寓意帝王尊榮等。

較大而飾以類似紋樣的大罐可見於墓葬及江蘇淮安出土瓷罐⁽¹⁾。另一片肩飾雲紋，藏於天津市藝術博物館⁽²⁾。倫敦佳士於1988年6月4日(號149)及2017年蘇富11月30日至12月1日拍賣(號431)也曾拍出類似青花大罐。

註 Notes:

(1) Illustrated in Ye Peilan, *Yuandai ciqi*, Beijing, 1998, pls. 52-53

(2) Tianjin shi yishu bowuguan cang ci, Tianjin, 1993, pl. 69

The globular body swelling bulbously from a flat, slightly lipped circular base, tapering to a wide cylindrical neck with lozenge design and culminating in an open mouth with a vertical square-lipped rim decorated with key-fret patterns beneath, featuring two animal masks handles with underglaze teeth and open nostrils, applied with a blue and white colour palette featuring a beautiful pond scene centered on splayed lotuses surrounded by lingzhi-shaped lily pads, decorated with aquatic plants, three-fruit lotus plants amidst the lotus bulbs and seeds and clovers, and beneath is a border of coin patterns. The shoulder adorned with a band of repeating lotuses and tendrils, with herringbone geometric motifs and baoxiang floral lappets aligning the rim and base, respectively. The concave base exposes the light yellowish biscuit with reddish tint.

The Yuan dynasty saw the manufacture of porcelain developed into a major industry at the famous imperial kiln site of Jingdezhen, Jiangxi province. The most significant and influential development, which occurred during the early-mid 14th century, was the increasing use of underglaze cobalt-blue decoration. Cobalt used at Jingdezhen was imported from Iran, made possible by trade spurred by Mongolian conquest of the Silk Road from Turkey to China. After preparation, the glaze was painted directly on to the body. After glazing the ware was fired at about 1280°C to 1300°C. The finished porcelain featured complex designs in gradations of blue contrasting with the pale colourless body; it is often said that the designs were so detailed and unique that no two Yuan dynasty jars are identical. The splendour of Yuan dynasty blue and white porcelain is also accentuated by the substantial size of many, for example charger dishes, meiping vases and bulbous wines jars known as guan; these, such as the piece above, are derived from ancient Shang and Zhou dynasty ritual vessels. The appearance of blue-and-white porcelains of the Yuan dynasty opened a new era of transition from the bisque to faience in the porcelain industry. Colours, starting from blue-and-white porcelain of the Yuan dynasty, appeared on various porcelains. Many blue-and-white porcelains represented by Blue-and-White Porcelain Plate with Patterns of Lotus Pond show people how simple colours such as blue and white can blossom on porcelains. In addition, the mandarin ducks, peafowl, phoenix, qilin, and dragon on the blue-and-white porcelain of the Yuan dynasty all have implied meanings in ancient China. The mandarin ducks imply a harmonious couple who have an undying love for each other. The peafowl implies wealth, honor and good fortune. Phoenix is the leader of birds and the symbol of auspiciousness. Qilin mythical beast is the symbol of mercy, and it is an auspicious animal that only appears during the time of peace and prosperity. The dragon represents authority and dignity and is mostly used for the imperial family.

Compare a Yuan jar of similar shape and design but larger in size excavated from the tomb of Yang he (1326-1395) and another excavated in the city of Huaian, Jiangsu province (1) A third vase of related shape with a cloud collar on the shoulder in the Tianjin Municipal Museum (2), See also a larger jar of related design sold at Christie's London, 6th June 1988, lot 149, as well as one sold at Sotheby's, November 30th – December 1st 2017, lot 431.

1027

A BLUE AND WHITE PHOENIX AND FLORAL YUHUCHUNPING VASE

Yuan Dynasty (1279 – 1368 AD)

Provenance
A private Hong Kong collector

H: 26.8cm

Appraised Value (評估價格): HK\$2,800,000

元 青花鳳凰牡丹圖八方玉壺春瓶

高: 26.8厘米

來源
香港私人收藏



此瓶青花呈色靛藍，絢麗濃艷，採用名貴鈷料蘇麻離青燒制而成，清晰而通透，綫條的紋理中或青料凝聚處有烏黑而濃重的結晶斑，為當時御窑廠所制精作。玉壺春瓶由宋人詩句中“玉壺先春”一詞而得名，始見于宋代而一直延燒至今。

元青花瓷器最初燒造多應波斯地區穆斯林王公貴族之需，造型、紋飾、功用皆依自彼地之風俗而定，往往器型巨碩，布局繁密。瓷器胎質較為堅硬，胎重而厚，含有較多雜質。胎面上有黑褐色鐵點，并在一些器物底部及足部露胎處常見到明顯的氧化鐵的紅色斑點，故稱“火石紅”。

青花鳳凰牡丹紋頗為鮮見，纏枝花卉紋與鳳紋相配，稱為“鳳穿花”。鳳為百鳥之後，象徵母儀天下，更有天下安寧祥和之意。飛鳳以花相擁，寓意吉慶祥瑞。與設色高雅的青花相襯，更突顯了一份嬌艷柔美的氣質，風華絕代，分外難得。

The well-potted octagonal body swells from a splayed base, tapering toward a short neck and culminating in a trumpeting rim. The exterior is painted in a deep underglaze cobalt blue with a phoenix in flight with outstretched wings and a fiery tail amidst peony scrolls between narrow decorative borders and bands of scroll-filled petal lappets above and below.

Chinese ceramic production was revolutionized during the Yuan Dynasty through the expansion of porcelain manufacture at the kiln-city of Jingdezhen, located in Jiangxi Province. Additionally, trade connections solidified by the Mongol Empire during the 13th and 14th centuries provided access to enormous cobalt mines in Persia (producing the colour known as huihui qing or “Islamic Blue”). This blue-and-white glaze combination overlaid translucent kaolin Chinese porcelain, which was mined from quarries outside of Jingdezhen. Chinese blue and white porcelain was once-fired: after the porcelain body was dried, decorated with refined cobalt-blue pigment mixed with water and applied using a brush, it was coated with a clear glaze and fired at high temperature. This method standardized the production of blue-and-white ceramics for the next seven centuries, which originated but was not perfected within Islamic Pottery of the Abbasid Caliphate. Coincidentally, blue and white wares (alongside celadons produced at Longquan) were the primary export wares produced during the Yuan Dynasty, and like celadons have been found within archaeological excavations of site across Eurasia and even Africa.

Yuhuchunping vases first appeared in the temples of the Tang Dynasty as a holy water vase, but was further popularized during the Song where its use shifted to that of a wine vessel; Yuan Dynasty paintings, book illustrations, and burial and tomb murals further prove this may have been the case. This vase is characterized by a slightly flared rim, a straight neck which broadens at each end, a bottom-heavy pear-shaped body, and a short foot ring. William Watson notes, the yuhuchunping is “one of the purest expressions of the feeling for delicately carving, unarticulated profiles” (Tang and Liao Ceramics, London, 1984, p. 63). Phoenixes, meanwhile, known as feng huang, are immortal birds whose rare appearances signify peace and prosperity, especially a new ruler ascending the throne.

Although there are a few examples of Yuan Dynasty blue and white yuhuchunping in museum and private collections, the finely executed details on the current vase is quite rare. Considering the vivid blues in the designs of this piece, it is likely that this specific vase was fired earlier in the dynastic period, especially as supplies of cobalt were cut off in the final years of the Yuan Dynasty as centralized control collapsed. Compare a blue and white yuhuchunping (28.5cm high) with grapes on a scrolling vine as the central motif in the British Museum, illustrated in Ming Ceramics in the British Museum, London 2001, p. 72. A further example (25.1cm high) with a serpentine three-clawed dragon chasing a flaming pearl amidst clouds as the central motif was sold at Sotheby’s New York, lot 133, October 17, 2001.

Finally, compare a similar example with two phoenixes offered at auction by Sotheby’s Hong Kong, China: 5000 Years, Lot 399, 30 November 2021.

1028

A BLUE AND WHITE DRAGON CUP WITH STAND
Early Ming Dynasty (14 -15 Century)

Provenance

Sold at Royale's Hong Kong, 30 May 2017, lot 1054

Cup H: 4.7 cm D of Cup: 8.6 cm D of base: 4.6 cm

Dish H: 2.8 cm D of Dish: 19.7 cm D of base: 14.1 cm

Appraised Value (評估價格) : HK\$1,000,000

明早期 青花折枝龍紋盞托

杯高：4.7厘米 口徑：8.6厘米 底徑：4.6厘米

托盤高：2.8厘米 口徑：19.7厘米 底徑：14.1厘米

來源

香港皇廷拍賣，2017年5月30日，編號：1054

該盞托由兩個獨立器具組合，杯、托盤組合成器。杯為小碗狀，弧腹圓底，口微撇，淺圈足，露胎，底未施釉，有火石紅痕跡。托盤邊沿呈花瓣形外敞，深腹。

杯內壁飾四朵菊花纏枝紋及雙圈花卉紋。杯外壁飾花卉纏枝紋一圈。口沿內外飾回文。托盤淺圈足，大平底，露胎，未施釉，有火石紅痕跡。邊沿為連弧狀花瓣狀，口沿內飾卷枝紋一周。托盤內壁為八朵蓮花葉紋。花葉紋下為二龍伸展，頭尾相連。龍爪為三爪，張牙舞爪。托盤居中飾一朵怒放的纏枝花卉。托盤外壁施十六瓣寶相花紋一周，口沿飾回紋。

此盞托通體施青花釉，造型規整，青花色調濃淡適宜，反映明早期典型鈷藍料呈色；繪畫精細，優雅古樸。此器型制與明代茗飲方式已脫離宋代習慣，人們先行泡茶再注入杯中飲用，而杯托是為了避免持杯時燙手之用。

This ware comprises of two parts of cup and stand. The cup is in the shape of a small bowl with slightly everted rim, round belly, shallow ringfoot and unglazed base with reddish tint. It rises from an unglazed base with no foot, deep wall and culminating in a slightly flared floral rim. The whole piece is decorated with blue and white designs. The interior of cup featuring a vivid floral motif of repeating chrysanthemums and leafy tendrils surrounding a single lily blossom, the exterior decorated with lily blossoms and tendrils, the interior and exterior rim adorned with a repeating pattern of Chinese archaistic swirls.

The lobed stand for the cup rising from an unglazed base with reddish tint and a slightly raised foot and culminating in a flat, slightly undulated rim with arabesque points in floral form, decorated with blue and white glaze. The interior featuring eight lotus sprays surrounding two serpentine three-clawed dragons encircling a single medallion with a lily. The exterior featuring sixteen baoxiang flower petals and a light archaistic swirl pattern on the side of the rim.

This cup with stand is finely potted in archaic form with blue and white decorations freely depicted in tonal gradations, showing the feature of early Ming blue and white wares. The form is closely associated with the change of tea-drinking practice from the Song dynasty when people brewed tea and poured into a cup. The cup stand is to prevent heat when holding the cup up for drinking tea.



1029

A BLUE AND WHITE MEIPING
Yongle Period (1402 – 1424 AD)

Provenance
A private Hong Kong collector

H:31.6cm D of mouth: 5.6cm D of base: 12 cm

Appraised Value (評估價格) : HK\$5,800,000

明永樂 青花折枝花果圖梅瓶

高：31.6厘米 口徑：5.6厘米 底徑：12厘米

來源
香港私人收藏



梅瓶一詞，乃後冠之名，此形自唐已有，趙宋初興，元後延盛。其圓肩小口，上寬下斂，形姿優雅雋永，風靡千年不衰。梅瓶初為酒壇以用，至元明之時，梅瓶或仍為盛酒之皿，但又因梅瓶細口圓肩，尤為雅致，漸為插花陳設之用。

此器形制規整，器形秀巧。通體青花為飾，所繪花果，果實飽滿，花盛葉蔓，生機勃勃，有多子多福之意。胎體細膩，白釉溫潤肥厚，底部露胎無釉。為明代早期流行式樣，全器典雅華美，俊拔秀雅中不失堂皇華貴之氣象，紋飾繪制精細，構圖疏密有致，青花發色青翠，勾勒點染為永、宣風骨，宮廷氣息濃厚，青花見錫光凝聚，吻合永樂另一類青花的典型特徵。

明代永樂時期，優質的青花原料“蘇麻離青”的再度傳入，相對於國產青料，蘇麻離青着色沉穩，發色濃麗，品質極高。因此永樂瓷器，特別是青花瓷器，堪稱明清御窑之典範，備受追慕。後世文人謂之“發古未有之名品”。

The sturdily-potted body swells from a flat, unglazed base with no foot, tapering to a short, thick neck with an everted rim. The exterior is painted in deep cobalt blue overtop white applied with a clear glaze. The body is adorned with an asymmetrical motif of plum fruits and blossoms intertwined over gentle branches. A band of tendrils encircles the base, below panels of lotus flowers. The shoulder features a repeating pattern of lotus blossoms outlined by lingzhi.

Meiping, or “plum vase”, is one of the most recognizable vase forms manufactured within China, and frequently features as the highlight of many museum and private collections. The meiping form originates from the Tang Dynasty, where it was used as a wine vessel, but began to see use as a decorative item during the Song Dynasty which primarily displayed images of plum blossoms. The form itself is believed to derive from the figure of a young girl, with a short neck with a thickened rim, sloping shoulders and tapering sides which flare out towards the base. Through firing, the body is joined together in three sections, and the spout would have been topped with a lid; only rarely has this lid survived.

This vase is representative of one of the classic patterns of the Yongle period (1403-24) that illustrates the phenomenal advances made by Jingdezhen’s potters and painters in less than a century, since blue-and-white porcelain began to be made there during the Yuan Dynasty (1279-1368 AD). Both in terms of its well-proportioned shape, which was produced with various kinds of decoration, and its lush fruit pattern, one of the most popular motifs of early Ming, blue-and-white which appears equally on other shapes of the period, this design set a standard of excellence that would be emulated for centuries to come. Several Yongle meiping with similar decoration of fruiting and flowering branches are known, and represent the zenith of early 15th century style with their elegant shape, restrained composition, and delicate painting. See pieces from the Palace Museum, Beijing, see a Yongle piece illustrated in *Zhongguo taoci quanji* [Complete series on Chinese ceramics], Shanghai, 1999-2000, vol. 12, pl. 12; another in Geng Baochang, ed., *Gugong Bowuyuan cang gu taoci ciliao xuancui* [Selection of ancient ceramic material from the Palace Museum], Beijing, 2005, vol. 1, pl. 85; and a third, attributed to the Xuande period, published in Geng Baochang, ed., *Gugong Bowuyuan cang Ming chu qinghua ci* [Early Ming blue-and-white porcelain in the Palace Museum], Beijing, 2002, vol. 1, cat. no. 76. Additionally, two blue and white meiping of this design, one attributed to the Yongle, the other to the Xuande period, are also in the National Palace Museum, Taipei, illustrated in *Minji meihin zuroku* [Illustrated catalogue of important Ming porcelains], Tokyo, 1977-78, vol. 1, pls 12 and 39, the two examples slightly varying in proportion, and the latter with the design more tightly arranged, and with a cover. “Fruits and flower” meiping from the Yongle Period have been recently sold at auction. Compare with a blue and white meiping with a similar shoulder decoration offered at Sotheby’s, Important Chinese Art, Lot 55, 13 September 2017.

1030

LARGE PLATE DECORATED WITH DESIGN OF A LOTUS
BOUQUET IN UNDERGLAZE BLUE
Ming Dynasty Yongle period (1403 – 1425)

Provenance
A private Hong Kong collector

H: 5.5 cm D of mouth: 35.3 cm D : 24 cm

Appraised Value (評估價格) : HK\$1,500,000

明永樂 青花一把蓮大盤

高：5.5厘米 口徑：35.3厘米 底徑：24厘米

來源
香港私人收藏



敞口，弧壁，圈足，通體施白釉，以青花為飾，底部露胎，胎質細膩。口沿內側繪海水紋一周，外側繪卷草紋一周，內外壁裝繪纏枝四季花卉紋，勾畫婉轉流暢；盤心繪一把蓮紋飾，以蓮花、蓮蓬、水草以緞帶束在一起，故名。蓮花紋樣是瓷器上的常見紋飾，寓有品德高尚、高潔清廉之意，廣受人們讚譽。此盤造型規整，構圖疏朗而飽滿，紋飾寫實傳神，反映傳統國畫的筆墨意韻，得其法度，勾、勒、點、染諸法運用皆宜。青花發色明豔泛紫，釉面青花積聚處多有自然形成的結晶斑點，即是使用進口青花料「蘇麻離青」所形成之，時代特徵鮮明。這種青花料在宣德朝（1426—1435）後不用進口，而為本地出產青花料替代。

明永樂時期，「一束蓮」圖案成為典型的瓷器裝飾紋樣，受到人們的推崇，之後明、清歷代官窯均有效仿，且尤以清初三代為盛。由此也可以看出，永樂時期青花瓷器作為我國青花發展史上的黃金時代，對後世青花瓷在紋飾、造型等各方面產生深遠影響。青花一束蓮紋盤為永樂官窯瓷器的經典紋飾，若以口沿內側紋飾的不同可以區分為兩類：一為卷草紋，一為海水紋，見於中國國家博物館及其他重要博館和私人珍藏。本品即屬後者，相當罕見。此類大盤源自中亞器物造型，盛載食品供多人聚落宴飲之用，在當時亦從銷中亞及西亞地區，土耳其伊斯坦堡博物館亦有度藏，彌足珍貴。

The plate has flared mouth, curved wall and ring foot and covered with transparent glaze on the white paste. The paste is finely potted and exposed at the base. The interior side of the mouth rim is decorated with a border of waves while the exterior rim is decorated with classical scrolls. Both the interior and exterior walls are decorated with floral scrolls of the four seasons rendered with fluent and swift brushwork. The centre of the plate is decorated with a lotus bouquet with buds, leaves and aquatic plants fastened by a ribbon. Lotus design symbolizes integrity and honesty and is popularly employed for decorating ceramic wares which are well-received by people. The form of this plate is finely potted and richly decorated with skilful spatial treatment of the pictorial composition that the lotus bouquet and flowers are vividly and realistically depicted with dotting, outline and washing techniques, illustrating the essence of Chinese ink and brush techniques in Chinese painting. The colour of underglaze blue is deep and brilliant and shows crystallized spots where glaze condenses, which is a typical feature of the solimani underglaze blue material. After the Xuande period (1426-1435), imported solimani underglaze blue material was no longer imported from overseas and was replaced by local underglaze blue material.

In the Yongle period, lotus bouquet design became very popular and acclaimed and was adopted as a classical decorative motif on imperial wares of the Ming and Qing dynasties, and was particularly copied on the wares of the three early periods of the Qing dynasty. The Yongle period marks a golden period of underglaze blue wares and had profound impact on the production of underglaze blue wares both in terms of decorative styles and forms in the later periods. Lotus bouquet as a representative motif in the Yongle period can be sub-divided into two styles in accordance with the decorations on the mouth rim, either with classic scrolls or waves, and typical examples are found in the collections of various museums and private connoisseurs. The form of these large plates originated from Central Asia, usually used for serving food during banquets, and they were also exported to Central and West Asia during that time, as represented by similar plates in the collection of the Istanbul Museum in Turkey.

1031

A RARE BLUE AND WHITE CHRYSANTHEMUM DISH WITH LYCHEE DECORATION
Ming Dynasty Xuande Mark and Period (1426-1435)

Provenance
A private Hong Kong collection, family legacy

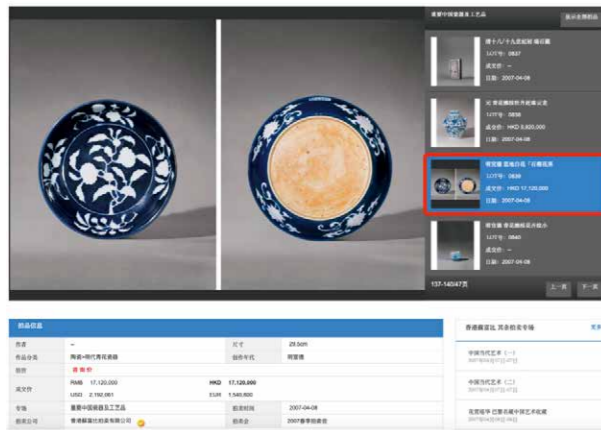
H: 5 cm D of mouth: 20.5cm D of base: 14.6 cm

Appraised Value (評估價格) : HK\$3,000,000

明 宣德 青花荔枝紋碟

高：5厘米 口徑：20.5厘米 底徑：14.6厘米

來源
香港私人收藏，家族遺留



同類瓷器曾經在2007年04月08日於香港蘇富比拍賣有限公司拍出HKD 17,120,000。
Similar porcelain was sold in Sotheby's Hong Kong Limited on April 08, 2007 for HKD 17,120,000.



此盤有如菊花狀，有48瓣。盤腹稍深，盤沿為小連弦起伏狀。盤內底圓平，施白釉，無圈足。淺圈足，圈足露胎，胎質灰白。圈足內平底施白釉，中有雙圈紋，雙圈之內有「大明宣德年製」楷書六字款。外壁施深藍色鈷藍釉，呈色斑駁。內壁飾二束從土中生長，碩果纍纍枝葉茂盛的荔枝樹。

中國藝術中常見花果紋樣，在元代於繪畫及陶瓷廣泛採用，明清代更達至高峰。果實紋具有子孫繁衍，吉祥豐樂的寓意。此盤中的荔枝紋樣，當有子孫昌盛，長壽安康的比喻。

菊瓣型制沿自古代，宋代各窯場燒製了各種樣式的菊瓣形器物，包括漆器⁽¹⁾及一件定窯印花菊瓣紋碟⁽²⁾。清雍正年間，皇帝曾於1733年令內務府總管年希堯進呈釉色各自不同的十二式菊紋碟，現藏於北京故宮博物院⁽³⁾。馮先銘在《文物》，1984年，頁37，圖10亦著錄六件。

比起前朝，明代菊瓣紋碟數量較少。北京故宮博物院藏有數件⁽⁴⁾及一件類似青花菊瓣紋碟⁽⁵⁾，紅彩菊花牡丹圓碟(及紅彩蓮花牡丹紋碟⁽⁶⁾)。景德鎮明官窯遺址亦曾出土數件殘器，包括一件碟心飾牡丹紋⁽⁷⁾以及一件菊瓣紋碟⁽⁸⁾。2011年4月7月蘇富比亦拍賣一件明洪武朝盤，飾以釉裏紅菊花牡丹紋(號43)。

註 Notes:

(1) The Monochrome Principle. Lacquerware and Ceramics of the Song and Qing Dynasties Exhibition, Museum für Lackkunst, Münster, 2008, cat. no. 13

(2) The Monochrome Principle. Lacquerware and Ceramics of the Song and Qing Dynasties Exhibition, Museum für Lackkunst, Münster, 2008, cat. no. 14

(3) Illustrated in *Monochrome Porcelain, The Complete Collection of Treasures of the Palace Museum*, Hong Kong, 1999, pl. 257

(4) *The Complete Collection of Treasures of the Palace Museum. Blue and White Porcelain with Underglazed Red*, Shanghai 2000, vol. 1, pl. 21

(5) *The Complete Collection of Treasures of the Palace Museum. Blue and White Porcelain with Underglazed Red*, Shanghai 2000, vol. 1, pl. 212

(6) *The Complete Collection of Treasures of the Palace Museum. Blue and White Porcelain with Underglazed Red*, Shanghai 2000, vol. 1, pls. 216-9

(7) Exhibition catalogue: *Imperial Hongwu and Yongle Porcelain Excavated at Jingdezhen*, Chang Foundation, Taipei, 1996, cat. no. 29

(8) *Imperial Hongwu and Yongle Porcelain Excavated at Jingdezhen*, Chang Foundation, Taipei, 1996, cat. no. 28

The uniquely lobed body modeled in the form chrysanthemum with 48 petals, rising from an inverted base with ringfoot, deep wall, culminating in a delicately undulating rim, applied with a blue-and-white colour palette, inside the ringfoot is six-character reign mark in regular script in underglaze blue in a double-circle. The exterior decorated in a deep cobalt blue monochrome glaze marbled with white, the interior panel featuring a luscious blue scene of a small *lychee* tree with gnarled branches, swirling leaves, and voluptuous berries on a small patch of grassy earth.

Fruit and flower motifs were always a popular theme in the history of Chinese art. They were used widely on porcelains and paintings since the Yuan dynasty and it reached the peak during the Ming and Qing dynasty. The fruits always have their specific symbolic meaning but generally all related to numerous and continuous offspring, auspiciousness, luck and wealth. On this beautifully carved chrysanthemum-shaped plate, the center panel shows few clusters of *lychees*, implies a Chinese homophonic sound to *lizhi*. It symbolizes “good and luck” which combined together of course will bring health, longevity and implies auspiciousness.

The form of the chrysanthemum dish was probably inspired by earlier chrysanthemum-shaped wares, which were produced in a variety of different materials at kilns as early as the Song dynasty. See a lacquer example attributed to the Song dynasty⁽¹⁾, together with a moulded *Ding* chrysanthemum dish⁽²⁾. As a prestigious and celebrated form of the Song dynasty, the Yongzheng Emperor (1722-1735) instructed Nian Xiyao, Minister of the Imperial Household in 1733 to send “the twelve colours of chrysanthemum dishes, one of each colour, for the inspection of the permanent guardian of the treasury and chief eunuch Samuha”. Thus, chrysanthemum-shaped dishes appear in a complete set of twelve colours, all with Yongzheng marks, are now collected by the Beijing Palace Museum⁽³⁾. Six are illustrated by Feng Xianming, *Wenwu*, 1984, p. 37, no. 10.

Chrysanthemum dishes from the Ming dynasty, meanwhile, are comparatively rare to those fired in the preceding and following eras. Several similar dishes are in the Palace Museum, Beijing⁽⁴⁾: a blue and white example of very similar design⁽⁵⁾, a circular dish painted in red with chrysanthemums and a peony scroll round the well; and barbed red-painted dishes with similar lotus sprays but peonies in the center, two of them with similar waves⁽⁶⁾. Related fragmentary dishes were also recovered from the waste heaps of the Ming imperial kilns at Jingdezhen, one with peonies in the centre⁽⁷⁾, and a circular blue and white example with chrysanthemums⁽⁸⁾. Finally, a large chrysanthemum and peony charger from the Hongwu Period (1368-1398) in faded copper red was sold at Sotheby’s, 7th April 2011, lot 43.



1032

A SKY BLUE AND WHITE CHRYSANTHEMUM DISH WITH A FIVE-CLAWED DRAGON MOTIF
Ming Dynasty, Xuande Mark and Period (1426-1435)

Provenance
A private Hong Kong collection, family legacy

H : 3.7 cm D of mouth: 18 cm D of base: 10.6 cm

Appraised Value (評估價格) : HK\$2,000,000

明 宣德 霽藍龍紋菊花盤

高：3.7厘米 口徑：18厘米 底徑：10.6厘米

來源
香港私人收藏，家族遺留



整盤施霽藍釉，釉色深沉，釉面無流無裂，色澤濃淡相宜，呈色穩定。盤敞口，呈菊瓣紋，有48瓣，瓣與瓣之間有凹凸線紋相連。沿邊為小連弧起伏狀。淺圈足，圈足露胎，胎質灰白。圈足內施淺青白釉，中部有雙圈紋，雙圈之內有「大明宣德年製」青花楷書六字款。盤內施白釉作地，白釉之上繪一青花五爪龍紋，龍爪伸張有力，龍紋周邊為雲紋。

這件燒造技巧超卓的宣德單色釉瓷盤非常珍罕。早在明洪武朝廷已有在祭祀中用瓷器的定制，在天壇祭天時需用霽藍釉瓷器。清乾隆時代的鑒賞家稱譽高溫燒成的鈷藍釉與釉裏紅、甜白釉為宣德朝三大釉色。宣德鈷藍釉彩厚膩亮澤，為世所重。2016年11月7日佳士得拍賣一件宣德藍釉盤可資比較(號58)。

五爪龍紋是帝王天子的象徵，此件官窯瓷無疑是為宮廷燒造。美國華頓Smithsonian Museum的Sackler Gallery展出一件白沿花形盤可資參攷。北京故宮博物院飾以牡丹蓮花及折枝菊的菊瓣盤亦可作比較⁽¹⁾。

註 Notes:

(1) *The Complete Collection of Treasures of the Palace Museum. Blue and White Porcelain with Underglazed Red*, Shanghai 2000, vol. 1, pl. 21

The elegantly ribbed body in the shape of chrysanthemum with 48 ribbed petals, rising from a splayed circular foot, culminating in a lobed, undulating rim, the exterior applied with a deep cobalt glaze pooling within each lobe, the rim left unglazed, the interior featuring a splayed scene of a fierce serpentine five-clawed dragon amongst *ruyi*-shaped clouds on the reserved white ground. The shallow ringfoot exposes the white biscuit and at the base is a six-character mark of Xuande in regular script in underglaze blue enclosed by double circles.

Monochrome blue porcelains of the Xuande reign, to which this piece shares technological similarities, are very rare despite the fact that from early in the Hongwu reign (AD 1368-1398) it was decreed that ceramic wares should be used for official sacrifices at the Imperial altars, and blue was the prescribed colour for ritual vessels at the Tiantan, the Altar of Heaven. This high-firing cobalt blue, along with the copper red and “sweet” white, was regarded as one of the three great glaze colours of the Xuande reign by connoisseurs of the Qianlong period (1736-1795). The Xuande monochrome cobalt blue is especially fine with a richness of colour due not only to the quality of the cobalt but also to the thickness with which the glaze was applied. See a similar blue Xuande period dish sold at Christies, 7th November 2016, lot 58.

The five-clawed dragon was the direct symbol of the emperor, who was regarded as the Son of Heaven and indicates that this piece was clearly fired for imperial consumption or donated as a gift. Compare a similar Xuande period flared five-clawed dragon motif on a white-rimmed foliate dish displayed in the Freer Sackler Gallery of the Smithsonian Museum, Washington DC. Also see a chrysanthemum-shaped dish with chrysanthemum sprays amongst peonies and lotuses displayed at the Palace Museum, Beijing⁽¹⁾.



1033

A BLUE AND WHITE DRAGON BOWL
Ming Dynasty, Xuande Mark and Period (1426-1435)

Provenance
A private Hong Kong collector, acquired in 1997 from an antique shop on Hollywood

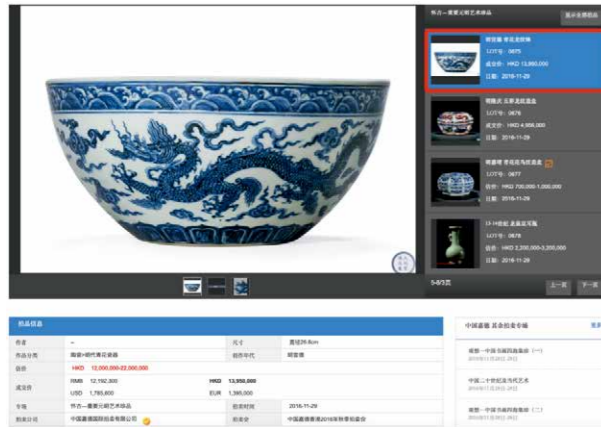
H: 11.3 cm D of mouth: 26.6 cm D of base: 13.3 cm

Appraised Value (評估價格) : HK\$5,000,000

明 宣德 青花雲龍紋鉢

高：11.3厘米 口徑：26.6厘米 底徑：13.3厘米

來源
香港私人收藏，1997年購藏於香港荷理活道古玩店



同類瓷器曾經在2016年11月29日於中國嘉德國際拍賣有限公司
拍出HKD 13,950,000。
Similar porcelain was sold in China Jiade International
Auction Co., Ltd. on November 29, 2016 for HKD
13,950,000.



此鉢侈口圓唇，深腹圓底。內壁沿唇下有青花圓圈紋一周。鉢內底部有「大明宣德年製」六字楷書款。外壁口沿下有一周翻湧的波濤紋。波濤紋之下繪五爪龍紋，龍圓自細鱗，翱翔於如意祥雲之中近底部處有寶相花紋一周。底部為內凹圈足，露胎無釉，胎質灰白。青花呈色深淺有致，繪畫流暢自然，反映宣德青花瓷的高度成就。

此鉢為宣德朝青花官窯官窯瓷精罕的器物。五爪龍紋為最典型的紋飾，亦為宣德朝瓷器紋樣的代表風格。此鉢型制亦少為圖籍所著錄。台灣故宮博物院藏有二件類似龍紋的青花碗，碗心飾以雲紋⁽¹⁾。2018年5月9日佳士得拍賣的Peggy and David Rockefeller收藏的一件類似的青花碗，但口沿處未飾有波濤紋（號972）。

這類宣德青花雲紋碗有不同紋飾，如三爪折枝花卉，請參攷台灣故宮博物院所藏四件⁽²⁾；大英博物館藏的一件⁽³⁾；日本東京松崗美術館藏的一件⁽⁴⁾；1994年11月2日香港蘇富比拍賣一件（號36）。此種五爪龍雲紋碗繼續在成化朝（1465-1487）及弘治朝（1488-1505）續有燒製，可分別參閱上海博物館度藏⁽⁵⁾。

註 Notes:

(1) Illustrated in *A Panorama of Ceramics in the Collection of the National Palace Museum: Hsuan-te Ware I*, Taipei, 2000, nos. 64 and 65

(2) Illustrated in *A Panorama of Ceramics in the Collection of the National Palace Museum: Hsuan-te Ware I*, Taipei, 2000, nos. 69-73

(3) Illustrated by Jessica Harrison-Hall, *Catalogue of Late Yuan and Ming Ceramics in the British Museum*, London, 2001, p. 134, no. 4:26

(4) Illustrated in the *Toji Taikei (Ceramics of East Asia)*, vol. 42, Tokyo, 1975, figs. 51 and 52

(5) Illustrated by Lu Minghua: *Porcelain Wares from the Official Kilns of the Ming*, Shanghai, 2007, fig. 3-61 and fig. 3-69

The deep body rising from a flat, circular foot to a slightly flared mouth with vertical rim, applied with an intense deep cobalt blue glaze in tonal gradations, the exterior body decorated with a fierce five-clawed dragon with sharp fangs, beady eyes, detailed scales and a long swirling body, writhing amidst the swirling clouds and surrounded by a sky of stylized *ruyi*-shaped clouds, the scene surrounded by two bands of decoration, a repeating motif of swirling waves near the rim and a row of arabesques painted in deep cobalt blue near the base, six-character reign mark in regular script in underglaze blue on the interior of the bowl in a double-circle. The ringfoot exposes the greyish-white biscuit.

This extremely rare bowl represents the finest quality of porcelain produced at the imperial kilns in the Xuande reign. The design of an imperial five-clawed dragon flying through the clouds and chasing a flaming pearl is one of the most classic motifs of Chinese porcelain, and yet one of the rarest patterns of the Xuande repertoire. No other example of this exact form and decoration appears to have been published. Two Xuande bowls of very similar design on the exterior but with cloud-scroll motifs on the center of the interior, are in the National Palace Museum, Taipei⁽¹⁾. Also see a similar bowl without a wave scrolled rim sold at Christie's from the collection of Peggy and David Rockefeller, 9th May 2018, lot 972.

Xuande "dragon" bowls of this form also exist in a slightly different version, for example dragons with three claws with interiors decorated with various floral scrolls and sprays in underglaze blue. See four examples in the National Palace Museum, Taipei, illustrated op. cit., nos. 69-73⁽²⁾; one in the British Museum⁽³⁾; one in the Matsuoka Art Museum, Tokyo⁽⁴⁾; and the other one sold at Sotheby's Hong Kong, 2 November 1994, lot 36. Bowls of this type, with five clawed dragons, also continued to be made in the following periods in the Ming dynasty (1368-1644) such as a Chenghua (1465-1487) example and a Hongzhi (1488-1505) example in the Shanghai Museum⁽⁵⁾.



1034

A BLUE AND WHITE "CHICKEN'S HEART" BOWL
Xuande Mark and Period (1425-1435 AD)

Provenance

A private Hong Kong collector

H:4.3cm D of mouth:13.2cm D of base: 5 cm

Appraised Value (評估價格): HK\$1,000,000

明 宣德 青花纏枝花卉紋雞心碗

高: 4.3厘米 口徑: 13.2厘米 底徑: 5厘米

來源

香港私人收藏



敞口，口沿微內斂，深腹，圈足，底心呈尖狀，形似鷄心故得名“鷄心碗”。

此器明宣德御窑青花精品代表作，存世罕見，品相完好，尤為難得。釉質溫潤瑩亮，白中泛青，胎骨均勻堅細，紋飾描繪遒勁綉麗，層次分明，繁而不亂，綫條灑脫靈動。造型精巧典雅，青花色澤艷麗。外底書青花“大明宣德年製”雙圈款。

明代宣德青花瓷在中國陶瓷史上具有極高的地位，以其古樸典雅之造型、瑩潤如玉之釉色、多姿靈動之紋飾而聞名于世，被譽為“開一代未有之奇”，《景德鎮陶錄》評價宣德瓷器“諸料悉精，青花最貴”。許之衡《飲流齋說瓷》記有“宣窯之美為有明一代冠，不但宣紅，宣黃彪炳業已也，即青花、五彩各器并發明極多，咸為後代所祖……。”



The bowl rises from an unglazed base toward a slightly lipped rim, with a six-character reign mark in underglaze blue in a double-circle. The vase is applied with deep cobalt blue decoration atop a slightly bluish white glaze. The exterior shows two repeating bands of decoration, with sixteen peony and arabesque medallions atop an archaic scroll. The interior features a band of fleur-de-lis lingzhi surrounding an asymmetrical band of peony and tendril decoration, wreathing an elaborate geometric and floral medallion.

The elegance and harmony of this bowl captures the strength of Xuande reign porcelain, which is considered to be one of the most celebrated periods of porcelain production in China. The vivacity of the floral scroll with lush blooms and tendrils reveals a high degree of confidence in the use of cobalt. The exceptional quality and great variety of designs that were either created or perfected during the Xuande reign could hardly be better illustrated by the repeating bands of geometric motifs on this piece, which while in later periods would be considered “crowded” are separated delicately and accentuated by the bluish-white spaces in between.

The Imperial Porcelain Factory at Jingdezhen had been set up in the Hongwu reign and came under the control of the imperial administration in Beijing during the Yongle period. However, it was only during the Xuande reign that court officials and eunuchs began to be sent to Jingdezhen to supervise production. Under their close scrutiny, the Imperial Porcelain Factory was able to vastly increase its capacity while improving the standard of workmanship and control distribution. Refinement of body and glaze materials seems to have been stipulated, while forms and patterns were pre-designed. The floral blooms on this bowl loosely reference the changing seasons; the lotus is followed by chrysanthemum, rose, tree peony, pomegranate, hibiscus and camellia. Flowers that came to symbolise the seasonal cycles in nature became a popular porcelain pattern during the Yuan dynasty.

The cobalt used for this piece was fired to a dark emperor blue tone, and features the characteristic ‘heaping and piling’ effect. While imported sumali cobalt, which is believed to have originated in the area of Kashan in Iran, was favoured in the early 15th century, local cobalt high in manganese was sometimes mixed in. The deeper blue hues of this piece are atypical for the Xuande Period; compare a blue and white bowl from the Xuande Period sold at Sotheby’s New York, Fine Chinese Ceramics and Works of Art, Lot 1228, 17 March 2017, although see a pair of blue and white Xuande stem cups of identical size and shape to the current cup, and decorated with the same design of flying elephants amongst clouds and above the waves is in the collection of the National Palace Museum, Taipei (illustrated in Catalogue of the Special Exhibition of Selected Hsüan-te Imperial Porcelains of the Ming Dynasty, Taipei, 1998, pp. 210-211, no. 78).

1035

A BLUE AND WHITE DICE BOWL DEPICTING A TRAVELLING GROUP OF CONCUBINES
Xuande Mark and Period (1425-1435 CE)

Provenance
A private Hong Kong collector

H:7.2cm D of mouth:20.1cm D of base: 8.2 cm

Appraised Value (評估價格): HK\$3,800,000

明 宣德 青花《妃子出遊圖》骰子碗
高: 7.2厘米 口徑: 20.1厘米 底徑: 8.2厘米

來源
香港私人收藏



此碗青花發色淡雅，造形簡潔有力，紋飾纖柔雅致，展現大明宣德朝青花瓷之至善至臻。

宣窑畫工臻熟超絕，以寫意取代工筆，取細筆層迭點染，綫條連綿不斷，紋飾生意盎然，氣韻生動，布局虛實錯落，整體清朗典雅，規整端莊。

色子碗，顧名思義，一般為皇官貴族擲骰子的賭具。

宣德時期，有“諸料悉備，青花為貴”之說。本品青花發色濃烈深艷，青料聚集處成黑色結晶斑，深入胎骨，撫之有凹凸不平之感。紋飾繪筆飄逸自然，疏朗有致。所用青料為“蘇麻離青”進口料，由于其含錳量低、含鐵量高，燒後色澤濃翠而有鐵斑，為明永宣時期典型器型。

The finely-potted body rises from a circular foot towards a slightly-lipped rim. The exterior is decorated with a rich blue and white glaze, and features a detailed figural motif depicting a procession of concubines, one holding a lantern and another seated within a horse-pulled cart, in long, flowing robes. The procession fronts a wooden fence leading from the porch of a small house, and encircles the vase towards a forest of willow trees with a cloud and mountain backdrop. The interior features a small scene of flowers on a medallion at the bottom of the bowl, including willows, plum blossoms, and a cactus. A six-character reign mark is found on the base in underglaze blue in a double-circle.

Xuande underglaze blue painting was basically literati painting, elegant and uninhibited. It has taken a long time to fully understand the origins of the Xuande cobalt blue. Wang Zongmu, writing during the reign of the Jiajing Emperor (1521-1567), notes in the “Ceramics Administration” chapter of the “Great Gazetteer of Jiangxi”: Ceramics use “Mohammedan blue”(hui qing), originally tribute from foreign countries.

Furthermore, Wang Shimao of Wanli’s reign wrote in his Annals Written in Retirement that “in the Ming a special kiln was established at Jingdezhen in Fuliang county. During Yongle and Xuande reigns, the palace fired ceramics here, which are still treasured today. At that time wares with palm-eye depressions and sweet-white glaze were common. Some wares were decorated with Sumali blue (qing).” Sumali is likely a Chinese translation of a place name in the Middle East, most likely an Islamic land given the other reference to “Mohammedan blue”.

The figural designs here in a landscape scene during Xuande period, would represent some of the earliest if not the earliest example of this type of ceramic decoration recorded on blue-and-white ceramics. Typically, blue-and-white motifs from this period would comprise dragons, qilin, auspicious animals, and phoenixes splayed out amongst clouds, ruyi, or floral wreaths, or would comprise repeating floral motifs of plum, chrysanthemum, peony, and willow blossoms. Compare with a contemporary example offered at Sotheby’s London, Fine Chinese Ceramics and Works of Art, Lot 149, 09 November 2011. For a more stylistic equivalent, compare a later example from the Kangxi Period (1662-1722) sold at Sotheby’s New York, The Hundred Antiques: Fine and Decorative Asian Art, Lot 1001, 24 June 2020.



1036

A BLUE AND WHITE "PHOENIX" TEAPOT
Xuande Mark and Period (1425-1435 AD)

Provenance
A private Hong Kong collector

H:12cm D of mouth:4.5cm D of base: 12.7 cm

Appraised Value (評估價格) : HK\$3,800,000

明 宣德 青花鳳紋竹節執壺

高: 12厘米 口徑: 4.5厘米 底徑: 12.7厘米

來源
香港私人收藏



執壺，最初的造型是由青銅器而來，南北朝早期的青瓷當中，已經完成了這種執壺的造型，其後在唐宋兩代是金銀器中的一種酒具。明代青花執壺，采用金銀器執壺造型的優點，安定、秀美而靈活。因瓷的質料和青花繪畫的關係，青花執壺顯得高妙雋雅。

宣德青花所用青花料有兩種：一為進口的蘇麻離青，由于其含錳量低、含鐵量高，燒成後色澤濃翠而有鐵斑；一是國產鈷料，由于國產料含錳量高、含鐵量低，因此色澤帶灰而沒有鐵斑，但宣德官窑器中有一類青花色澤偏淡，并不帶灰暗色，且無鐵斑，極為幽雅。

此件青花鳳紋竹節執壺和永樂青花器一樣，着彩時系用小枝筆，使得彩色每筆醮料有限，需不斷重新醮料，這就使青花色彩有深深淡淡的筆觸痕。

The body swells from a flat, unglazed base, tapering towards a mouth with a cylindrical lid, featuring a bent spout and a ribbed handle carved to resemble bamboo. The exterior is applied with a deep cobalt-blue glaze overtop white featuring two soaring phoenixes amongst fleur-de-lis lingzhi and lotus blossom, the base features a repeating lappet motif. A four-character reign mark is found directly atop the spout.

The teapot shape is not endemic to China. Ewers, the material ancestor of teapots, first appear in ceramic production during the Tang Dynasty, inspired by Middle-Eastern and Persian water vessels made from precious metals. Ewers are one of the most continuously-fired forms of ceramic, and shards of these have been found at nearly every renowned kiln site from the Song Dynasty onwards. This teapot of Xuande mark and period, appears to be unique, as teapots during this period were typically much taller and more slender, although its exterior design is familiar from examples of the previous Yongle reign (1403-1424). The reigns of Yongle and Xuande in the early Ming period (1368-1644) marked the first great era of China's imperial porcelain production, when the Jingdezhen kilns in Jiangxi province were strictly controlled by and worked exclusively for the court. Although the imperial porcelain production of the Xuande reign is characterized by continuity, as many of the shapes and designs introduced in the Yongle period were retained, the potters never simply duplicated earlier models, but created updated versions by deliberately modifying profiles and fine-tuning details.

The shape of the early 15th century ewers was influenced by Near Eastern metalwork, and so it is not surprising that the Chinese blue and white porcelain examples proved popular in the Near East. Evidence of this popularity can be seen in their inclusion among the porcelains preserved in the collection of the Topkapi Saray, Istanbul and that of the Ardebil Shrine, now housed in the Iran Bastan in Tehran. See R. Krahl and J. Ayers, *Chinese Ceramics in the Topkapi Saray Museum, Istanbul*, vol. II, Yuan and Ming Dynasty Porcelains, London, 1986, p. 519, no. 618; and J. A. Pope, *Chinese Porcelains from the Ardebil Shrine*, Second Edition, London, 1981, pl. 54, no. 29.427.

This blue-and-white phoenix-patterned bamboo-jointed pot is painted in a similar manner to surviving Yongle blue-and-white ware. The vessel would have been painted with a twig pen, so that the materials for each color are limited. As such, the pen must be refilled continuously, which accounts for the variability in thick and thin stroke marks on the vessel.

1037

A BLUE AND WHITE DRAGON PATTERN BRUSH WASHER
Xuande Mark and Period (1425-1435 AD)

Provenance
A private Hong Kong collector

H:4.7cm D of mouth:17.3cm D of base:14 cm

Appraised Value (評估價格): HK\$4,800,000

明 宣德 青花團龍紋荷葉洗

高: 4.7厘米 口徑: 17.3厘米 底徑: 14厘米

來源
香港私人收藏



本品為宣窑之曠世雋品，極負盛名，其形端莊秀雅，簡潔清新，呈葵瓣花口十棱式，盡顯曲綫變化之佳妙。釉汁凝潤泛青，胎骨堅致細薄，執之品鑒，纖巧怡人。洗心繪以青花五爪游龍穿梭于祥雲間，雄姿邁勁，氣奪千裏。外壁飾以十組青花無框團龍紋，升龍與降龍相間，方寸之際，威勢凌人。其筆觸細膩，精到有神，青花一色蒼妍舒雅，墨勢渾然而莊重，泛出濃妍之錫光，誠為宣窑之妙品。底落“大明宣德年製”青花六字楷書款，樸拙蒼健，古意盎然。

明宣宗朱瞻基為史上寥寥可數擅長文藝和獻身于仁政的儒家君主，執政十年，“吏稱其職，政得其平，綱紀修明，倉庾充羨，閭閻樂業。歲不能災。蓋明興至是歷年六十，民氣漸舒，蒸然有治平之象矣”，史稱“仁宣之治”。每于萬機之暇，宣宗皇帝寄情于各式文玩，以致彼時雕漆、範金、織綉、製墨、埴埴等諸類宮廷工藝品成就斐然，皆稱後世同類之典範。其御瓷一項，品格超群，發明極多，前後器類之豐富，釉色之廣泛，裝飾之多變，皆發古未有，誠為一代絕品。

The ten-lobed mallow form body, sturdily-potted, rises from a flat, countersunk base, tapering outward to an everted rim with a slight lip. The interior and exterior decoration are applied with a rich cobalt blue glaze over white. The exterior features two distinct, alternating medallions of serpentine dragons coiled amongst clouds and ruyi on each face. The interior is painted with a larger, similar variation of the outer medallion, with similar decoration. A six-character reign mark in underglaze blue is painted on the base in a double-circle.

Writing and painting played an outstandingly important role in Imperial China, and a brush washer was thus an object of the utmost importance and consideration. Emperors were compelled to write all the time in the fulfilment of their duties, but in addition, many of them enjoyed to compose poetry, to exercise and demonstrate their calligraphic skills, to inscribe colophons on paintings or calligraphies they liked, or to paint themselves. The Xuande Emperor (r. 1426-1435) has gone down in history as one such ruler, who devoted himself to cultural pursuits and employed his brush not only for the affairs of state, but also for artistic endeavours.

Xuande brush washers of this classic ten-petalled mallow shape are known with several different dragon designs, as well as with dragon and phoenix, or phoenix only, and in various sizes. Stem bowls, bowls, dishes and even small ewers appear to have been matchingly shaped and decorated, all with the foot or stem similarly following the lobed outline of the sides. A stem bowl with similar dragon roundels, for example, in the collection of the National Palace Museum, Taiwan, was included in the exhibition Mingdai Xuande guanyao jinghua tezhuan tulu/Catalogue of the Special Exhibition of Selected Hsüan-te Imperial Porcelains of the Ming Dynasty, National Palace Museum, Taipei, 1998, cat. no. 111. Brush washers such as the present piece, with its subtle mallow shape and delicate roundels of five-clawed dragons alternately ascending and descending, and the imperial Xuande reign mark, would not have been accessible outside the court.

An almost identical example with a shallower interior was sold at Sotheby's New York, Ming: The Invention of Imperial Taste, Lot 8, 15 March 2017. However, this example does not feature the exterior dragon decoration, which while rare is more common than the ware noted above. Four such pieces are listed in the inventory of the holdings of the National Palace Museum Gugong ciqu lu [Record of porcelains from the Old Palace], Taipei, 1961-6, vol. 2, part 1, pp. 105f., plus one with dragon-and-phoenix design, ranging in size from 15.9 to 18.5 cm, and one washer of either design was included in the Museum's, 1998 exhibition, op.cit., cat. nos 182 and 183.



1038

PLATE DECORATED WITH DESIGN OF DRAGON AMIDST WAVES IN UNDERGLAZE BLUE
Ming Dynasty Mark and period of Xuande (1426 - 1435)

Provenance
A private Hong Kong collector

H : 4.8 cm D of mouth : 21.3 cm D : 13.1 cm

Appraised Value (評估價格) : HK\$1,500,000

明 宣德 青花海水龍紋盤

高：4.8厘米 口徑：21.3厘米 底徑：13.1厘米

來源
香港私人收藏



唇口微撇，淺弧壁，圈足。

弧壁繪青花海水行龍紋，盤心為海水雲龍紋。足內署「大明宣德年製」青花楷書六字兩行雙圈款。

整器紋飾佈局疏朗有致，線條流暢，青花發色濃豔，濃處有鐵銹斑痕，釉面肥腴。宣德瓷器的胎體低鈣高鉀，透光性高，釉下青花的描繪於此時完全掌握，所繪之龍紋，睜眉瞪目，炬眼炯炯，張牙舞爪，筆法遒勁有力，氣勢威猛剛勁，遠為後朝所不及。

「宣德之貴，今與汝敵」。宣德御窯之器，以青花「開一代未有之奇」，以古樸典雅的造型、晶瑩潤澤的釉色、豐富多樣的紋飾聞於後世。青花器發色莊重舒雅，色調深沉雅靜，自然天成，為明代青花瓷器之冠。後世所仿，有其形而無其神。飾五爪龍紋或署年款者，乃屬皇家御用瓷品，殊為珍罕。

The plate has slightly flared mouth, thin curved shallow wall and ring foot.

The wall is decorated with dragons amidst waves in underglaze blue. Inside the foot is a six-character mark of Xuande in regular script in two rows enclosed by double rings in underglaze blue.

Decorations on this plate is finely rendered with sparse pictorial composition and swift brush work. The colour of underglaze blue is vibrant and brilliant with iron-rust brown colour spots under the thick and lustrous glaze. For porcelain wares produced in the Xuande period, the biscuit is lower in calcium and higher in potassium and thus become more transparent. Superb mastery of rendering decorations design pattern in ununderglaze blue was attained in this period, as exemplified by the dragon vividly depicted with raised eyebrows and fierce stare, and the claws and teeth are widely open in a fighting mood. The brush work exudes forcefulness and vigour that could not be matched in subsequent dynasties.

It is acclaimed that "The artistic merit of Xuande wares are esteemed with a fame that challenge the superb Ru wares of the Song dynasty." Among the Xuande wares, underglaze blue wares "opened an unprecedented wonderful realm" as marked by archaic and classical forms, lustrous and translucent glaze and a wide variety of decorative motifs produced by imperial kilns in this period. The colour of underglaze blue is serene and tranquil with a touch of naturalism, representing the best type of wares of the Ming dynasty. The later imitated pieces produced after the Xuande period are unmatched in spiritual essence, even similar in shape and form. A ware decorated with five-claw dragon design or a mark of the period was exclusively produced for imperial use, which are very rare and unusual.

1039

A BLUE AND WHITE “THREE FRIENDS” PLATE
Chenghua Mark and Period (1464-1487 AD)

Provenance
A private Hong Kong collector

H:4.4cm D of mouth:21.9cm D of base:13.7 cm

Appraised Value (評估價格) : HK\$1,800,000

明 成化 青花三友圖盤

高：4.4厘米 口徑：21.9厘米 底徑：13.7厘米

來源
香港私人收藏



此盤撇口，弧壁，圈足。

“歲寒三友”，指翠竹、青鬆、冬梅三種花木，象徵不畏嚴霜之高潔風格及永恒不變之忠貞友誼。

明成化一朝歷時雖短，却在中國製瓷史上譜寫出了一段璀璨的傳奇。此盤青發色純正、淡雅，釉質瑩滑如絲、明潤淨膩見稱，觀之清然，撫之穆怡，他朝瓷器概不可及，本件正屬臻例。

值得一提的是已不用進口的蘇麻離青，而改用江西樂平的陂塘青，發色淡雅而無黑鐵斑。已改變了永樂、宣德時期的采用小筆觸着色，用雙勾綫條，一筆塗沫的上色法，因而不如典型宣德青花那樣留有層次和空白地。

The finely-potted body, with a 21.9cm diameter, rises from a circular foot to a smooth rim with a slight lip. The exterior is decorated with a vibrant floral pattern in blue-and-white. The internal panel depicts a splayed “three friends of the cold season”: bamboo, green pine, and winter plum. The interior rim is adorned with a ruyi lingzhi border among spiky tendrils. The exterior features gnarled trees with willow blooms dancing in a semi-repeating motif. A six character reign mark in underglaze blue is found on the base in a double-square.

The outstanding quality and inventiveness of Jingdezhen’s blue-and-white porcelains created in the Yongle (1403-1424) and Xuande (1426-1435) reigns is – and always was – undisputed. The imperial potters of the Chenghua period (1465-1487) were faced with a tall order to create porcelains that could stand the comparison. That they managed to come up with pieces that are today held in perhaps even greater esteem is due to their inventing a completely new style that

followed a different aesthetic and improving the physical quality of the porcelain even further.

The porcelain stone and glaze used for Chenghua imperial porcelains are arguably the finest ever achieved at Jingdezhen. The sensual pleasure of the touch of a Chenghua porcelain vessel is unmatched by porcelains of any other period. They are remarkable for their understatement, their unsurpassed material quality and workmanship, unrivalled tactility, perfectly attuned proportions, and seemingly simple yet highly sophisticated designs that are executed in an irresistibly captivating, sharply focused and yet free and easy painting manner. There are only a total of about 650 extant examples of Chenghua mark and period wares, with more than half being preserved in the National Palace Museum, Taiwan, and only a small number remaining in private hands. The number of different patterns is very limited, and of every pattern only a few examples remain. This scarcity of surviving pieces is due in the first place to limited production figures, but at the same time to the extremely high standards set by the imperial kilns for a piece to pass the rigorous quality controls.

The piece above depicts the Three Friends of Winter: pine, bamboo, and plum. The Chinese celebrated these plants together, as they observed that each does not wither as the cold days deepen into the winter season unlike many other plants. Together they symbolize steadfastness, perseverance, and resilience, which are regarded as ideals within Confucian thought and are also revered within the scholar cultures of Japan and Korea.

The “Three Friends” pattern also continued through to the late Qing Period. Compare a Kangxi-marked blue and white teapot with a similar decoration in the collection of the Palace Museum, Beijing, illustrated in Selected Porcelain of the Flourishing Qing Dynasty at the Palace Museum, Beijing, 1995, p. 48, fig. 6. A similar, less refined example of this motif is found on a vase sold at Sotheby’s Hong Kong, Fine Chinese Ceramics and Works of Art, Lot 32, 10 November 2010.

1040

STEM-CUP DECORATED WITH DRAGONS AMIDST CLOUDS
IN UNDERGLAZE BLUE
Ming dynasty Mark and period of Chenghua (1465-1487)

Provenance
A private Hong Kong collector

H: 9.7 cm D: 13.3 cm

Appraised Value (評估價格) : HK\$3,800,000

明 成化 青花雲龍紋高足杯

高: 9.7厘米 直徑: 13.3厘米

來源
香港私人收藏

撇口、弧形壁,高圈足,下漸寬。外壁飾五爪雲龍趕珠及十字雲紋,杯心畫團龍紋,外足飾纏枝蓮紋一周。內底足有青花「大明成化年製」青花楷書六字一行款。

高足杯上繪畫雲龍回首飛翔於祥雲天際之間,畫工格流暢奔放,青花呈色雅淡柔和,反映成化青花的新風格。

成化青花用料江西出產的「平等青」,這種青料含鐵量低,沒有了宣德「蘇麻離青」的「鐵斑」,其柔和的藍調與永宣青花的厚重濃艷形成了鮮明的分別,更適合勾線、描繪輪廓細節,故成化時期龍身更婉轉,鬚毛鱗片描繪更細緻,極具時代特徵。

This stem-cup has everted mouth and curved wall supported on a tall slightly spreading hollow foot. The exterior wall is decorated with two five-claw dragons with long snouts, sinuous bodies in flight among clouds, the foot with a band of floral scrolls, the interior with a central medallion enclosing a similar dragon design within double circles. Inside the foot is six-character mark of Chenghua in regular script in one row in underglaze blue.

The decoration of dragons in flight among auspicious clouds is rendered with swiftness in a spontaneous style. The colour of underglaze blue is soft and subtle, revealing new painterly style in new glaze colour of the Chenghua period.

In contrast to expression of blue-and-white ware in the reign of Yongle(1403 – 1425) and Xuande periods, the local pingdengqing underglaze blue from Jiangxi was used instead, the tone of which is lighter and more subtle. The local cobalt blue contains lower iron, therefore the heaped and piled effect was replaced with the present lighter tones. The change of material allows display of precise outlines and more refined details of the decorations. Therefore, the decorative style of Chenghua imperial wares are noted for a touch of softness and delicacy, as represented by the dragons on this stem-cup, which are described with hairs and scale in detail with a more forceful curvy body movement.



1041

A YELLOW- GROUND GREEN ENAMELLED “PEONY” DISH
Ming Dynasty Zhengde Period (1506-1521)

Provenance

A private Hong Kong collection, acquired in 1997 from an antique shop on Hollywood Road, Hong Kong

H: 4.2 cm D of mouth: 23 cm D of base: 13.5 cm

Appraised Value (評估價格) : HK\$2,000,000

明 正德 黃地綠彩花卉紋盤

高：4.2厘米 口徑：23厘米 底徑：13.5厘米

來源

香港私人收藏，1997年購藏於香港荷理活道古玩店



此盤口微敞，內底平，淺圈足。圈足內平底，施白釉，胎質白，青花雙圈內書「正德年制」四字楷書款。此盤施黃釉為地。盤外壁亦有四折枝蓮紋。盤內壁有折枝花果紋，包括桃、李、葡萄、柿，相距有序。盤底有圈紋一周，內飾牡丹紋。

此盤花卉圖案均以綠彩繪成。此盤地色及彩繪色調鮮明，黃綠兩色搭配得宜，為明代彩繪官窯瓷精品。明弘治、正德年間(十五世紀晚期至十六世紀早期)景德鎮窯發展蓬勃，擺脫以前輕薄胎體、型制有限、紋樣稀疏的風格而邁向胎體厚重，紋飾豐富而獨特的作風。彩瓷如黃地綠彩器深得弘治帝喜好；而正德帝則尚好孔雀綠彩瓷。明永樂年間(1403-1424)景德鎮已嘗試燒製黃地綠彩瓷，令彩釉更呈多樣化。

大英博物館藏二件較小(正徑分別為20.2及22.6厘米)的正德黃地綠彩龍紋盤⁽¹⁾；2017年4月5日佳士得拍賣一件藍綠彩庭園植物紋盤及北京故宮博物院藏一件體積相若的正德盤⁽²⁾，均可資參考。

註 Notes:

(1) Illustrated by J. Harrison-Hall, *Catalogue of Late Yuan and Ming Ceramics in the British Museum*, London, 2001, p. 206, nos. 8:29 and 8:30

(2) Illustrated in *The Complete Collection of Treasures of the Palace Museum. Blue and White Porcelain with Underglazed Red*, Shanghai, 2000, vol. II, pl. 233

Well potted with low rounded sides rising to slightly flaring rims, circular foot with a slightly lipped rim, four-character reign mark in regular script in underglaze blue on interior base in a double-circle. The dish is applied with a yellow enamel and incised green floral decoration, the exterior featuring four lotus and tendril sprays, the interior with a central panel of peonies stemming from a gnarled leafy branch, the cavetto evenly spaced and surrounded by individually painted sprays of peach, plum, grapes, and persimmon, all on a rich Imperial yellow ground. The complementing colours of green and yellow match harmoniously and this dish represents a refined imperial ware of the period.

The Hongzhi and Zhengde periods (late 15th to early 16th centuries) witnessed the turning point in the development of Jingdezhen during the Ming dynasty. Porcelain pieces fired during this period break away from traditional features such as a light and thin body, limited shapes, and sparse embellishment towards an increasing variety of thick-potted vessels with elaborate and unique decorative motifs. Multi-coloured enamels, notably yellow-enameled plates, became more common during the Hongzhi period, and a well-known favorite of the Zhengde Emperor was peacock-green for commissioned imperial wares; the green and yellow palette is coincidentally one of the classic designs of his reign. The colour scheme was among the first the Jingdezhen potters experimented with when the imperial kilns started to enlarge their range of colours and designs in the Yongle period (1403-24).

Compare with two similar Zhengde-marked yellow and green-glazed “dragon” dishes of slightly smaller size (20.2 and 22.6 cm. diam.) in the British Museum (1). Additionally, compare a similar “gardenia” design with one in blue and yellow sold at Christie’s, 5th April 2017, lot 4, as well as a Zhengde mark and period dish of similar size in the collection of the Palace Museum, Beijing (2),

1042

A WUCAI DRAGON WASHER
Wanli Mark and Period (1573-1619 AD)

Provenance
A private Hong Kong collector

H: 6 cm D: 20 cm

Appraised Value (評估價格) : HK\$1,600,000

明 萬曆 五彩雲龍火焰紋六瓣葵口折沿洗

高：6厘米 直径：20厘米

來源
香港私人收藏



洗呈六瓣葵口形，優雅端莊，胎體厚實，洗心以雙龍戲珠穿梭于祥雲間，雄姿遒勁，氣勢凌人；內壁及口沿處皆飾龍紋六組，分別以紅、綠彩及青花相鄰而繪，色澤對比鮮明，尤覺絢麗濃艷，體現了皇室要求“龍鳳花草各肖形容，五彩玲瓏務極華麗”之藝術效果。外壁口沿及其下六面繪折枝花紋，構圖飽滿。底部雙圈青花“大明萬曆年製”楷書款。

整器畫面設色繁縟華麗，紅綠二彩濃妍相映，青花幽麗勻淨，黃彩璀璨奪目，其用色之巧妙，實難書表，紅藍黃綠，轉換自如，絕無重復疊雜之處，畫工精湛，筆觸灑脫，凸顯萬曆時期粗獷樸麗之風。

The body rises from an unfired base towards a flat, hexagonal rim, potted in the shape of a six-petalled sunflower, with the six-character reign mark of the Wanli Emperor on the base in a double-circle in underglaze blue. The exterior is painted in a vivid doucai palette, featuring fourteen five-clawed dragons, two encircling the bowl of the washer and one on each panel of the body and rim, floating amongst clouds and ruyi. The underside of the rim is painted with poppy and plum blossoms in red and white, respectively, with narrow green tendrils.

The reign of the Wanli Emperor is defined as a turbulent time within the final decades of the Ming Dynasty, with no proper centralized control, several insurgencies by government officials and external forces, and the “passive resistance” policy of Wanli reflecting his disinterest in ruling China. As an indirect result of this tumult, ceramic production at Jingdezhen declined in quantity and quality, and the operations of the imperial kilns deteriorated to the point where production was unsustainable. In fact, production ceased entirely (during the thirty-sixth year of his reign). Consequently, private kilns flourished for several decades until 1681 – the twentieth year of the Qing Kangxi Emperor (1662-1722 CE). The ceramics primarily produced during this period were rough and simple, with cruder brushstrokes and straightforward motifs. Doucai and wucai ceramics, defined by underglaze blue decoration juxtaposed with overglaze coloured enamels, were highly coveted and produced during the Wanli Period (1572 – 1620 CE). Additionally, export wares, known as kraak based on the Dutch translation of the Portuguese carrack vessels upon which they were imported, were also manufactures in high volumes, and were both commissioned and exported by European clients and vessels, respectively. Kraak vessels were often blue-and-white, and were painted with scenes of European luxury or simple yet exotic scenes of Chinese culture and society in doucai or wucai.

Still, given the use of dragons on this vase as an auspicious symbol of imperial patronage and use, this washer was likely commissioned during the earlier period of Wanli’s reign. Additionally, the balance between the underglaze blue and the red, green, and yellow enamels is used to good effect, producing a design that is at once harmonious and lively. Note a blue-and-white dragon washer from the period of Wanli sold at Sotheby’s, Chinese Ceramics and Works of Art, Lot 3206, 08 April 2011.



1043

AN OXBLOOD RED GLAZED SEAL-PASTE BOX
Qing Dynasty, Kangxi Mark and Period (1662-1722)

Provenance

A private Hong Kong collection, acquired in 2013 from an antique shop on Hollywood Road, Hong Kong

H: 4 cm D of mouth: 10.2 cm D of base: 6 cm

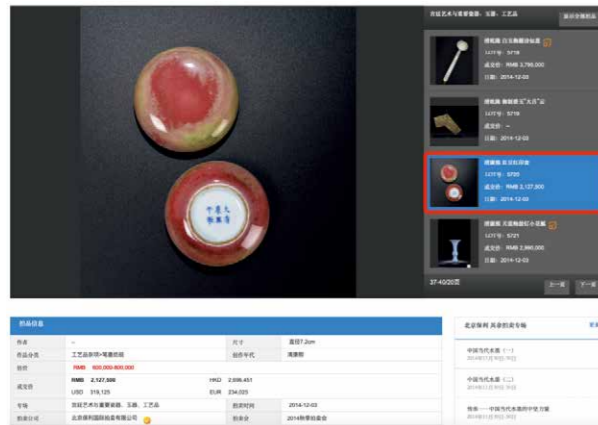
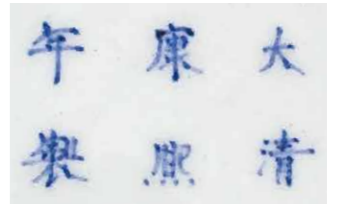
Appraised Value (評估價格) : HK\$100,000

清 康熙 霽紅釉印泥盒

高：4厘米 口徑：10.2厘米 底徑：6厘米

來源

香港私人收藏，2013年購藏於香港荷理活道古玩店



同類瓷器曾經在2014年12月03日於北京保利國際拍賣有限公司
拍出RMB 2,127,500。
Similar porcelain was sold in Beijing Poly International
Auction Co., Ltd. on December 03,
2014 for RMB 2,127,500.



該器為印盒。釉色如牛血初凝，深沉瑩潤而均勻。上下口沿扣合緊湊平整，口沿處有細白邊，似燈草。上蓋平整向周邊微弧與下層口沿吻合。圈足底。底內飾淡青釉，有青花楷書「大清康熙年製」六字。胎質細膩呈白色，為糯米胎。

小巧玲瓏文素為歷代皇帝如明永樂、宣德帝及其後多位帝皇和士大夫所鍾愛。明各朝官窯瓷均有變化前朝器型的各種新創樣式器物。降及清代，印泥盒製作已臻完美。清康熙朝時印泥盒以不同物料樣式製造，包括陶瓷，玉石，漆器，琺瑯器等。

這件薄胎印泥盒施以牛血紅釉，反映清宮廷的高尚美學品味。明代小巧的印泥盒多以有機物料製作，造工精良，簡單純樸，與道家和新理學崇尚天人合一，順應天道的理念。

類似印泥盒，如北京故宮博物院⁽¹⁾、上海博物館⁽²⁾、美國大都會藝術博物館⁽³⁾均有收藏；2012年11月5日佳士得拍出一件豇豆紅印泥盒(號290)亦可資參攷。

註 Notes:

(1) Illustrated in *Qing Porcelain of Kangxi, Yongzheng and Qianlong Periods from the Palace Museum Collection*, Hong Kong, 1989, p. 141, col. pl. 124

(2) Illustrated in *Kangxi Porcelain Ware from the Shanghai Museum Collection*, Hong Kong, 1998, p. 321, pl. 207-1

(3) Illustrated by S. Valenstein, *A Handbook of Chinese Ceramics*, New York, 1975, pl. 237

The ovoid body rising from a circular foot towards a rounded top, fired in two identical segments (lid and base) with slight curved lid fitting the body, the mouth of each segment is unglazed with whitish strip textures, applied with a smooth and deep monochrome oxblood red glaze, six-character reign mark in regular script in underglaze blue on base in a double-circle. The seal paste box is finely potted with white biscuit and the base is glazed in light green.

Important objects like seal-box from the early Ming dynasty that appears to have been appreciated by both the Yongle and Xuande (1426-35) emperors could pass from emperor to emperor. New imperial artefacts would be produced in virtually every Ming reign, the new emperors typically relegated wares of their predecessors to storage. When it came to Qing dynasty, the seal-paste box came into a fully matured stage. During Kangxi period, the styles and materials of seal-paste box appeared in large varieties including jade, porcelain, cinnabar lacquer, cloisonné-enamel and stones.

This exquisite box, with its thinly potted body and brilliant oxblood-red glaze, is testament to the aesthetic refinement of the early Qing court. Small boxes for storing seal paste were often made in the preceding Ming dynasty from organic materials; standing as symbols of simplicity and a life lived in tune with nature, concepts at the center of Daoist and Neo-Confucian philosophy.

Compare this lot with similar seal-paste boxes in museum collections, including one in the Palace Museum, Beijing⁽¹⁾, one in the Shanghai Museum⁽²⁾ and one in the Metropolitan Museum of Art, New York⁽³⁾. Additionally, a similar peach-bloom-glaze seal box was sold at Christie's, 5th November 2012, lot 290.



1044

A BLUE AND WHITE COVERED BOWL WITH DRAGON DESIGN
Qing Dynasty Yongzheng Period (1723-1735)

Provenance

Sold at Royale's Hong Kong, 27 November 2017, lot 258

H: 8.8 cm D of mouth: 12.8 cm D of base: 6.2 cm

Appraised Value (評估價格): HK\$500,000

清 雍正 青花龍紋蓋碗

高: 8.8厘米 口徑: 12.8厘米 底徑: 6.2厘米

來源

香港皇廷拍賣, 2017年11月27日, 編號: 258



此碗為碗蓋合一的茶具。蓋上紐為一凸起的圈紐，圈口微敞，紐內平底，內有小雙圈，圈內飾花葉紋。蓋邊與碗口平沿扣合，碗口設二層臺，內圈口徑與蓋外徑相符，使之扣合嚴密。蓋飾青花蝙蝠紋，蓋邊飾回紋一周。

碗深腹圓底。碗外壁口沿之下有回紋一周。回紋下為祥雲間遊龍爭珠紋，龍為五爪，蒼勁有力。近底處飾水波紋。碗內底部有青花金剛杵紋。圈足平底。底內施淺藍釉，中有「大清雍正年製」青花六字篆書款。

在清雍正年間，茗飲盛行使用蓋碗以保溫及茶香。此蓋碗造型規整造型規整，全器施青花釉，濃淡相宜，畫工精湛，為清雍正朝茶具精品。

This set of tea ware comprises the bowl and cover. The finely-potted body rising from a raised circular foot with an unglazed base, deep belly culminating in a flared rim with no lip, the wide cover has a knob, the interior of which is decorated with double rings and floral and leaf patterns, and tapering to a truncated thick neck rising to a lipped rim, applied with blue and white glaze, the cover featuring three repeating bands of motif, the first a set of floral medallions encircling the neck, the second a series of swirling clouds and bats, the third a band of key-fret patterns near the rim. The bowl featuring a border of key-fret patterns with a beautifully-painted series of five-clawed serpentine dragons with fierce facial features, pointed scales, and an array of streamers, in the pursuit of the flaming pearl, surrounded by swirling bat-shaped clouds, beneath and bordered by a motif of key-fret near the rim and detailed waves lappets near the foot, and the interior center of the bowl is decorated with emblem of vajra. Six-character mark in seal script in underglaze blue inside the base.

In the Yongzheng period of the Qing dynasty, the practice of tea drinking often used covered bowls which could keep tea warm and its fragrance. This covered bowl is refined potted with underglaze blue decorations painted in an elegant and fluent style, representing a fine tea ware of the time.



1045

A BLUE AND WHITE FLORAL FACETED VASE
Qing Dynasty Yongzheng Period (1723-1735)

Provenance

Sold at Royale 's Hong Kong , 27 November 2017, lot 260

H: 17.5 cm

Appraised Value (評估價格) : HK\$1,000,000

清 雍正 青花牽牛花紋倭角雙耳瓶

高： 17.5厘米

來源

香港皇廷拍賣，2017年11月27日，編號： 260

此瓶唇口，直長頸，頸兩側獸頭半環耳，腹部四方倭角，喇叭狀高圈足。通體白釉青花，口沿下飾回紋，頸部繪如意雲頭和纏枝喇叭花，腹部飾纏枝喇叭花，底青花雙圈內署“大清雍正年製”雙行楷書款。牽牛花，是宣德時期常用的紋飾。此瓶造型系模仿西亞伊斯蘭國家金屬器。瓶腹倭角處過度自然，器足內呈臺階式，這種將外撇形高圈足的內部做成臺階式是宣德時期的一個特徵。此種倭角瓶在明晚期和清雍正時多有仿製。

The lobed body rising from a splayed circular base with a raised foot, tapering to a thick, cylindrical neck and rising to a thick, lipped rim, featuring two handles carved in the shape of demonic dragon heads with bulging eyes and sharp fangs, applied with blue and white glaze featuring five rows of decoration, the topmost panel below the rim adorned with two repeating bands of key-fret border and ruyi-lappets, the neck adorned with painted faceted floral panels within clover-shaped medallions, the body applied with a repeating motif of morning glory flowers interspersed among leaves and tendrils, the foot featuring ruyi-shaped medallions with floral motifs, Yongzheng seal mark in underglaze blue with a double-circle on base.

The Yongzheng Emperor's court favored Ming Dynasty ceramic shapes, such as this piece, but it is likely the shape originally came from metalwork. This could be a combination of three factors: the first being gu ware, ancient Chinese ritual vessels with trumpeting rims that, over time, became both sturdier and more nuanced; second, Middle-Eastern bronzework, best manifested in the earlier Yuan Dynasty David Vases of the Percival David Collection, British Museum; or third, inspired by Yuan and Ming representations of metalwork, which were typically copies of ancient bronzework or Sassanid Persian trade goods from the Tang Dynasty (618 – 910 AD). Any number of these factors may have aided in the shaping of this piece, and others, as a near-exact copy was auctioned and sold by Sotheby's Hong Kong in October 2012 (Lot 3082, Auction 0399).



1046

A *FAMILLE ROSE* BAMBOO-NECK Mallet Vase with
Gnarled Branches and Peach Blossoms
Yongzheng Mark and Period (1722 - 1735 AD)

Provenance
A private Hong Kong collector

H:35cm D of mouth:7.6cm D of base:9.5 cm

Appraised Value (評估價格) : HK\$1,600,000

大清雍正年制款 粉彩折枝桃花盤口竹節瓶

高：35厘米 口徑：7.6厘米 底徑：9.5厘米

來源
香港私人收藏



此器盤口，長頸，豐肩，鼓腹，腹下漸收，圈足。足內青花雙圈“大清雍正年製”楷書款。整器凸起弦紋六道，形似竹節，稱竹節瓶。

全器無多餘圖案，通景為粉彩折枝桃花圖。以粉彩繪一株蒼茂桃樹，其枝幹虬錯矯健，蜿蜒而生，時而乍然轉折，却總與瓶形相得益彰。以精湛的工筆雅繪桃花盛開，以細筆淡墨勾勒花蕊及花苞，形態端莊秀雅，充分表現畫家功力。

雍正御瓷的桃紋，描繪入微，飽滿瑩潤，枝葉繁茂，經脈畢現。每朵桃花均用極細的深色綫勾勒輪廓，既層次分明，又無損花瓣之嬌美。花瓣本身的顏色粉中泛黃，向花蕊處的漸變深淺有致，纖細的花蕊用蛋黃料彩厚塗而成。桃花盛開，比擬靈芝仙物，更添慶賀之意。

The vase, 35cm in height, is robustly-potted, swells from a splayed circular base and tapers sharply towards a long, cylindrical neck accentuated with raised fillets resembling bamboo nodes, culminating in a thick, flaring rim, with a slight lip, six-character reign mark on the base in underglaze blue in a double-circle, the exterior painted in a famille rose palette without repeating bands of decoration on a white background, with the thick, gnarled branches of a peach tree snaking upward encircling the vessel painted in light and dark brown pastels, adorned with lustrous blooming peach blossoms with lush branches and leaves painted in yellowish white with egg-yolk at the edges of the petals, the design outlined with thin dark lines.

The Yongzheng Period marks the beginning of a period of unprecedented ceramic experimentation, which continued well into the Qianlong Period (1735-1796 CE), where ancient Song Dynasty (918-1279 CE) forms and monochrome glaze production techniques were resurrected (in a reverence of tradition known as *fang gu*, or “copying the ancients”). It is likely that the form of this piece is a product of that experimentation, as the form of the vase’s neck appears in imitation of Longquan-produced “bamboo neck” vases, while the rim takes inspiration from ancient Chinese bronzework. As *fang gu* was often confined to direct replicas of Song pieces, the use of this form beneath a famille rose motif is exceptionally rare.

Peaches are perhaps China’s most auspicious fruit, having a long tradition as omens of longevity and harbingers of happiness, and flowering peach branches are believed to ward off evil. Peach trees on ceramics had been introduced once during the reign of the Kangxi Emperor (1654 – 1722 CE), painted on a metal-bodied vase on display in the Beijing Palace collection. It is thought that the first peach and peach blossom motifs took place under the auspices of the Yongzheng Emperor’s trusted official Tang Ying (1682-1756 CE), who supervised the imperial kilns at Jingdezhen after 1726 CE. Contrasted against the dark brown of the gnarled branches on this vase, the soft coloration of flowering peach blossoms seemed custom-made for the famille rose palette, its wide range of pastel shades such as egg-yolk and light green shown more elegantly over the pale white porcelain. The production of famille rose in fact overtook blue and white porcelain, in the mid-18th century. Famille rose remained popular throughout the 18th and the 19th centuries and continued to be made in the 20th century. The quality of wares produced however declined after the Qianlong period, which along with Yongzheng is considered the apogee of famille rose production from Jingdezhen.

The combination of form and design is rare within Chinese ceramics, with almost no examples having survived. A floral famille rose vase within similar form and “bamboo” neck was sold at Sotheby’s, Imperial Sale; Important Chinese Ceramics and Works of Art, Lot 3123, 29 May 2013.



1047

A *DOUCAI* BOWL WITH FLORAL PANELS (A PAIR)
Yongzheng Mark and Period (1723-1735 AD)

Provenance
A private Hong Kong collector

H:5cm D of mouth:10.4cm D of base:4.8 cm

Appraised Value (評估價格) : HK\$1,800,000

清 雍正 斗彩團花紋碗 (一對)

高: 5厘米 口徑: 10.4厘米 底徑: 4.8厘米

來源
香港私人收藏



此碗胎體輕薄，釉質瑩潤。外壁以斗彩加飾粉彩繪團花紋四組，間飾仰俯勾蓮紋。團花由四季色花卉構成，花葉勾繪細膩，色彩艷麗，為雍正官窑精品，傳世少見，彌足珍貴。外底青花“大清雍正年製”六字雙行楷書款。

雍正帝胤禛被視為最具藝術品味的皇帝，在位雖僅有十三年，却素以精巧淡雅清新脫俗著稱，影響深遠。其時極為推崇成化朝斗彩，其斗彩花卉亦冠絕一時，由宮廷畫師為之畫稿，交與御窑廠畫工能手臨摹而成，故其花卉圖頗饒書卷之氣。在傳統的斗彩呈色中增加了金紅，并在斗彩中融入了粉彩的渲染技法，不僅增加了色彩，而且打破了成化斗彩一件衣、花朵無陰陽向背的特點。此斗彩團花碗即為典型的雍正朝器物。

The delicately-potted body rising from a raised circular foot with a single band of underglaze blue towards an everted rim with a slight lip, applied in a rustic doucai palette with medallions of purple, blue, and yellow sunflowers amongst a leafy background with fiery red chrysanthemum blossoms, a similar scene painted as a panel in the circular base of the interior of the cup, each medallion wreathed with a thin lingzhi, six-character reign mark in underglaze blue in a double circle on base.

During the Yongzheng Period, the imperial kilns at Jingdezhen saw a renaissance of Chenghua-style doucai wares under imperial period, and exquisite vessels such as the present bowl were produced. With broad and deep curving sides atop a narrow, slightly inward tapering foot, the shape of this bowl creates a greater sense of finesse, conforming perfectly to the exact standards and aesthetic taste of the Yongzheng Emperor, who during his brief reign personally influenced the artistic direction of the imperial kilns. In close collaboration with the celebrated kiln administrator Tang Ying (1682-1756), the Yongzheng Period came to represent an unsurpassed standard of quality, aesthetically subtle and refined. The outlines of the design above are rendered with a very fine brush in a clear, soft blue, and the enamel colours are used with delicacy and restraint. Such porcelain became known as the “Inner Court Manner”, and was superseded by the comparatively complicated and crowded designs of the Qianlong (1735-1796) and Jiaqing (1796-1820) Emperors.

The sunflower within Chinese culture is an auspicious symbol of longevity and good luck; gifting sunflowers is also considered as an auspicious gesture. The yellow colour symbolizes vitality and an abundance of intelligence, as well as happiness. Similar to the lingzhi, sunflower seeds were consumed as snacks by the Chinese royalty as a desire to achieve immortality.

A slightly larger bowl with a near-identical pattern of floral medallions among lingzhi was sold at Sotheby's, Important Chinese Ceramics and Works of Art, Lot 2196, 28 November 2012. Compare the lingzhi design with a doucai bowl 'floral' bowl held in the Art Institute of Chicago. Compare also a doucai double-lotus bowl sold at Bonham's, Fine Chinese Ceramics and Works of Art, Lot 73, 27 November 2018.



1048

A BLUE AND WHITE DISH DEPICTING A BOY RIDING A QILIN
MYTHICAL BEAST

Qing Dynasty Kangxi Mark and Period (1662-1722)

Provenance

A private Hong Kong collection, acquired in 2013 from an antique shop on
Hollywood Road, Hong Kong

H: 4.2 cm D of mouth: 22.9 cm D of base: 14.2 cm

Appraised Value (評估價格) : HK\$300,000

清 康熙 青花童子騎麒麟盤

高：4.2厘米 口徑：22.9厘米 底徑：14.2厘米

來源

香港私人收藏，2013年購藏於香港荷理活道古玩店



此盤寬沿，寬沿上施青花釉一周為地紋，冰裂地紋上飾梅花十八朵，繞盤口一周，三朵為一組，共六組依次環繞排列。盤中紋樣為一童子騎麒麟。麒麟形相威猛如龍。周邊有三童子，狀態各異。麒麟前面一童子手舉風箏，麒麟後面一童子手擎荷葉，麒麟下方有一童子站立，天際祥雲飄渺，寓意童子祝福騎麒麟的好友前程似錦，成為傑出人物。盤外橫繪四枝竹子，二枝為一組，細長飄逸。寓意為四季祝（竹）福。盤底中為青花雙圈紋，雙圈內青花楷書「大清康熙年製」六字。

清代康熙朝瓷業發展至另一高峰，瓷工承傳明萬曆朝(1572 - 1620)外銷瓷的型制紋樣，如此盤中童戲圖及傳教士傳入的瑤瑯彩繪技法，令康熙青花瓷更呈豐姿。景德鎮窯工在晶亮白釉地上描繪呈色豐富的青花紋樣。此外，其他窯場燒製的次等外銷青花瓷更呈示康熙瓷器的多元化風格。

官窯器採用最佳的高嶺土、製作精良，書以年款，避免出現鐵斑或縮釉的毛病，質素幾近完美。康熙青花瓷器常以道家或佛教題材為飾。此盤上麒麟為神獸，具備龍、虎、馬、鹿、牛的特徵，寓意送子吉祥、昇官晉爵，亦為仁厚天子或聖人的象徵。2019年10月14日佳士得拍賣一件康熙青花麒麟盤(號16)可資參考。

The body rising from a wide circular foot, applied with a vivid cobalt blue and white glaze palette, the exterior decorated with streaked leafy bamboo stalks in freehand, the interior emblazoned with a vivid landscape scene centered on a boy unstably riding a saddled qilin mythical beast, highlighting the creature's fierce dragon-like face and equine hooves, surrounded by three skipping boys in flowing robes, one boy holding a kite entwined with a ribbon, another holding a lotus leaf and a third standing to watch, all on a grassy knoll with rising trees and branch boughs, adorned with stylized clouds scrolling above, surrounded by an ornate band of prunus blossoms among trapezoidal "crackled" blue glaze, six-character reign mark in regular script in underglaze blue on base with a double-circle. The decorations carry auspicious blessings with boys riding on qilin mythical beast symbolizing rise to officialdom in future, whereas bamboos represent peace all over the year.

The reign of the Kangxi Emperor marked a period of unprecedented innovation within the manufacture of Chinese ceramics. Combining traditional techniques of blue and white, export ware manufacturing developed during the reign of the Wanli Emperor, Ming dynasty (1572 - 1620), for example the child figures on this piece, and new techniques of cloisonne enamel painting imported by European Christian missionaries, Kangxi blue and white porcelain features charming and sophisticated designs. The technical brilliance of Jingdezhen potters produced porcelains in a brilliant underglaze cobalt blue for painting beneath a white slightly bluish silky glaze applied to a fine white kaolin body. That said, the number of poorly-made export wares produced during this period at dozen of kilns across Jingdezhen sometimes leads to Kangxi porcelain having a reputation for variable quality.

Imperial porcelain, however, was finely marked, potted from the highest quality clay, and potted near-perfectly to ensure very few, if not any, iron spots or other imperfections in the glaze. Designs on domestic Kangxi blue and white wares were often based on Buddhist or Daoist themes as well as Chinese traditional mythology. The qilin mythical beast on this dish, which forms the focal image of the exterior's design, is a chimerical creature with features of a dragon, horse, deer, tiger, and ox, and is symbolic of good luck and prosperity which signals rise in officialdom and benevolent emperor or sagely scholar. Compare a similar Kangxi-era depiction of a qilin mythical beast on a blue-and-white dish sold at Christie's, 14th October 2019, lot 16.



1049

**A DOUCAI BOTTLE VASE (DU PING) WITH FLORAL PATTERNS
Qianlong Mark and Period (1735-1796 AD)**

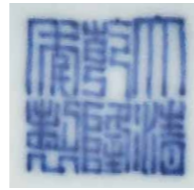
Provenance
A private Hong Kong collector

H:15.6cm D of mouth:3.8cm D of base:6.5cm

Appraised Value (評估價格): HK\$1,500,000

清 乾隆 斗彩纏枝花卉紋雙耳扁肚瓶
高: 15.6厘米 口徑: 3.8厘米 底徑: 6.5厘米

來源
香港私人收藏



此瓶撇口，長頸，扁圓腹，圈足。夔龍耳，底書青花“大清乾隆年製”六字篆書款，款識工整，工致端莊。

通景斗彩纏枝花卉紋，其花鮮葉綠，枝纏葉繞，連綿不絕，五彩斑斕。整器紋樣線條流暢，描繪細膩，填色準確，層次分明，用色極為豐富，令人過目不忘。所繪枝葉纏枝方式略帶西洋風格，器身卷葉紋仿若羽毛尖的花瓣紋，使其華麗的外表更添一份異國風情。細白瓷上，以豐富多色之釉上彩，巧繪盛放繁花，仿古蝙蝠，層次豐富的彩彩，精細描繪而成，精細入神。

乾隆御窯斗彩器可視為皇帝本人藝術品位的反應，乾隆時期的斗彩瓷器一改雍正時期靈秀典雅的風格，而傾向追求製作工藝精細，紋飾華麗繁縟。不僅在造型方面趨於多樣化，在設色用彩等裝飾工藝上更有獨特的表現。燒造裝飾之華麗，令人讚歎，無一不體現出乾隆時期高超的製瓷技藝，堪稱巧奪天工。此類品種，均存世稀少，加之本身燒造難度較大，堪稱珍罕。

The compressed globular onion-shaped body rises from a raised circular foot, sweeping up to a long cylindrical thick neck with two kuilong handles reminiscent of ancient Chinese bronzework, culminating in a slightly everted lipped mouth, the bulbously body decorated with lotus flowers interspersed by ruyi heads suspended from further lotus scrolls amidst meandering foliate designs, painted in a vivid doucai palette of blue, light green, dark green, yellow, red, and orange featuring a floral pattern of richly layered intertwined branches and tendrils centered on floral medallions of lotus blossoms, complete with bats and other auspicious symbols, the foot and mouth painted in monochrome ground gold, kaishu reign mark in underglaze blue on base.

As early as the Xuande Period (1426 – 1435 CE), Chinese porcelains were decorated using a technique called doucai. As a decorative technique, doucai was both difficult and expensive. After throwing and drying the vessel, fine underglaze cobalt blue outlines were painted onto the unfired body. As the cobalt immediately soaked into the unfired clay, no mistakes could be rectified, and the vessel was subsequently given a transparent porcelain glaze and fired. After the fired piece had cooled, overglaze enamel colours were carefully applied within the underglaze blue outlines and the piece was fired again at a lower temperature. As each firing would have produced some failures, it would have been an expensive undertaking to create vessels which met the high imperial standards.

The most notable doucai pieces come from the reign of the Chonghua Emperor (r. 1464-1487 AD), and were highly coveted as early as the Wanli Period (1573-1619 AD), when they regained popularity. A renaissance of doucai ceramic decoration occurred again during the Yongzheng Period (1723-1735 AD), which continued well into the Republican Period (1912-1949 AD) with little innovation after the end of the 18th century. The diversity of forms manufactured at Jingdezhen allowed for replication of ancient bronze forms, as well as metalwork, to continue within ceramic manufacture well into the Qing Dynasty (1644 – 1911 CE) – this is reflected in the handles of the figure.

The Qianlong emperor's preference for auspicious and novel designs is evident in the imperial wares of his reign, which frequently combined elements of various traditional motifs and formal elements to form innovative designs. The striking design of lotus medallions and leafy scrolls also incorporates a series of ruyi motifs based on the form of a lingzhifungus, as well as stylized bats on the neck and shoulder. The ruyi, based on the form of the lingzhifungus, indicates a wish for 'everything as you wish' and was a popular motif for imperial birthdays.

Compare a similar Qianlong era doucai vase sold at Sotheby's Hong Kong, Fine Chinese Ceramics and Works of Art, Lot 1818, 07 April 2010. Of similar design yet far larger, compare a rare and important doucaivase from the Munson-Williams Proctor Art Institute sold to benefit the Helen Munson Williams Acquisition Fund at Sotheby's Hong Kong, Important Chinese Ceramics and Works of Art, Lot 2863, 30 May 2022. Finally, see a doucaibottle vase sold at Christie's London, Fine Chinese Ceramics and Works of Art, Lot 288, 10 May 2022.

1050

FLASK WITH FOUR LOOPS IN UNDERGLAZE BLUE
DECORATED WITH DESIGN OF CHILDREN PLAYING IN A
GARDEN IN PANELS IN FENCAI/ENAMELS
Qing Dynasty Mark and period of Qianlong (1736 - 1795)

Provenance
A private Hong Kong collector

H : 24.3 cm D of mouth : 4.3 cm D: 8 cm (h) x 4.2 cm (w)

Appraised Value (評估價格) : HK\$1,000,000

清 乾隆 青花開光粉彩庭院嬰戲圖四繫扁壺
高：24.3厘米 口徑：4.3厘米 底徑：長8 x寬4.2厘米

來源
香港私人收藏



盤口，短真頸，扁圓形腹，長方形圈足，圈足外撇，腹部兩側上下配有穿帶四繫。頸部、腹部兩側及足牆飾落地花卉紋，兩面開光兩處施粉彩庭院嬰戲圖。足內署「大清乾隆年製」青花篆書六字一行款。

此壺的粉彩紋飾濃筆豔抹，富麗繁褥。所繪場景描繪孩童在庭園舞劍、持燈、吹喇叭、捉蝶的熱鬧場面，反映了中國傳統社會視為頭等大事的主題——即百子千孫，萬世昌盛，福樂滿堂。這類以童子為題的題材又稱「百子圖」或「童戲圖」，為明清兩代流行的吉祥紋樣，也反映了儒家強調傳宗接代，修身出仕、侍奉父母的觀念。紋飾以粉紅、藍、綠、黃等粉彩描畫，筆觸細膩，色澤艷麗。「粉彩」又稱洋彩，是雍正(1723 - 1735)、乾隆朝創燒的彩瓷。在燒好的胎釉上施含砷物的粉底，塗上顏料後用筆化開，產生深淺變化多端，精雅妍巧的色彩效果，有如繪畫。

此壺胎質細膩、紋飾生動，而且題材深具中國傳統文化的特色，更體現了乾隆皇帝崇尚奢華和民間題材的審美意趣，為典型的官窯精品。

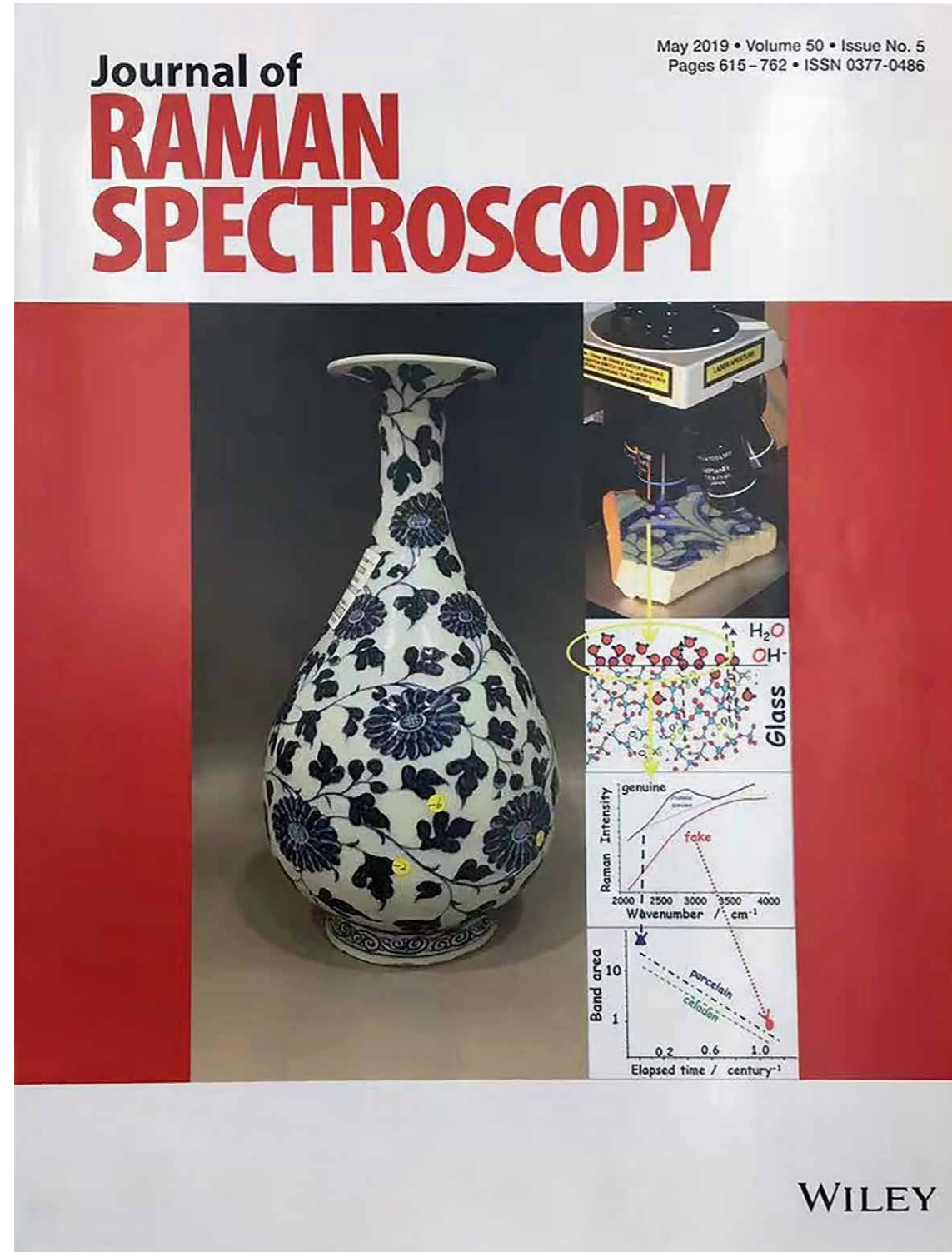


The flask has a wide mouth, short straight neck, flat round belly, rectangular and flared ring foot. Four loops are on the upper and lower, right and left sides of the flask. The neck, the two sides of the belly and wall of the ring foot are decorated with floral patterns. Panels decorated with children playing in a garden in fencai enamels are reserved on both sides of the flask. Inside the foot is a six-character mark of Qianlong in seal script in one row in underglaze blue.

Decorative designs on this flask are painted with fencai enamels in a luxuriant and exquisite style. The busy and amusing scene depicting children playing with sword, lantern and trumpet and catching butterflies are vividly rendered. This joyful scene as a decorative motif is cherished in the traditional Chinese society, reflecting people's wish for having hundreds and thousands of offspring, which are signs of prosperity and happiness which are of utmost importance. Such motif of children playing is called "hundred children-at-play" or "Hundred children", which were popular and auspicious motifs in the Ming and Qing dynasties. It also reflects the Confucius values of sustaining posterity, cultivating oneself to enter officialdom and serving the parents life for long.

Decorated with fencai enamels in pink, blue, green and yellow, the pictorial rendering is refined and the colours are luxuriant and brilliant. Fencai enamels are also called yangcai enamels (foreign colour enamels) which is a new type of enamel painting style on porcelain wares first produced in the Yongzheng (1723 - 1735) and Qianlong periods. The base colours that contain potassium are applied on the glaze on the fired biscuit, then painted with colour ingredients and further diluted with water, to create explicit variations in dark and light colours tones with charming and subtle aesthetic appeal similar to painting.

This flask is refine with pictorial decorations vividly rendered, at the same time also reflect the distinctive of traditional Chinese value and the pursuit of luxuriance of emperor Qianlong and the aesthetic taste of laymen, and is a representative piece produced by the imperial kiln.



The Raman signature of protonic species as a potential tool for dating or authentication of glazed pottery 釉陶定年或鉴定潜在工具——质子物质的拉曼信号

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Abstract

摘要

In this study, the potential of Raman spectroscopy is discussed for the comparative dating or authentication of glazed pottery based on the Raman signature of protonic species incorporated in the glazes due to the corrosion processes as a function of time, chemical composition, and environmental conditions. According to the literature and analyses on a reference set of glass samples that had previously been subjected to heavy corrosion in laboratory conditions and extensively studied by Infrared spectroscopy, the accumulation of protonic species such as water and hydroxyl groups on the surface of glassy silicates gives rise to a specific Raman signature in the 2,000–3,800 cm⁻¹ range. The relative intensity of this Raman signature is mainly considered to act as a means of discriminating between old and modern artefacts. In order to check this hypothesis, glazed pottery with different origins (Chinese and Vietnamese stoneware or celadons, blue - and - white and painted enamelled porcelains, Islamic *terra cotta*) and different chemical compositions or processing conditions from a wide time span (~1000 to the present) were analysed by Raman microspectroscopy. Further comparative data was obtained by modifying the experimental parameters such as laser wavelength, objective magnification, and confocal hole. The results showed that Raman intensity of the protonic species shows a correlation with age for lead free glazed pottery in the case of celadons and porcelains. The intensity strongly depends on the chemical composition of the glaze as well as the preservation conditions to a certain degree.

本文基于釉料中质子物质的拉曼信号, 讨论了采用拉曼光谱技术对釉陶进行比较定年和鉴定的潜力, 认为釉中质子物质的拉曼信号的腐蚀过程随时间、化学成分和环境条件的变化而变化。根据文献资料、对一组参照玻璃样品(先前已在实验室条件下遭受严重腐蚀)的分析及通过红外光谱法进行的广泛研究可以得知, 质子物质(例如水和羟基)在玻璃硅酸盐表面的积累在2,000-3,800cm⁻¹范围内会产生特定的拉曼信号。大体上, 这种拉曼信号的相对强度被视为是鉴别古代和现代手工艺品的一种方法。为了验证这一假说, 采用显微拉曼光谱技术对较长时间跨度内(~1000年至今)源自不同产地(中国和越南的炆瓷或青瓷、青花瓷和珐琅彩瓷、伊斯兰陶瓷), 具有不同化学成分或加工条件的釉陶进行了拉曼光谱分析。通过修改诸如激光波长、物镜放大倍率和共聚焦孔等实验参数获得进一步的比较数据。结果表明, 在青瓷和陶瓷中, 无铅釉陶质子物质的拉曼光谱强度与年代有关。其强度很大程度上取决于釉料的化学成分及保存条件。

KEYWORDS

关键词

authentication, dating, glass corrosion, glazed pottery, water
鉴定, 定年, 玻璃腐蚀, 釉陶, 水

1 | INTRODUCTION

引言

Dating of ancient artefacts, especially the ones with inorganic composition (no carbon), has always been a focal point in archaeological and art historical studies, which consequently led to the development of several scientific methods for dating in the 20th century. Among these artefacts of inorganic origin, objects made of glassy silicates (natural and synthetic glasses, pottery glazes, enamels, etc.) have been one of the major interests in dating research for the last decades.

古代手工艺品, 特别是无机成分(不含碳)的定年一直是考古学和艺术史研究的重点, 并由此推动了20世纪几种科学定年方法的发展。在这些无机成因的手工艺品中, 玻璃硅酸盐

制品(天然和合成玻璃、陶瓷釉料、搪瓷等)在过去几十年里一直是定年研究的主要关注对象之一。

Given the fact that all glassy objects corrode in the course of time as a function of their chemical composition and environmental conditions, attempts have been made to date archaeological glasses on the basis of measuring the thickness of their corrosion layers formed as a function of time.^[1] In terms of glass corrosion, it has been known for a very long time that the most important factor is the presence of (acidic) water in the environment.^[2-6]

鉴于所有玻璃质物体在其化学成分和环境条件的作用下都会随着时间的推移而遭受腐蚀的事实, 因此, 在测量其随时间变化而形成的腐蚀层厚度的基础上, 人们已尝试确定考古玻璃的年代。^[1] 就玻璃腐蚀而言, 众所周知, 最重要的因素是环境中(酸性)水的存在。^[2-6]

In that case, protonic species primarily tend to replace the alkali ions such as K⁺, Na⁺, Li⁺, and Mg²⁺ in the glass network by their hydrogen ions (H⁺ and/or H₃O⁺) on the basis of an inter- diffusion process. The hydrogen ions, namely, the protons therefore cause the diffusion of these network modifiers out of the glass network, breaking some of the Si–O–Si links. This process also has mechanical effects on the glass due to the changes in the microstructure as a result of stress in the form of defects (microcracks and voids),^[2,4,7,8] and it is expected that the number of these defects will be increased as a function of time and hence the reactivity of the glass is enhanced. The thickness of the so - called corroded layer will thus increase in a nonlinear way, leading to the possibility of dating or authentication of old artefacts.

在这种情况下，质子物质主要倾向于通过相互扩散过程中产生的氢离子（H⁺和/或 H₃O⁺）取代玻璃网络中的碱性离子，例如 K⁺、Na⁺、Li⁺ 和 Mg²⁺。因此，氢离子（即质子）会导致这些网络修饰体从玻璃网络中扩散出去，断开一些 Si–O–Si键。由于以缺陷（微裂纹和空隙）形式存在的应力导致微观结构发生变化，因此该过程对玻璃也有机械影响。^[2,4,7,8]预计随着时间的推移，这些缺陷的数量会有所增加，从而增强玻璃的反应性。所谓腐蚀层的厚度因此会以非线性方式增加，从而有可能测定或鉴定古代手工艺品的年代。

Water molecules and hydroxyl groups are also adsorbed inside the (highly porous) corrosion layers as in the case of oxide surfaces^[9–11] to saturate the dangling bonds and hence increases in the specific surface area will increase the amount of water molecules adsorbed.

水分子和羟基也会被吸附在（高孔隙度）腐蚀层中，例如在氧化物表面[9–11]使不饱和键饱和的情况下，因此，比表面积会增加，水分子的吸附量也会随之增加。

All of these species containing protons (including water) that react with glass form bonds at the molecular level by hydrogen bonding (either strong or weak). As a result, glass (and glaze) corrosion induces water, proton, and/or OH⁻ incorporation in the surface region of glassy silicates. This has been clearly demonstrated for potash stained glasses at the millimetre or submillimetre scale, both by Optical and Scanning Electron Microscopy, Thermogravimetry, and by Infrared and Raman spectroscopy.^[7,8] A late study about the very surface analyses of rock crystal objects made up of quartz, a more stable type of silicate than man - made glass, by nuclear techniques also shows the time - dependent penetration of “hydrogen” in this very stable mineral but at the submicron scale.^[12] The uptake of water from the environment as a function of time was also qualitatively observed in ancient obsidian^[13] and quartz^[14] artefacts.

所有这些含有质子的物质（包括水）通过氢键（强或弱）与分子水平的玻璃形成键反应。因此，玻璃（和釉）腐蚀会在玻璃硅酸盐表面区域诱导水、质子和/或 OH⁻ 结合。通过光学和扫描电子显微镜、热重分析以及红外和拉曼光谱技术在毫米或亚毫米级对钾彩色玻璃进行的测定已清楚地证明了这一点。^[7,8] 利用核技术对石英（一种比人造玻璃更稳定的硅酸盐）构成的岩石晶体进行表面分析的最新研究也表明，“氢”在这种非常稳定的矿物中（但在亚微米尺度上）的渗透随着时间的推移而变化。^[12] 在古代黑曜石^[13]和石英^[14]手工艺品中，也定性地观察到从环境中吸收的水分随时间的变化。

Raman microspectroscopy is now a well - established technique for the characterization of covalently bonded compounds as those constituting ceramics and glass. Furthermore, mobile Raman set - up allows the fast identification of crystalline and amorphous phases in a nonintrusive way on - site^[15] and use of the technique has also developed rapidly for the authentication of glass, pottery, and enamelled objects.^[15–18] Raman spectroscopy is an optical technique, which is directly influenced by the optical properties of the materials analysed, such as transparency and colour. Transparency of a glass is very much affected by the presence of defects on the surface as well as some other surface - deposited materials as a result of corrosion processes.^[19]

显微拉曼光谱技术现在是一项用于表征构成陶瓷和玻璃的共价键化合物物的成熟技术。此外，移动式拉曼装置允许在现场以非侵入性的方式快速识别晶相和非晶相^[15]，而且该技术在玻璃、陶瓷和搪瓷制品的鉴定方面也得到了迅速发展。^[15–18] 拉曼光谱技术是一种光学技术，直接受所分析材料的光学性质（如透明度和颜色）影响。由于腐蚀过程，玻璃的透明度受到表面上的缺陷以及一些其他表面沉积物质的严重影响。^[19]

The selection of high magnification microscope objectives allows the specific analysis of the near surface of artefacts. It has been demonstrated that the absolute as - recorded Raman intensity (glass signature) at the surface of rather similar types of glass objects, which were preserved in the same or similar conditions decreases as a function of time and thus can be used for the purpose of comparative dating.^[16,17] The identification of protonic species (water, hydroxyl groups, etc.) in glass can be performed by Raman spectroscopy but better by infrared (strong bands between 2,500 and 3,800 cm⁻¹) and near infrared (overtones and combination bands) absorption or reflexion methods^[17,8,20,21] due to the strong dipolar character of X–H bonds. However, infrared methods require a flat, glossy surface, or a sample preparation procedure in the form of thin samples or powder dispersed in KBr or CsI solid pellets or in Nujol™ or Fluorolube™ mulls, which is destructive and time - consuming. The low intensity of the near infrared signature allows measuring the transmission through thick and optically clear (polished) samples (>mm). However, as a scattering technique, Raman spectroscopy requires no preparation of the sample.^[15,16,19] Preliminary measurements have pointed out the presence of protonic species signature in the Raman spectrum of ancient glazed pottery recorded at the very surface.^[16] Raman signature of the protonic species with weak, more or less broad features obtained in the 2,000–3,800 cm⁻¹ range, and their relative intensity could be used as a potential tool for the discrimination of old and modern artefacts, that is, genuine artefacts and copies or fakes and for the comparison of samples with an unknown age.

高放大倍率显微镜物镜的选择允许对手工艺品的近表面进行特定分析。已经证明，在相同或相似条件下保存的相当相似类型玻璃物体表面上记录的拉曼强度（玻璃特征）绝对值随着时间的推移而降低，因此可用于比较定年。^[16,17] 由于 X-H 键的强偶极特性，玻璃中的质子物质（水、羟基等）可通过拉曼光谱技术进行鉴别，但通过红外（2,500-3,800cm⁻¹之间的强谱带）和近红外（泛频和组合谱带）吸收或反射方法^[7,8,20,21]进行鉴别效果更佳。然而，红外方法要求表面平坦、光滑，或将样品以薄样品或粉末形式制备，分散在KBr或CsI固体颗粒或Nujol™或Fluorolube™研磨机中，这是一种具有破坏性且耗时的样品制备方法。近红外信号的低强度允许测量通过厚且光学透明（抛光）样品（> mm）的透射率。然而，作为一种散射技术，拉曼光谱技术不需要制备样品。^[15,16,19]初步测量指出，在古代釉陶表面记录的拉曼光谱中存在质子物质特征。^[16]在2,000-3,800 cm⁻¹ 范围内获得的具有较弱、较多或较少宽谱带特征的质子物质的拉曼信号及其相对强度可用作鉴别古代和现代手工艺品（即真品和复制品或仿制品），并与年代不详的样品进行比较的潜在工具。

In order to test the potential of this method, we present here a comparison of the Raman signals recorded on 20 glazed pottery of different origins (Chinese and Vietnamese stoneware or celadons, blue - and - white and painted enamelled porcelains, Islamic *terra cottas*) from different time periods (the beginning of the 11th century to the present, including modern fakes). The pottery samples were selected on the basis of their “conservation” history (excavated from soil or from shipwreck) and glaze compositions, hence different chemical resistance towards corrosion: high - melting temperature (T_m) porcelains (feldspar - based glaze), medium T_m stoneware or celadons (calcium - rich glaze) and low T_m *terra cottas* (lead - based glaze). Five different corroded glass pieces previously characterized by Raman, IR, and nIR spectroscopy^[8] were also used as reference for the Raman signatures of the protonic species. The methodological procedure was also discussed with different experimental parameters such as laser wavelength, objective magnification, and confocal hole.

为了测试这种方法的潜力，本文比较了20种不同来源的釉陶（中国和越南的炻瓷或青瓷、青花瓷和珐琅彩瓷、伊斯兰陶瓷）在不同时期（11世纪初期到现在，包括现代仿制品）记录的拉曼信号。由于陶瓷样品是基于其“保存”历史（从土壤或沉船中出土）和釉料成分挑选的，因此这些样品对腐蚀有不同的耐化学性：高熔点（T_m）瓷器（长石釉）、中熔点炻瓷或青瓷（富钙釉）和低熔点瓷釉（铅基釉）。先前通过拉曼光谱、红外光谱和近红外光谱技术^[8]对5种不同的腐蚀玻璃样品进行表征，并以此作为质子物质拉曼信号的参考。还讨论了激光波长、物镜放大倍率、共聚焦孔等不同实验参数对该方法的影响。

2 | EXPERIMENTAL

| 实验

2.1 | Artefacts

| 手工艺品

The pottery samples were selected on the basis of three criteria, such as the age of the artefact, its glaze composition, and the environmental condition of its preservation (soil and sea) in order to be able to test our hypothesis. Thus, the samples belong to different types of glazed pottery coming from different cultures and belong to a wide time span from ca. 11th century up to the present time (fakes are also included, see Table 1). The reference samples were selected from a previous study on naturally (meteoric water) and artificially corroded (with H₂SO₄) pieces of stained glass windows (soda - lime and potash - lime glass), dating to the 13th–19th centuries. They had been obtained from ancient notable cathedrals in France, such as Le Mans and Amiens (Table 2).^[8,22] A total of 25 samples were analysed, each of them at least at two to three spots.

为了验证我们的假设，我们根据手工艺品的年代、釉料成分和保存环境条件（土壤和海洋）三种标准来选择陶瓷样品。因此，这些样品都是较长时间跨度内（约11世纪至今）具有不同文化背景的不同类型的釉陶（也包括仿制品，见表1）。参考样品依据以前对自然（大气水）和人工腐蚀（H₂SO₄）彩色玻璃窗（碱石灰和钾钙玻璃）的研究加以选择，样品年代可追溯到13-19世纪。它们取自法国著名的古代大教堂，如勒芒和亚眠大教堂（表2）。^[8,22]总共分析了25份样品，每份样品至少在两至三个地点进行分析。

The first group of samples consists of porcelains displaying different production techniques and mostly belonging to Chinese origin (Table 1 and Figure 1). The earliest Chinese porcelain samples are dated to the Ming Dynasty (1368–1644) and belong to the blue - and - white group with underglaze blue decoration. The selected samples along with other similar Chinese blue - and - whites have previously been studied (see previous studies^[23–25] and references herein), in particular by Raman microspectroscopy.^[23] The later Chinese porcelain samples belong to the different reigns of the Qing Dynasty (1644–1911) with multicolours and include different groups, such as *wucai*, *Famille Rose*, and *fencai*. These samples display a range of painting techniques with alkali - or earth - alkali - based glazes and lead - based overglaze (yellow, red, etc.) painted decorations. Their detailed descriptions can be found in a very recent study.^[26] The last Chinese porcelain sample is a modern fake of the Ming Dynasty blue - and - white. The other blue - and - white porcelain samples are of Vietnamese origin, dating to the Lê Dynasty from the 15th century that had been the period of commercial expansion of Vietnamese pottery to the world, taking advantage of the Ming embargo of exportation. The Vietnamese porcelain samples are products of the Chu Đâu kilns from the north of Vietnam, which was one of the most important ceramic production centres during the 15th–16th centuries.^[23,27–30] One of the shards had been recovered in the mid - 15th century Cu Lao Cham shipwreck that was found close to the commercial port of Hoi An in central Vietnam.^[29] The excavations of the shipwreck conducted ~80 m undersea in the late 20th century had revealed a great quantity of Vietnamese ceramics.^[27] These glazes have a lime - potash aluminosilicate composition.^[23,27]

第一组样品由展示不同生产工艺的瓷器组成，大部分来自中国（表1和图1）。中国最早的瓷器样品可以追溯到明朝（1368-1644年），属于采用釉里青装饰的青花瓷。先前已对所选样品及其他类似的中国青花瓷进行过研究（见先前的研究^[23–25]和本文的参考文献），特别是采用显微拉曼光谱技术进行了研究。^[23]后续的中国瓷器样品属于清朝（1644-1911年）不同统治时期的瓷器，颜色多样，包括五彩、软彩、粉彩等不同类别。这些样品展示了一系列使用碱或土碱釉和铅基釉（黄色、红色等）彩绘装饰的彩绘技术。其详细描述可在最近开展的一项研究中找到。^[26]最后一件中国瓷器样品是一件明朝青花瓷的现代仿制品。其他的青花瓷样品来自越南，样品年代可以追溯到15世纪的黎王朝，当时越南陶瓷正利用明朝的出口禁令向全世界进行商业扩张。越南瓷器样品出自越南北部的Chu Dau窑，该窑厂是15-16世纪最重要的陶瓷生产中心之一。^[23,27–30]其中一块陶瓷碎片是于15世纪中叶在越南中部港口城市会安附近发现的Cu Lao Cham号沉船中找到的。^[29] 20世纪末，在海底约80米处对该沉船进行挖掘，发现了大量越南陶瓷。^[27]这些釉料含有石灰钾铝硅酸盐成分。^[23,27]

Another category of samples consists of celadons or stoneware with mostly Vietnamese origin (Figures 2 and 3). The ancient Vietnamese samples are dated between the 12th–15th centuries (Ly and Lê Dynasties, Table 1).^[18,27,30] Their glazes have a lime aluminosilicate composition, as in the case of Chinese and Korean celadons.^[24,31] Most of the Vietnamese celadons or stoneware dating to the Ly Dynasty were produced in the Ha Lan kilns, which are situated in the southeast of Hanoi.^[30] The 15th century Vietnamese celadon sample, a product of the Chu Đâu kilns, also comes from the excavation of Cu Lao Cham shipwreck.^[27,29] The modern Vietnamese celadon is a fake, which was produced in the Bat Trang kiln, a famous site always active close to Hanoi. This sample has already been analysed.^[18] Other celadon samples are dated to the Southern Song Dynasty (1127–1279) in China and Goryeo Dynasty (918–1392) in Korea. 另一类样品由青瓷或炻瓷组成，大部分来自越南（图2和图3）。越南的古代样品可以追溯到12-15世纪（李朝和黎朝，表1）。^[18,27,30]他们的釉料含有石灰铝硅酸盐成分，如中国和韩国的青瓷一样。^[24,31]越南青瓷或炻瓷大多可追溯到李朝，产于河内东南部的Ha Lan窑。^[30] 15世纪越南青瓷样品，产自Chu Dau窑，由Cu Lao Cham沉船的挖掘得来。^[27–29]现代的越南青瓷是仿制品，产于Bat Trang窑，此窑是河内附近一直很受欢迎的著名遗址。已对样品进行了分析。^[18]其他青瓷样品可以追溯到中国的南宋（1127-1279）和朝鲜半岛的高丽时期（918-1392）。

The last category of samples includes glazed *terra cottas* from different Islamic production centres, namely, Samarkand (Uzbekistan), Termez (Uzbekistan - Afghanistan border), and Ifriqiya (Tunisia) (Figures 2 and 3).

最后一类样品是来自撒马尔罕（乌兹别克斯坦）、铁尔梅兹（乌兹别克斯坦-阿富汗边境）和Ifriqiya（突尼斯）等不同伊斯兰生产中心的釉陶（图2和3）。

They are mostly dated to the 14th century (Table 1). These samples have a different type of glaze composition from the porcelains and celadons with a considerable amount of PbO with a lower firing temperature (see previous studies^[32,33] and references herein). The Afghan and Tunisian glazes are lead based whereas the Uzbek glaze is of the mixed lead - alkaline type.

它们大多可以追溯到14世纪（表1）。这些样品含有大量氧化铅，不同于瓷器和青瓷的釉料成分，烧制温度较低（见先前的研究^[32–33]和本文的参考文献）。阿富汗和突尼斯的釉料是铅釉，而乌兹别克的釉料是铅碱混合釉。

2.2 | Methodological procedure

| 方法程序

Raman spectroscopy analyses on the glazes of the pottery samples were performed non - invasively using a HR800 LabRam spectrometer (Horiba Scientific Jobin - Yvon) coupled to a BX Olympus microscope equipped with different magnification objectives. Olympus ×100 ultralong working distance objective was used in order to be able to analyse the glaze layers more specifically in reproducible conditions whatever the shape of the pottery. The 457 - nm laser line generated by an Ar⁺ ion laser (Coherent) source was mainly used for the collection of data with the illumination power on the samples of about 6 mW. The blue laser is very efficient in the analysis of glassy materials because it induces strong Raman scattering of the silicates.^[34] The glaze layers of the samples were mostly analysed at two different points regardless of the colour. The maximum total counting time was 75 min, and the accumulations ranged from 3 to 50 to increase the signal - to - noise ratio. Each point was scanned in two different spectral windows, such as ~75 - 2,355 cm⁻¹ for the glass signature and ~2,110 - 4,000 cm⁻¹ for mainly the signature of the protonic species with 600 lines grating.

将HR800 LabRam光谱仪（Horiba Scientific Jobin - Yvon）与具有不同放大倍率的物镜的BX Olympus显微镜连接，对陶瓷样品釉料进行非侵入性拉曼光谱分析。无论陶瓷形状如何，只要具备可复原的条件，使用Olympus×100超长工作距离物镜就能非常具体地分析釉层。主要靠氩离子激光（Coherent）源产生的457 - nm激光线采集数据，其在样品上的照明功率约为6 mW。蓝光对玻璃材料的分析是非常有效的，因为它能引起硅酸盐的强拉曼散射。^[34] 无论颜色如何，只要有两个不同的点就可以分析大多数样品的釉层。最大总计数时间为75分钟，累计次数3到50次，以提高信噪比。每个点都由两个不同的光谱窗口进行扫描，例如玻璃信号为~75 - 2355 cm⁻¹，质子物质信号为~2110 - 4000 cm⁻¹，光栅为600线。

TABLE 1 The list of samples and their detailed description
表1样品列表及其详细描述

Label (Figure) 标签 (图)	Type 类型	Date 日期	Origin 原产地	Remarks (largest dimension, cm) 备注 (最大尺寸, cm)	Figures (Spectrum) 图 (光谱)	References 参考文献
M-b1b (1b)	Blue-and-white porcelain	Ming Dynasty (1368-1644)	China	Feldspar-based glaze (8.5)	8b-top	See similar artefacts in previous studies ¹²³²⁵¹ [261] 见先前研究中的类似手工艺品 ¹²³²⁵¹ [261]
M-b1b (1b)	青花瓷	明朝 (1368-1644)	中国	长石釉 (8.5)	8b-上图	
M-b1c (1c)	Blue-and-white porcelain	Ming Dynasty (1368-1644)		Feldspar-based glaze (10)	8c-top	
M-b1c (1c)	青花瓷	明朝 (1368-1644)		长石釉 (10)	8c-上图	
Q-bl (1g)	Wucui porcelain (blue underglaze; green, red overglaze)	Qing Dynasty (Kangxi reign, 1662-1722)		Alkali-lime feldspar-based glaze with lead-based overglaze (5.5)	8f-top	
Q-bl (1g)	五彩瓷器 (釉下青花; 绿色、红釉上彩)	清朝 (康熙年间, 1662-1722)		碱性石灰长石釉, 铅基釉 (5.5)	8f-上图	
Q-r (1f)	Famille Rose porcelain (blue and green overglaze)	Qing Dynasty (Yongzheng reign, 1723-1735)		feldspar-based glaze with lead-based overglaze (9)	8a-top	
Q-r (1f)	粉彩瓷器 (蓝绿釉上彩)	清朝 (雍正年间, 1723-1735)		长石釉, 铅基釉 (9)	8a-上图	
Q-p (1e)	Painted enamelled porcelain (blue, red, green, and yellow overglaze)	Qing Dynasty (Qianlong reign, 1736-1795)		Lead-based overglaze (9)	8c-top	
Q-p (1e)	珐琅彩瓷 (蓝、红、绿和黄釉上彩)	清朝 (乾隆年间, 1736-1795)		铅基釉 (9)	8c-上图	
F-p (1a)	Blue-and-white porcelain	"Ming Dynasty" fake (21st century)		Feldspar-based glaze (6.5)	8d-top	[18,30] [18,30]
F-p (1a)	青花瓷	"明代"仿制品 (21世纪)		长石釉 (6.5)	8d-上图	
G-cel (3e)	Celadon	Goryeo Dynasty (11th century)	Korea	Lime glaze (10)	7b-bottom	
G-cel (3e)	青瓷	高丽王朝 (11世纪)	韩国	石灰釉 (10)	7b-下图	
Ly-cel 1 (3d)	Celadon	Ly Dynasty (12th-14th century)	Vietnam (Ha Lan kiln)	Lime glaze (5)	7f-bottom	
ly-cel 1 (3d)	青瓷	李朝 (12-14世纪)	越南 (Ha Lan窑)	石灰釉 (5)	7f-下图	
Ly-cel 2 (2d)	Celadon	Ly Dynasty (12th-13th century)		Lime glaze (10)	7c-bottom	
ly-cel 2 (2d)	青瓷	李朝 (12-13世纪)		石灰釉 (10)	7c-下图	
Ly-bo (2c)	Stoneware	Ly Dynasty (12th century)		Lime glaze (6.5)	7a-bottom	
Ly-bo (2c)	炆瓷	李朝 (12世纪)		石灰釉 (6.5)	7a-下图	
S-cel (1d)	Celadon	Southern Song (1127-1279)	China	Lime glaze (4)	7e-bottom	See similar artefacts in Wood ¹³¹¹ 见Wood ¹³¹¹ 中的类似手工艺品 [181] [181]
S-cel (1d)	青瓷	南宋 (1127-1279)	中国	石灰釉 (4)	7e-下图	
F-cel (3f)	Celadon	Fake (21st century)	Vietnam (Bat Trang kiln)	Lime glaze (5)	7g-bottom	
F-cel (3f)	青瓷	仿制品 (21世纪)	越南 (Bat Trang窑)	石灰釉 (5)	7g-下图	
Ly-ti (2e)	Glazed tile or celadon	Ly Dynasty (13th century)	Vietnam	Lime glaze (6.5)	8b-bottom	
Ly-ti (2e)	釉面瓦或青瓷	李朝 (13世纪)	越南	石灰釉 (6.5)	8b-下图	
Le-bw (2a)	Blue-and-white porcelain	Le Dynasty (15th century)	Vietnam Cu Lao Cham	Feldspar-based glaze (3.5)	8a-bottom	
Le-bw (2a)	青花瓷	黎朝 (15世纪)	越南Cu Lao Cham	长石釉 (3.5)	8a-下图	
Le-cel (2b)	Celadon	Le Dynasty (15th century)	shipwreck (Chit Dau kiln)	Lime glaze (5)	8c-bottom	
le-cel (2b)	青瓷	黎朝 (15世纪)	沉船 (Chit Dau窑)	石灰釉 (5)	8c-下图	
Le-bwp (1h)	Blue-and-white porcelain bowl bottom	Le Dynasty (15th century)	Vietnam (Chit Dau kiln)	Feldspar-based glaze (8.5)	8d-bottom	
Le-bwp (1h)	青花瓷碗底	黎朝 (15世纪)	越南 (Chit Dau窑)	长石釉 (8.5)	8d-下图	
T-ti (2f)	Turquoise (blue) glazed terra cotta	Timurid Dynasty (14th-15th century)	Uzbekistan (Samarkand)	Lead-alkaline glaze (9)	7c-top	[321] [321]
T-ti (2f)	青绿色 (蓝色) 釉陶	帖木儿王朝 (14-15世纪)	乌兹别克斯坦 (撒马尔罕)	铅碱釉 (9)	7c-上图	
T-p (3a)	Yellow glazed terra cotta	(14th century)	Afghanistan border (Termez)	Lead-based glaze (7)	7a-top	
T-p (3a)	黄色釉陶	(14世纪)	阿富汗边境 (铁尔梅兹)	铅釉 (7)	7a-上图	
T-b (3b)	Blue glazed terra cotta	(14th century)	Tunisia (Ifriqiya)	Lead-based glaze (10)	7d-top	
T-b (3b)	蓝色釉陶	(14世纪)	突尼斯 (Ifriqiya)	铅釉 (10)	7d-上图	
T-bb (3c)	Blue and brown glazed terra cotta	(14th century)		Lead-based glaze (6)	7b-top	
T-bb (3c)	蓝色和棕色釉陶	(14世纪)		铅釉 (6)	7b-上图	

TABLE 2 The list of reference stained glass samples with artificial corrosion and their detailed description
表2经人工腐蚀的参考彩色玻璃样品的列表及其详细说明

Label 标签	Type (colour) 类型 (颜色)	Date (century) 年代 (世纪)	Origin 原产地	Remarks 备注
LM13b - 2	K - Ca glass (blue)	13th	Le Mans cathedral	
LM13b - 2	钾钙玻璃 (蓝色)	13世纪	勒芒大教堂	
LM13 - 15b - 1	K - Ca glass (blue)	ca. 13th to 15th		Annealed at 600 °C
LM13 - 15b - 1	钾钙玻璃 (蓝色)	约13-15世纪		在600°C下退火
AM19b - 1	Na - Ca glass (blue)	19th 19th	Amiens cathedral	
AM19b - 2	钠钙玻璃 (蓝色)	19世纪 19世纪	亚眠大教堂	K ⁺ ion exchanged
AM19b - 1				k ⁺ 离子交换
AM19b - 2				
AM13y	K - Ca glass (yellow)	13th		
AM13y	钾钙玻璃 (黄色)	13世纪		



FIGURE 1 Chinese (a: F - p; b: M - blb; c: M - blc; d: S - cel; e: Q - p; f: Q - r; g: Q - bl) and Vietnamese (h: Lê - bwp) porcelains and celadon (see Table 1 for details) [Colour figure can be viewed at wileyonlinelibrary.com]
图1中国(a:F - p; b:M - blb; c:M - blc; d:S - cel; e:Q - p; f:Q - r; g:Q - bl)和越南(h:Lê - bwp)的瓷器和青瓷 (详见表1) [彩图请浏览wileyonlinelibrary.com]

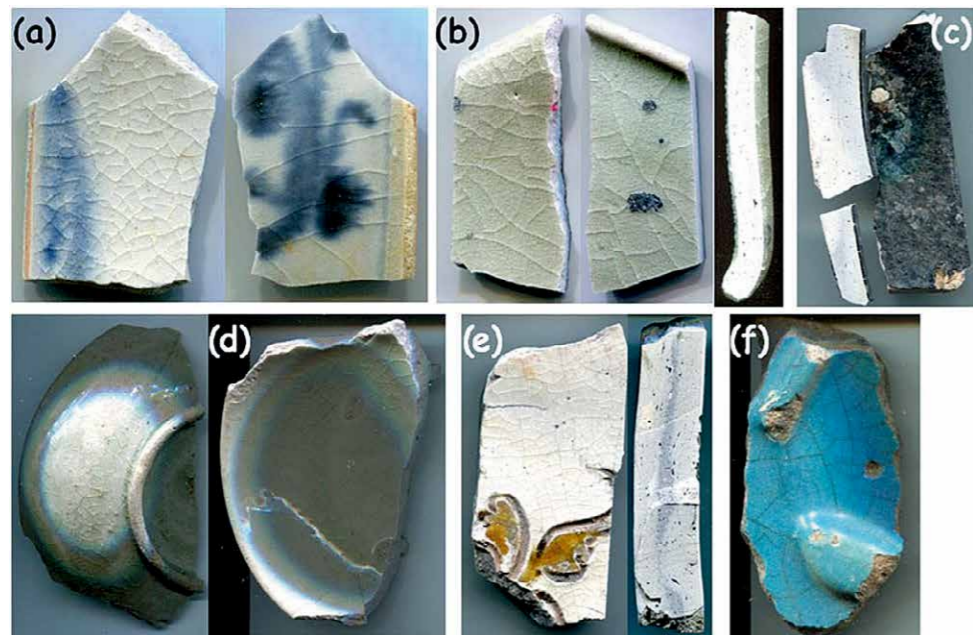


FIGURE 2 Vietnamese pottery (a: Lê - bw; b: Lê - cel; c: Ly - Bo; d: Ly - cel 2; e: Ly - ti) and glazed *terra cotta* from Samarkand (f: T - ti; see Table 1 for details) [Colour figure can be viewed at wileyonlinelibrary.com]

图2越南陶器(a:Lê - bw; b:Lê - cel; c:Ly - Bo; d:Ly - cel 2; e:Ly - ti)和撒马尔罕的釉陶(f:T - ti; 详见表1) [彩图请浏览wileyonlinelibrary.com]

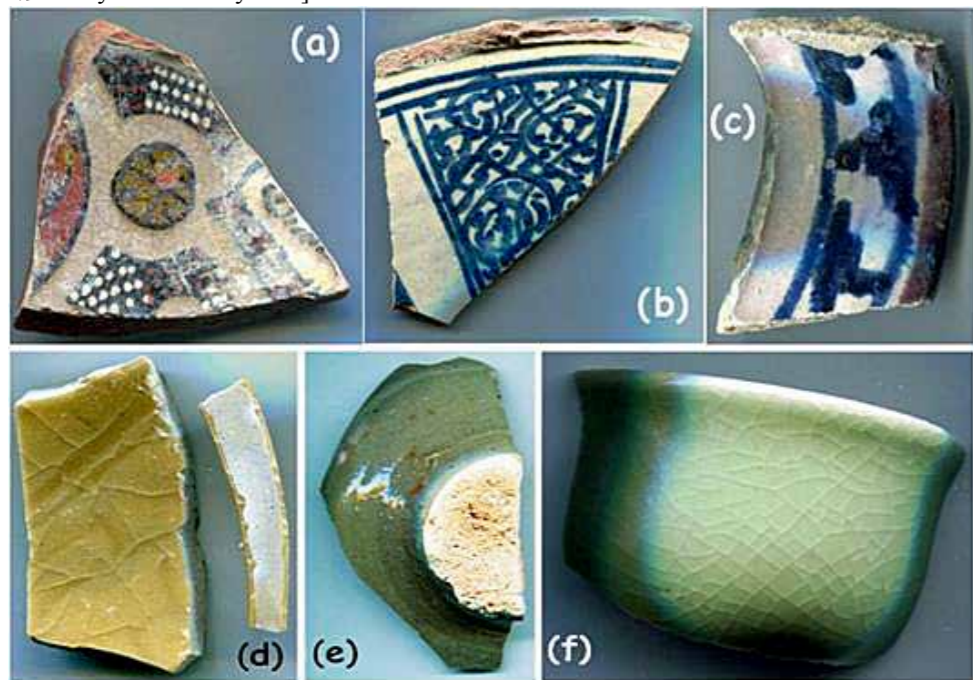


FIGURE 3 Glazed *terra cottas* from Termez (a: T - p) and Ifriqiya (b: T - bb; c: T - bb), Vietnamese (d: Ly - cel 1; f: F - cel), and Korean (e: G - cel) celadons (see Table 1 for details) [Colour figure can be viewed at wileyonlinelibrary.com]

图3铁尔梅兹(a:T - p)和Ifriqiya(b:T - bb; c:T - bb)的釉陶; 越南(d:Ly - cel 1; f:F - cel)和朝鲜(e:G - cel)的青瓷(详见表1) [彩图请浏览wileyonlinelibrary.com]

This grating provides a large spectral window that allows collecting the 2,110–4,000 cm^{-1} range in one shot without the need to combine the spectra as required in the case of using a grating with a high line number. The grating has a large spectral window, which can collect the 2,110–4,000 cm^{-1} range, and does not require the combination of spectra using a high line number grating.

This is very important because it allows the analysis of broad tiny bands.

这一点非常重要,因为它可以分析各种各样的微小谱带。

The vibrational modes including the protons are expected in the wavenumber region between 2,000 and 3,800 cm^{-1} (the narrow Raman signature of isolated vibrators such as hydroxyl groups being expected in the 3,500–3,800 cm^{-1} range although those of more or less strongly hydrogen-bonded species between 2,000 and 3,200 cm^{-1}).^[8,9,11,20,35–38] Each spectrum obtained in the high wavenumber region was mathematically corrected by using LabSpec 5 software according to the procedure recommended by the instrument supplier for the elimination of the interference waves arising from the notch filter, which become visible when the scattered intensity is very low.

质子在振动模式下的波数范围预计可以达到2,000至3,800 cm^{-1} (虽然或多或少有些强氢键物质的拉曼信号在2,000至3,200 cm^{-1} 之间,但独立的原子团如羟基等的窄拉曼信号预计可以达到3,500至3,800 cm^{-1})。^[8,9,11,20,35–38] 使用LabSpec 5软件,按照仪器供应商建议的程序对在高波数区域获得的各光谱进行数学校正,当散射强度非常低时,可以看到由陷波滤波器产生的干扰波,然后进行消除。

The experimental procedure was extended with the use of a higher magnification objective ($\times 200$ Mitutoyo), a smaller (100 μm) confocal hole, and a different laser wavelength (514 nm) in order to compare the quality of the spectra obtained. Our experience in the study of aluminosilicates^[34,39] and protonic species^[11,20] convinces us that blue or violet laser lines are the most efficient for the study of silicates (and of protonic species) due to the factors such as the combination of ν^4 dependence of Raman scattering,^[19] good efficiency of mirrors and charge-coupled device (CCD) detector, high-laser intensity, and preresonance of Si–O bond. For the purpose of comparison, representative samples that display a good signal of the protonic species were selected for each step. A very high magnification ($\times 200$) objective allows the analysis of the very surface and probes a volume of approximately $0.5 \times 0.5 \times 2 \mu\text{m}^3$ to be compared with that of $2 \times 2 \times 6 \mu\text{m}^3$ for $\times 100$ objective (measurement based on the procedure reported in Havel and Colomban^[40]). Very high magnification objective gives a very good spectrum by focusing on a single phase, a fluorescence-free grain but requires a more sensitive focus adjustment on the sample by checking the Raman signal while moving the objective at the same time. In this case, the total counting time was usually increased by a factor of 3. The 514-nm laser line was also produced by the Ar^+ ion laser source with an average illumination power of ~ 10 mW on the samples.

为了比较所获得光谱的质量,使用了较高倍物镜($\times 200$ Mitutoyo)、更小的(100 μm)共焦孔和不同波长(514 nm)的激光来扩展实验程序。我们在研究铝硅酸盐^[34,39]和质子物质^[11,20]方面的经验使我们相信,蓝色或紫色激光线对于硅酸盐(和质子物质)的研究是最有效的,这得益于拉曼散射 ν^4 依赖性的组合、^[19]反射镜和电荷耦合器件(CCD)探测器的良好效率、高激光强度和硅氧键的预共振等因素。出于比较的目的,每个步骤都选择了显示质子物质良好信号的代表性样品。超高倍($\times 200$)物镜适用于最表层分析,可以探测到大约 $0.5 \times 0.5 \times 2 \mu\text{m}^3$ 的体积,相比之下, $\times 100$ 物镜可以探测到的体积为 $2 \times 2 \times 6 \mu\text{m}^3$ (按照Havel和Colomban报告中的程序进行的测量^[40])。将超高倍物镜聚焦在单相无荧光纹理上,可以得到非常好的光谱,但是需要在移动物镜的同时检查拉曼信号,更精确地调整对样品的聚焦。在这种情况下,总计数时间通常增加3倍。514-nm激光线由氩离子激光源产生,样品的平均照明功率约为10 mW。

3 | RESULTS 结果

3.1 | Reference corroded glass samples 参考腐蚀玻璃样品

The wave-corrected Raman spectra for the reference stained glass samples previously studied^[8] are given in Figure 4. Raman analyses of these samples with different chemical compositions gave variable signatures between 2,100 and 4,000 cm^{-1} , assigned to the protonic species at the surface layer of the glass network (Tables 2 and 3). Here, the glasses analysed belong to two types, such as potash-lime glass (sensitive to water corrosion) and soda-lime glass (relatively more stable against corrosion). Figure 4b shows the spectrum of a corroded blue potash-lime type of glass (LM13-15b-1) with a notable Raman signature of protonic species.

先前研究的参考彩色玻璃样品^[8]的波修正拉曼光谱如图4所示。对不同化学成分的这些样品进行拉曼分析,得出玻璃网络表面的质子物质的各种信号范围在2100至4000 cm^{-1} 之间(表2和表3)。本文分析的玻璃分为两种类型:钾钙玻璃(对水腐蚀敏感)和碱石灰玻璃(抗腐蚀性相对更稳定)。图4b是受腐蚀的蓝色碱石灰玻璃(LM13-15b-1)的光谱,其质子物质的拉曼信号非常强。

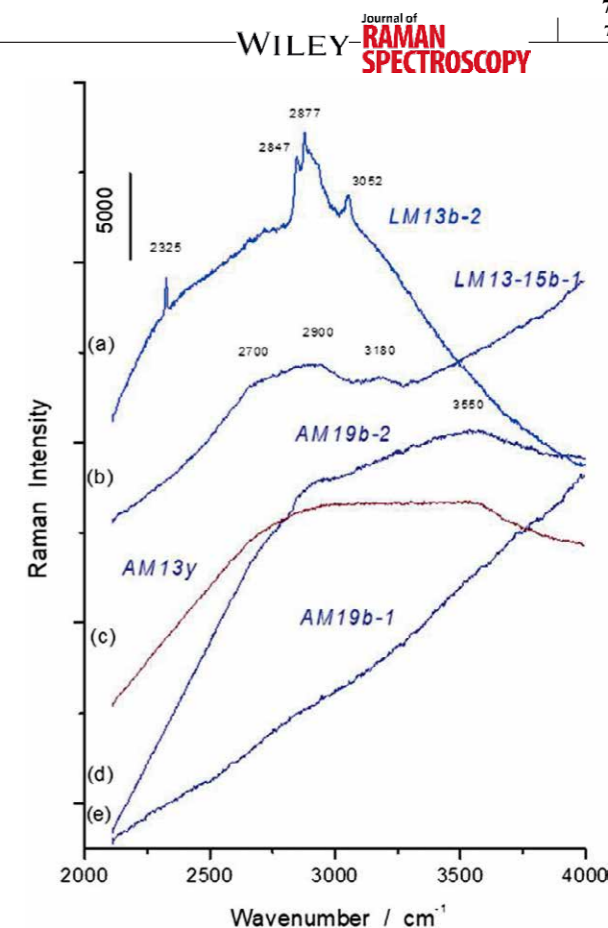


FIGURE 4 Representative wave-corrected Raman spectra recorded on artificially corroded stained glass pieces: lime-potash medieval (LM13b-2, LM13-15b-1, and AM13y) and soda-lime 19th century glasses (AM19b-1, AM19b-2; $\times 100$ objective; confocal hole: 200 μm ; see Table 2 for more details) [Colour figure can be viewed at wileyonlinelibrary.com]

图4人工腐蚀彩色玻璃片的代表性波修正拉曼光谱:中世纪钾钙玻璃(LM13b-2、LM13-15b-1、AM13y)和19世纪碱石灰玻璃(AM19b-1、AM19b-2; $\times 100$ 物镜;共焦孔:200 μm ;详见表2) [彩图请浏览wileyonlinelibrary.com]

This sample had been annealed in air at 600 $^{\circ}\text{C}$ after the corrosion process in boiling H_2SO_4 and then exposed to air.^[8] This process actually cleans the very surface of glass and eliminates the poorly H-bonded species. A broad component is observed with submaxima at 2,700, 2,900, and 3,180 cm^{-1} . The broad bands at 2,700 and 2,900 cm^{-1} indicate the strongly H-bonded species whereas the band at 3,180 cm^{-1} is assigned to the water molecules adsorbed at the glass surface or within the cracks.^[8,16] A weak broad band visible at 3,300 cm^{-1} also indicates the presence of water molecules in the sample whereas another weak narrow band at 3,730 cm^{-1} is assigned to the hydroxyl groups (Table 3 and Figure 4b). The spectra of a yellow potash-lime glass (AM13y; Figure 4c) and a blue soda-lime glass (AM19b-2; Figure 4d) also display somewhat similar Raman signatures of protonic species with weaker intensity.

样品在沸腾的 H_2SO_4 中腐蚀后,在600 $^{\circ}\text{C}$ 空气中退火,然后暴露于空气中。^[8]这个过程实际上清洁了玻璃表面,消除了氢键结合不良的物质。在2700、2900、和3180 cm^{-1} 处观察到仅次于最大值的宽谱分量。2700和2900 cm^{-1} 处的宽谱带表示强氢键物质,而3180 cm^{-1} 处的谱带表示吸附在玻璃表面或裂纹内的水分子。^[8,16]在3300 cm^{-1} 处可见的弱宽谱带同样表明样品中存在水分子,而在3730 cm^{-1} 处的另一个弱窄谱带表示羟基(表3和图4b)。黄色钾钙玻璃(AM13y;图4c)和蓝色碱石灰玻璃(AM19b-2;图4d)也显示了类似的拉曼信号,表示质子物质的强度较弱。

TABLE 3 The observed Raman band wavenumbers and bandwidths of the samples and their assignments
表3样品的拉曼谱带波数和带宽及其代表物质

Wavenumber (cm ⁻¹) 波数(cm ⁻¹)	Bandwidth 带宽	Materials 材料	Assignment 指示	Corresponding IR band wavenumbers (cm ⁻¹) 相应的红外谱带波数 (cm ⁻¹) [8, 20, 21]
3,750	vb	Porcelain	Hydroxyl groups	3,600–3,800
3,750	vb	陶瓷	羟基	3,600–3,800
3,730	n	Stained glass		
3,730	n	彩色玻璃		
		Glazed <i>terra cotta</i>		
		釉陶		
		Celadon or stoneware		
		青瓷或炻瓷		
3,560	n	Porcelain overglaze		
3,560	n	瓷釉		
3,550	vb	Stained glass		
3,550	vb	彩色玻璃		
		Glazed <i>terra cotta</i>		
		釉陶		
3,510	n	Glazed <i>terra cotta</i>		
3,510	n	釉陶		
3,300	n	Stained glass	Water	3,200–3,500
3,300	n	彩色玻璃	水	3,200–3,500
		Celadon or stoneware		
		青瓷或炻瓷		
3,230	b	Porcelain (shipwreck)		
3,230	b	瓷器 (沉船)		
3,180	vb	Stained glass		
3,180	vb	彩色玻璃		
		Porcelain overglaze		
		瓷釉		
3,170	vb	Celadon or stoneware		
3,170	vb	青瓷或炻瓷		
2,950	vb	Glazed <i>terra cotta</i>	H - bonded species	2,500–3,500
2,950	vb	釉陶	氢键物质	2,500–3,500
		Celadon or stoneware		
		青瓷或炻瓷		
2,940	b	Porcelain (shipwreck)		
2,940	b	瓷器 (沉船)		
2,920	b	Porcelain overglaze		
2,920	b	瓷釉		
2,900	vb	Stained glass		
2,900	vb	彩色玻璃		
		Porcelain overglaze		
		瓷釉		
2,850	n	Porcelain		
2,850	n	陶瓷		
2,750	vb	Glazed <i>terra cotta</i>		
2,750	vb	釉陶		
2,700	vb	Stained glass		
2,700	vb	彩色玻璃		
		Glazed <i>terra cotta</i>		
		釉陶		
		Celadon or stoneware		
		青瓷或炻瓷		
		Porcelain overglaze or (shipwreck)		
		瓷釉或 (沉船)		

Note. n: narrow; b: broad; vb: very broad.

注: n: 窄; b: 宽; vb: 极宽。

These glass pieces conserved in ambient air after the corrosion process (and washing)^[8] show an additional feature at ~3,550 cm⁻¹, according to the poorly H - bonded protonic species (Tables 2 and 3). The spectrum of sample LM13b - 2 (Figure 4a), a blue potash - lime glass that was inserted in KNO₃ to exchange protonic species with K⁺ ions shows narrower peaks at 2,847, 2,877, and 3,052 cm⁻¹ characteristic of trapped organic molecules within the cracks (samples have been washed with water and ethanol). Their signature

is very different from that of protonic species in terms of wavenumber and bandwidth. The very narrow peak at around 2,325 cm⁻¹ is due to the signature of N₂ gas^[41] trapped from the air in bubbles during the production of glass. Its observation is common in glass, glaze, and ceramic body as that of O₂ at 1,555 cm⁻¹ because the multireflection of the light at the bubble - matrix interface increases the Raman intensity. The last spectrum corresponds to a blue soda - lime glass (AM19b - 1) with no visible signature of protonic species (Figure 4e).

This is most probably due to the composition of the sample because soda - lime glasses are more corrosion resistant than the potash - lime ones.^[8,22]

氢键结合不良质子物质 (表2和表3) 腐蚀 (和清洗) 后保存在环境空气中的玻璃碎片^[8]在~3550 cm⁻¹处显示出额外的特征。样品LM13b - 2 (图4a)是一种蓝色钾钙玻璃, 将其插入硝酸钾中, 与钾离子交换质子物质后, 其光谱显示2847、2877和3052 cm⁻¹处有较窄峰, 表示裂缝中截留的有机分子 (样品用水和乙醇洗涤)。就波数和带宽而言, 它们的信号与质子物质非常不同。在大约2325 cm⁻¹处出现非常窄的峰是由于玻璃中有氮气气泡^[41], 该气泡在玻璃生产过程中形成。玻璃、釉料和陶瓷体中的氮气观察值与氧气在1555 cm⁻¹时的观察值相同, 因为光在气泡基质界面的多次反射增加了拉曼强度。最后一个光谱对应的是蓝色碱石灰玻璃 (AM19b - 1), 未看见质子物质的信号 (图4e)。这很可能是因为样品的成分引起, 因为碱石灰玻璃比钾钙玻璃更耐腐蚀。^[8,22]

The analyses of these glasses by IR absorption on thick samples give rise to strong absorption in the same wavenumber range but also in the nIR region (combinations and overtones), and their assignment is well documented (see previous studies^[8,21] and references herein). This confirms that Raman microspectrometry allows detecting the signature of the protonic species present in the very surface of glass, although its sensitivity is less than those of IR and nIR absorption.

对这些玻璃的厚样品进行红外吸收分析, 在相同的波数范围和近红外区 (合谱和泛频峰) 都产生了强吸收。这些信号都有相关记录 (见先前的研究^[8, 21]和本文的参考文献)。这证实显微拉曼光谱技术能够检测玻璃表面质子物质的信号, 尽管其灵敏度低于红外和近红外吸收。

3.2 | Choice of the “best” experimental parameters

选择“最佳”实验参数

Raman spectra were compared by using 514 - nm laser wavelength, ×200 objective, and 100 - μm confocal hole on the same samples for each experimental step. The analyses with the green laser were performed on samples Q - r and T - p that show stronger signatures of the protonic species with the blue laser (Table 3). The spectra obtained show very weak signature of the protonic species but some additional cosmic peaks recognized by the one pixel - width (Figures 5a and S1). The results confirmed that blue laser is the most efficient one for detecting the protonic species. For the objective comparison, sample M - blb was selected due to its strong signal of the protonic species in the glass network (Figure 5b, A–A'; Table 3).
要比较拉曼光谱, 须在每个实验步骤中, 对相同的样品使用514-nm激光波长、×200物镜和100μm共焦孔。对在蓝色激光下显示出较强质子物质信号的样品Q - r和T - p, 使用绿色激光进行分析 (表3)。所获得的光谱显示质子物质的信号非常微弱, 但是一些额外的宇宙峰可用一个像素宽度识别 (图5a和S1)。结果证实, 蓝色激光是探测质子物质最有效的方法。为了进行客观比较, 选择了在玻璃网络中质子物质信号较强的样品M - blb (图5b, A–A'; 表3)。

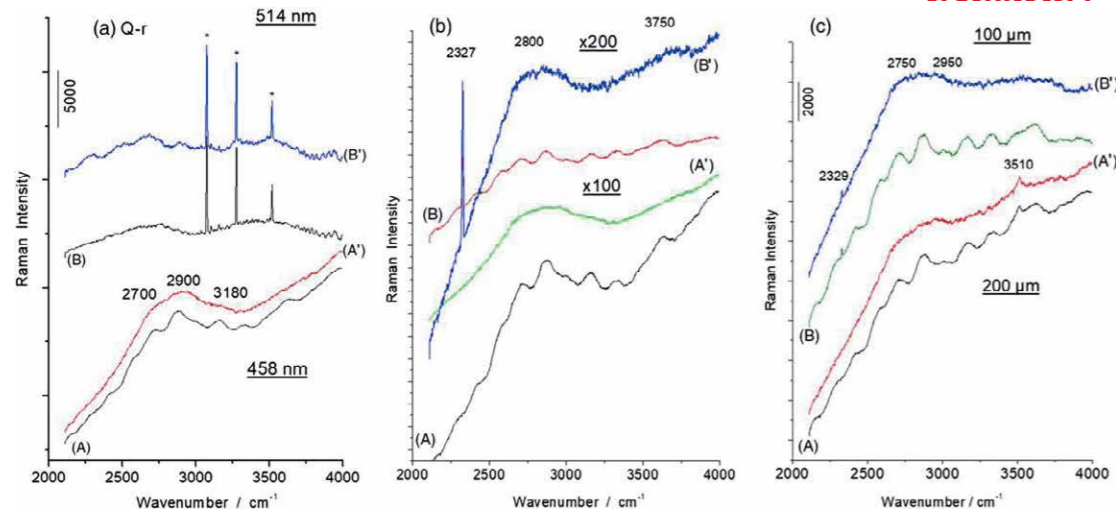


FIGURE 5 Comparison of Raman spectra recorded on the same sample with different experimental parameters: (A,B) as recorded; (A',B') spectra after subtraction of the waves due to the filtering. (a) Spectra of Q - r obtained with green (10 mW at the sample) and blue (6 mW at the sample) lasers; (b) Spectra of M - blb obtained with $\times 200$ and $\times 100$ microscope objectives; (c) Spectra of T - p obtained with 100 and 200 μm confocal hole (*: Cosmic peak, see text for more details) [Colour figure can be viewed at wileyonlinelibrary.com]

图5同一样品不同实验参数的拉曼光谱比较：(A,B)为记录参数；(A',B')为滤波后得到的滤波光谱。(a)使用绿色激光（样品照明功率10 mW）和蓝色激光（样品照明功率6 mW）获得的Q - r光谱；(b)使用 $\times 200$ 和 $\times 100$ 显微镜物镜获得的M - blb光谱；(c)使用100 μm 和200 μm 共焦孔获得的T - p光谱（*：宇宙峰的详细定义见描述）[彩图请浏览wileyonlinelibrary.com]

Raman analysis of the same sample with $\times 200$ objective allowed us to obtain a better signal with higher intensity with an apparent feature at 3,750 cm^{-1} , which is assigned to the hydroxyl groups (Figure 5b, B-B'; Table 3). However, the recording time was increased about three times together with the decrease of the signal-to-noise ratio because the laser spot was much smaller. Here, it should be noted that it is impossible to analyse the same point with different high magnification objectives and the OH - groups are probably distributed heterogeneously. For the confocal hole comparison, analyses were performed on sample T-p also showing a strong signal with the standard parameters (Figure 5c, A-A'; Table 3). The intensity of the Raman signal was also increased with the use of a smaller confocal hole, but the OH - peak at 3,510 cm^{-1} was no longer visible, perhaps due to some local heating that eliminated the poorly H-bonded species at the very surface (Figure 5c, B-B').

使用 $\times 200$ 物镜对同一样品进行拉曼分析能够获得更好、更高质量的信号，在3,750 cm^{-1} 处具有明显的特征，代表羟基（图5b，B-B'；表3）。然而，由于激光光斑小得多，记录时间增加了大约三倍，同时信噪比也有所降低。这里，应该注意的是，不可能用不同的高倍物镜分析同一个点，而且羟基可能是不均匀分布。为了进行共焦孔对比，样品T-p的分析也显示了具有标准参数的强烈信号（图5c，A-A'；表3）。使用更小的共焦孔，拉曼信号的强度也相应增加，但是在3,510 cm^{-1} 处的羟基峰值不再可见，这也许是由于局部加热消除了最表层的氢键结合不良的物质（图5c，B-B'）。

3.3 | The glaze signature

釉料信号

The silicate glasses may comprise a wide range of compositions based on the different types of their raw materials that are mainly the fluxes such as potash, soda, lime, and lead. In the history of glazed pottery, different types of glass compositions had been used in the preparation of the glazes according to the availability of raw materials, technical competence of the period (kiln maximal temperature), and experimentations of the craftsmen.^[24,31]

根据不同类型的原材料，硅酸盐玻璃可能包含多种成分，这些原材料主要是熔剂，例如碳酸钾、苏打、石灰和铅。在釉陶的发展史中，依据原料的实用性、当时的技术能力（窑最高温度）和工匠的经验，在釉料的制备过程中使用了不同类型的玻璃成分。^[24,31]

All types of glassy silicates give a characteristic Raman spectrum, which mainly consists of two broad bands found at ~ 500 and $\sim 1,000$ cm^{-1} .

⁻¹. These are the Si-O bending and stretching modes respectively, which display the fundamental vibrational modes of the SiO_4 tetrahedral units making up the glass network.^[34,42-44] The incorporation of different types of fluxes in the silicate structure has a direct effect on the Raman signature in terms of the spectral position of the bands and their relative intensities. Thus, the evaluation of these parameters in the Raman spectra enables us to identify different composition types.^[34,39,42-46] The different components of the Si-O stretching bands arise from the different population of the SiO_4 tetrahedra in the form of isolated and more or less connected arrangements. It has been pointed out both experimentally^[45,46] and by modelling^[47] that the area ratio of bending to stretching band is directly related to the degree of polymerization of the SiO_4 vibrational (and chemical) unit and hence to the melting temperature of glass.

所有类型的玻璃硅酸盐都有特定的拉曼光谱，它主要由在约500和约1000 cm^{-1} 处发现的两个宽谱带组成。这些分别是硅氧弯曲和伸缩模式，它们显示了构成玻璃网络的 SiO_4 四面体单元的基本振动模式。^[34, 42-44]硅酸盐结构中结合不同类型的熔剂对拉曼信号有直接影响，具体表现在谱带的光谱位置及其相对强度上。因此，拉曼光谱中这些参数的评估使我们能够识别不同的组成类型。^[34, 39, 42-46]硅氧伸缩谱带的不同成分来自不同群体的 SiO_4 四面体，其形式为孤立的或多或少相连的排列。通过实验^[45, 46]和建模^[47]可知，弯曲与伸缩谱带的面积比与 SiO_4 振动（和化学）单元的聚合度直接相关，因此与玻璃的熔化温度直接相关。

The representative Raman spectra obtained from the glazes of the pottery samples are given in Figure 6. All spectra display the characteristic Raman signature of a silicate type of glass: two broad features at about 450 and 1,000 cm^{-1} , which represent the Si-O bending and stretching modes, respectively.^[45-47] For the porcelain glazes with silica - rich composition that have a high melting temperature (approximately 1350-1400 $^{\circ}\text{C}$), the bending mode band is much stronger than the stretching one (Figure 6a,b,d,e).^[46] An opposite behaviour is observed for low temperature melting lead - rich glazes (approximately 700-800 $^{\circ}\text{C}$) such as in the cases of Islamic *terra cotta* glaze (Figure 6f) and the overglaze of Chinese Qing porcelain sample (Figure 6h).

从陶器样品釉料中获取的具有代表性拉曼光谱如图6所示。所有光谱都显示了硅酸盐玻璃的拉曼信号特征：在大约450和1000 cm^{-1} 处的两个宽谱带特征，分别代表硅氧弯曲和伸缩模式。^[45-47]对于具有高熔点（约1350-1400 $^{\circ}\text{C}$ ）的富含二氧化硅成分的瓷釉，弯曲模式谱带比伸缩模式谱带强得多（图6a、6b、d、e）。^[46]在低熔点富铅釉（约700-800 $^{\circ}\text{C}$ ）中，例如伊斯兰釉陶（图6f）和中国清代陶瓷样品的釉上彩（图6h），却观察到相反的行为。

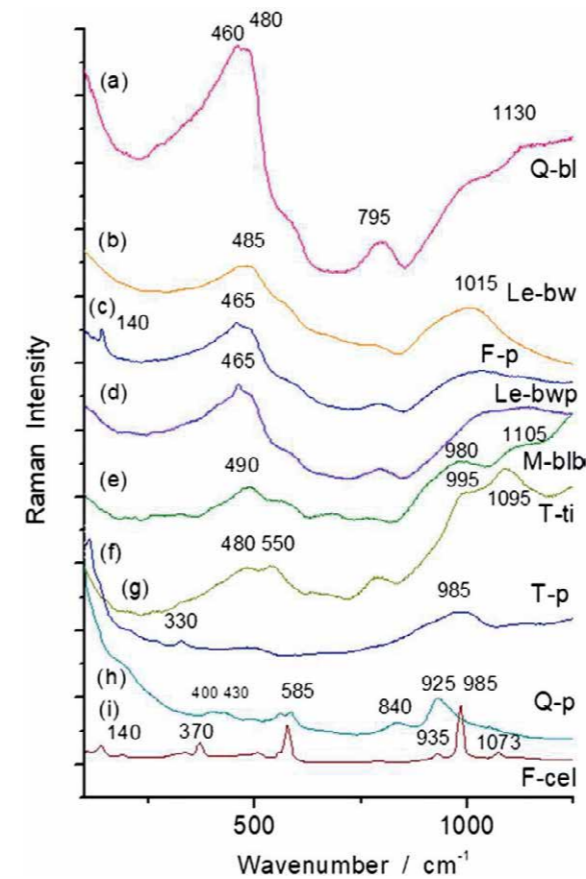


FIGURE 6 Representative Raman spectra of the different types of glazes collected from different coloured areas of the samples ($\times 100$ objective; c.h.: 200 μm): (a) Q-bl white, (b) Lè-bw blue, (c) F-p white, (d) Lè-bwp white, (e) M-blb blue, (f) T-p yellow, (g) T-ti turquoise, (h) Q-p green, and (i) F-cel green (see also Table 1 for more details) [Colour figure can be viewed at wileyonlinelibrary.com]

图6从样品的不同颜色区域收集的不同类型釉料的代表性拉曼光谱（ $\times 100$ 物镜；c.h.: 200 μm ）：(a) Q-bl白色，(b) Lè-bw蓝色，(c) F-p白色，(d) Lè-bwp白色，(e) M-blb蓝色，(f) T-p黄色，(g) T-ti蓝绿色，(h) Q-p绿色，和(i) F-cel绿色（详见表1）[彩图请浏览wileyonlinelibrary.com]

Several narrow peaks (quartz at 465 cm^{-1} , α -wollastonite at 585 and 985 cm^{-1}) are also observed in some of the glaze spectra arising from the crystalline precipitates within the glaze.^[34,46] The durability of the glaze is directly related to its chemical composition as in the case of feldspar-based porcelain glazes where the addition of aluminium increases the chemical stability.^[48] On the contrary, lead-rich glass can easily be corroded by water.^[48,49]

从釉料的结晶沉淀物中也观察到一些釉谱有几个窄峰（石英：465 cm^{-1} 处； α -硅灰石：585和985 cm^{-1} 处）。^[34, 46]釉料的耐久性与其化学成分直接相关，例如长石基瓷釉，可以通过添加铝提高化学稳定性。^[48]相反，富铅玻璃很容易被水腐蚀。^[48,49]

We will first discuss the data regarding the lead-glazed terra cotta (the a priori more reactive glaze with low polymerization index), then those of celadons or stoneware (firing at higher but medium temperature) and porcelains in which the glaze is fired at high temperature and has the maximal index of polymerization, that is, the less number of exchangeable cations.

我们将首先讨论铅釉陶（聚合指数较低的先天活性釉）的数据，然后讨论青瓷或炻瓷（在较高但中等温度下烧制）和在高温下烧制且

聚合指数最大的瓷釉的数据，即可交换阳离子的数量较少。

3.4 | Glazed terra cotta

釉陶

The wave-corrected Raman spectra for the glazed terra cotta are given in Figure 7 on the left. The Raman signal of the protonic species is rather strong since these glazes have a high reactivity due to the lead-based composition. In particular, the yellow-coloured glaze of the sample from Termez (T-p) displays a strong signal with the broad features at 2,700 and 2,950 cm^{-1} (Table 3; Figure 7a, left). Here, it should be noted that the yellow pigments used are rich in lead, which is a factor also contributing to the corrosion process.^[48-50] The "narrow" peak at 3,510 cm^{-1} that is assigned to the hydroxyl groups is also significant (and seems associated to the lead-based glaze, see further). Another small band at 3,730 cm^{-1} also indicates the presence of hydroxyl groups. The spectra of other glazed terra cotta also show rather similar features of the protonic species but with variable intensities (Figure 7b,c,d, left). In fact, the white glaze of the Tunisian sample (T-bb) displays the least marked signal among the others. Additionally, the blue glaze of the sample from Tunisia (T-b) displays an apparent very broad band at 3,550 cm^{-1} rising from the OH - groups as well as the N₂ gas peak at 2,325 cm^{-1} (Table 3). Please note that all of the samples are dated to the same time period.

图7左侧是釉陶的波修正拉曼光谱。因为这些釉料基于铅成分具有高反应性，质子物质的拉曼信号相当强。特别是，Termez（T-p）样品的黄色釉料在2700和2950 cm^{-1} 处显示出强烈的信号，具有宽谱带特征（表3；图7a，左图）。这里，要注意的是所用的黄色颜料富含铅，这也是加速腐蚀的一个因素。^[48-50]表示存在羟基的3,510 cm^{-1} 处的“窄”峰也很明显（似乎与铅基釉料有关，详见下文）。3,730 cm^{-1} 处的另一个小谱带也表明存在羟基。其他釉陶的光谱也显示出质子物质相当相似的特征，但强度不同（图7b，c，d，左图）。事实上，突尼斯样品（T-bb）的白色釉料显示的信号最不明显。此外，突尼斯样品的蓝色釉料在3550 cm^{-1} 处显示出明显的极宽谱带，表明存在羟基，也在2,325 cm^{-1} 处也显示出N₂气体峰（表3）。请注意，所有样品的日期都是同一时期。

3.5 | Glazed celadons or stoneware

釉青瓷或炻瓷

Figure 7, right compares the wave-corrected spectra obtained from the celadons or stoneware that have a lime-based composition. The stoneware sample (Ly-bo) that is one of the oldest samples from the 12th century shows a very strong Raman signal of the protonic species (Figure 7a, right). The broad features at 2,700 and 2,950 cm^{-1} are again visible, displaying the H-bonded species found in the glass network. Additional features at 3,170 and 3,300 cm^{-1} are also present, which are assigned to the water molecules adsorbed on the surface.

图7右图比较了青瓷或有石灰基成分的炻瓷的波修正拉曼光谱。炻瓷样品（Ly-bo）是12世纪以来最古老的样品之一，显示出质子物质非常强的拉曼信号（图7a，右图）。在2700和2950 cm^{-1} 处的宽谱带特征再次可见，表示存在在玻璃网络中发现的氢键物质。在3170和3300 cm^{-1} 处也有附加特征，这些特征表示存在吸附在表面上的水分子。

Another feature at 3,730 cm^{-1} is assigned to the hydroxyl groups (Table 3). The spectrum of the 11th century Korean sample (G-cel) is also consistent with that of the stoneware sample, showing a similar but less intense signature (Figure 7b, right). The spectrum of the Vietnamese sample (Ly-cel 2) shows a rather similar spectrum with lower intensity (Figure 7c, right) whereas spectra of the other ancient celadons represent rather different signatures with varying intensities (Figure 7d,e,f, right).

在3730 cm^{-1} 处的另一个特征表示存在羟基（表3）。11世纪韩国样品的光谱也与炻瓷样品一致，显示出相似但不够强烈的特征（图7b，右图）。越南样品的光谱（Ly-cel 2）显示了强度较低而且相当相似的光谱（图7c，右图），而其他古代青瓷的光谱代表了强度不同也

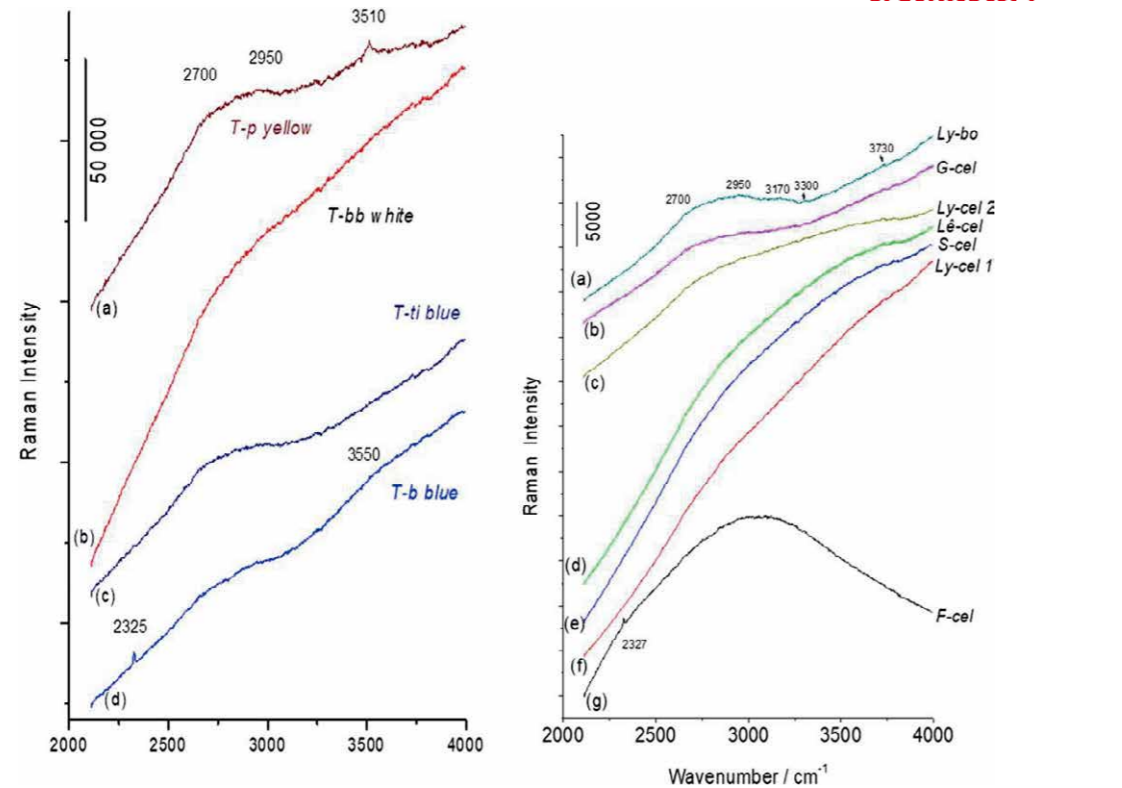


FIGURE 7 Representative wave - corrected Raman spectra recorded on glazed *terra cottas* (left) and celadons or stoneware (right; $\times 100$ objective; c.h.: 200 μm ; see Table 1 for more details) [Colour figure can be viewed at wileyonlinelibrary.com]

图7釉陶(左图)和青瓷或炆瓷(右图)的代表性波修正拉曼光谱; $\times 100$ 物镜; c.h.: 200 μm ; 详情见表1 [彩图请浏览wileyonlinelibrary.com]

After all, the modern celadon sample (F-cel) displays a completely different type of spectrum where actually no signature of the protonic species is visible (Figure 7g, right). The big bump peaking at $\sim 3,000\text{ cm}^{-1}$ is characteristic of fluorescence. The peak at $2,327\text{ cm}^{-1}$ is again assigned to N_2 gas. Thus, Raman signatures of the protonic species obtained in the celadons or stoneware seem to be in correlation with their ages, but other factors should also be considered such as the mechanical damage (cracks, voids) as a function of the degree of corrosion.

毕竟, 现代青瓷样品(F-cel)显示了一种完全不同类型的光谱, 它看不到质子物质的特征(图7g, 右图)。荧光的特征是顶峰约在 $3,000\text{ cm}^{-1}$ 处。在 $2,327\text{ cm}^{-1}$ 处的峰值再次表示存在 N_2 气体。因此, 在青瓷或炆瓷中获得的质子物质的拉曼信号似乎与它们的年代相关, 但是也应该考虑其他因素, 例如影响腐蚀程度的机械损伤(裂纹、空隙)。

3.6 | Porcelains 陶瓷

3.6.1 | Glazes 釉料

The wave-corrected Raman spectra of the porcelains are given in Figure 8, left. The spectrum of the Ming porcelain (M-blb; blue underglaze decor, the colourless glaze being fired with the porcelain body) particularly represents a rather strong Raman signature of the protonic species ($\sim 2,700$ and $2,900\text{ cm}^{-1}$ for H-bonded species and $\sim 3,180\text{ cm}^{-1}$ for water; Table 3; Figure 8b, left).

陶瓷的波修正拉曼光谱如图8(左图)所示。明代陶瓷的光谱(M-blb; 釉下青花装饰, 无色釉与瓷体一起烧制)尤其显示出质子物质相当强的拉曼信号(氢键结合物质约为 $2,700$ 和 $2,900\text{ cm}^{-1}$, 水约为 $3,180\text{ cm}^{-1}$; 表3图8b, 左图)。

The fake porcelain (F-p) and the other Ming porcelain (M-blc) show different Raman signatures with the features at $2,850$ and $3,730\text{ cm}^{-1}$, which result from the H-bonded species and hydroxyl groups,

respectively (Figure 8d,e, left). In these spectra, fluorescence is also observed in the region $3,000\text{--}3,500\text{ cm}^{-1}$. In the case of sample F-p, it should be noted that defects might have been made in the glaze to mimic an old appearance, but it is not known whether some treatments have been made to “age” the object.

陶瓷仿制品(F-p)和其他明代陶瓷(M-blc)表现出不同的拉曼信号, 分别为 $2,850$ 和 $3,730\text{ cm}^{-1}$ 处, 分别表示氢键物质和羟基(图8d, e, 左图)。在这些光谱中, 在 $3,000\text{--}3,500\text{ cm}^{-1}$ 处也观察到了荧光。就样品F-p而言, 需要注意的是, 为了模仿旧的外观, 釉料中可能会存在缺陷, 但不知道是否进行了某些技术处理来“做旧”该物品。

3.6.2 | Lead - based overglazes

铅基釉

The spectrum of the green lead-based overglaze of the Qing Famille Rose porcelain (Q-r) displays a very strong Raman signature of the protonic species, with $\sim 2,700$ and $\sim 2,900\text{ cm}^{-1}$ for H-bonded species and $\sim 3,180\text{ cm}^{-1}$ for water (Table 3; Figure 8a, left). The spectrum of the other green lead-based overglaze of the Qing wucai porcelain (Q-bl) displays a well-distinguished band at $2,920\text{ cm}^{-1}$, which is due to the H-bonded species (Table 3; Figure 8f, left) whereas the green enamel of the Qing painted porcelain (Q-p) has a lower intensity signal but displays an additional peak at $3,560\text{ cm}^{-1}$, which is assigned to the hydroxyl groups (Figure 8c, left). This peak seems to be characteristic of the corroded lead-based glaze.

清代粉彩瓷(Q-r)绿色铅基釉的光谱显示质子物质的拉曼信号非常强, 氢键物质的拉曼信号约为 $2,700$ 和 $2,900\text{ cm}^{-1}$, 水的拉曼信号约为 $3,180\text{ cm}^{-1}$ (表3; 图8a, 左图)。清代五彩瓷器(Q-bl)的另一种绿色铅基釉的光谱在 $2,920\text{ cm}^{-1}$ 处显示出非常明显的谱带, 这是氢键结合物质造成的(表3; 图8f, 左侧), 而清代彩瓷(Q-p)的绿瓷釉具有较低的强度信号, 但在 $3,560\text{ cm}^{-1}$ 处显示附加峰值, 该峰值表示羟基(图8c, 左图)。该峰值表明存在受到腐蚀的铅基釉料。

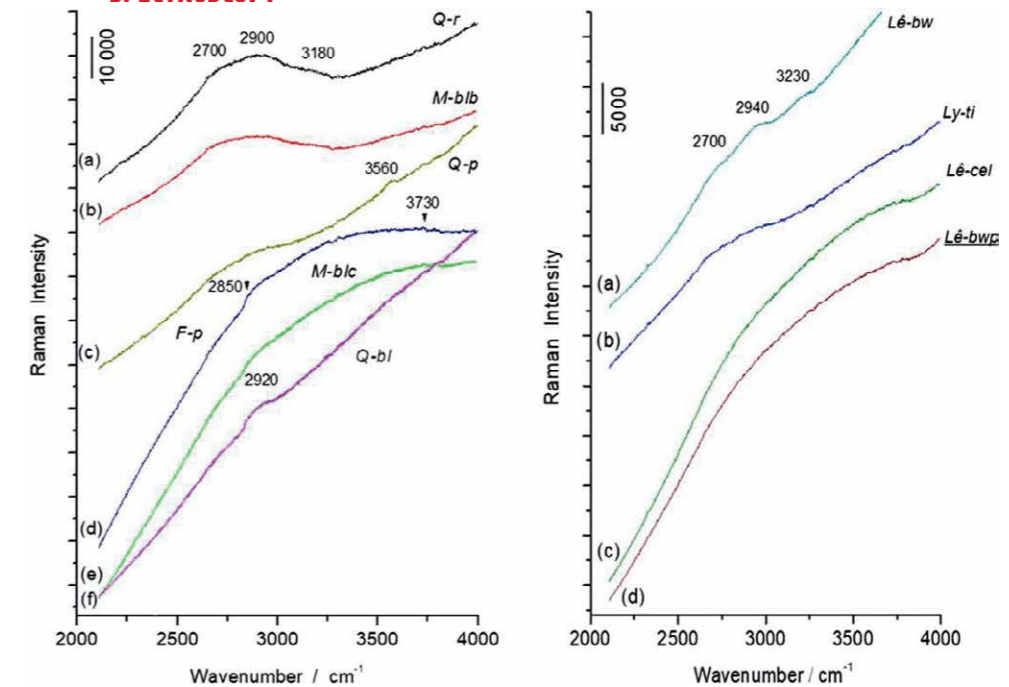


FIGURE 8 Representative wave - corrected Raman spectra recorded on Qing and Ming Dynasty (over) glazed porcelains (left) and Vietnamese porcelains or celadons excavated or from shipwreck (right; $\times 100$ objective; c.h.: 200 μm ; see Table 1 for more details) [Colour figure can be viewed at wileyonlinelibrary.com]

图8 清朝和明朝(上图)釉瓷(左图)和挖掘或沉船中的越南瓷器或青瓷的代表性波修正拉曼光谱(右图; $\times 100$ 物镜; c.h.: 200 μm ; 详见表1) [彩图请浏览wileyonlinelibrary.com]

3.7 | Samples excavated or recovered from shipwreck

3.7 | 从沉船中挖掘或回收的样品

Figure 8, right compares the wave-corrected Raman spectra of the Vietnamese porcelains or celadons either being excavated from kilns or recovered from the Cu Lao Cham shipwreck. The shipwreck samples are expected to have been exposed to more active corrosion conditions as a result of their long term stay in sea water. The spectrum of the porcelain sample from the 15th century shipwreck (Lè-bw) displays bands at $2,700$, $2,940$, and $3,230\text{ cm}^{-1}$, which are assigned to H-bonded species and water, respectively (Table 3; Figure 8a, right). The other samples show different types of Raman spectra with varying intensities (Figure 8b–d, right). Consequently, it can be proposed for the last sample categories that the composition of the glazes and the environmental conditions are other factors to be considered affecting the Raman signature of the protonic species apart from the age.

图8比较了从窑中挖掘或从Cu Lao Cham沉船中回收的越南瓷器或青瓷的波修正拉曼光谱。沉船样品由于长期置于海水中, 预计会暴露于更活跃的腐蚀条件下。15世纪沉船出土的瓷器样品的光谱显示了 $2,700$ 、 $2,940$ 和 $3,230\text{ cm}^{-1}$ 处的谱带, 分别表示氢键物质和水(表3; 图8a, 右图)。其他样品显示不同强度下不同类型的拉曼光谱(图8b–d, 右图)。因此, 对于最后的样品类别, 可以得出结论, 除年龄之外, 釉料的成分和环境条件是影响质子物质拉曼信号的其他因素。

4 | DISCUSSION

讨论

As mentioned before, the Raman intensity obtained is directly related to the optical properties of the materials analysed because

Raman spectroscopy is an optical technique.

如上所述, 因为拉曼光谱技术是一种光学技术, 所以获得的拉曼强度与所分析材料的光学性质直接相关。

The absolute Raman intensity of the silicate signature was found to be an effective tool in the discrimination of similar types of glasses as a function of time according to their varying degrees of corrosion, which in turn affect the transparency of glass. [6,17] The relative intensity of the Raman signature of protonic species incorporated in the glassy silicate network on the glass or glaze surface was also previously proposed as a potential tool for the discrimination of artefacts (kept in the same conditions) as a function of age. [16] The results of our analyses on different types of glazed pottery samples showed that there is a correlation between the relative intensity of the broad Raman signature of the protonic species and the age of the artefact to a certain degree including the celadon or stoneware and porcelain samples. For the comparison of all the data obtained, a plot of the so-called H 2O/OH band area as an indicator of Raman intensity of the protonic species versus elapsed time since production date was drawn where Y scale is logarithmic and X scale is taken as inverse time (assuming an Arrhenius law for the diffusion of the protonic species in the glass), [11] including the regression lines for the sample groups (Figure 9). The band area was mostly calculated between the wavenumbers $\sim 2,300$ to $\sim 3,300\text{ cm}^{-1}$ with variations in some of the spectra according to the shape of the spectrum.

研究发现, 硅酸盐特征的绝对拉曼强度是用于根据相似类型的玻璃的不同腐蚀程度来区分随时间变化的相似类型玻璃的有效工具, 反过来又影响玻璃的透明度。[6, 17]玻璃或釉面玻璃硅酸盐网络中质子物质的拉曼信号相对强度也曾被提议作为辨别受年龄影响的手工艺品(保持在相同条件下)的潜在工具。[16]我们对不同类型釉陶样品的分析结果表明, 包括青瓷或炆瓷、瓷器样品在内的质子物质的宽拉曼信号的相对强度与手工艺品的年龄之间在一定程度上存在相关性。为了比较所有获得的数据, 绘制了作为质子物质拉曼强度指标的所谓H 2O/OH谱带面积与自生产日期以来的时间曲线图, 其中Y标度指对数, 而X标度是反向时间(假设质子物质在玻璃中扩散符合阿伦尼乌斯定律), [11]包括样品组的回归线(图9)。主要计算波数约 $2,300$ 至约 $3,300\text{ cm}^{-1}$ 处之间的谱带面积, 根据光谱的形状, 某些光谱会有变化。

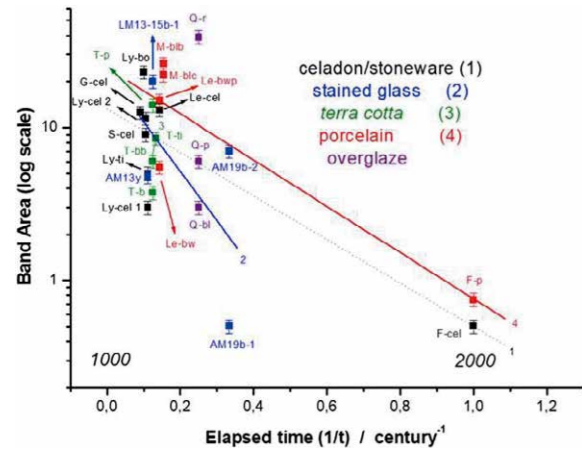


FIGURE 9 H₂O/OH band area vs. time elapsed since production date for celadons or stoneware, reference stained glasses, glazed *terra cottas*, porcelains, and porcelain overglazes. Regression lines are given indicating the groups. ($\pm 10\%$ error bars are included) [Colour figure can be viewed at wileyonlinelibrary.com]

图9 青瓷或炆瓷、参考彩色玻璃、釉陶、瓷器和瓷釉的H₂O/OH带面积与自生产日期以来经过的时间的关系。给出的回归线表示各组。（包括10%误差线）[彩图请浏览wileyonlinelibrary.com]

The more or less fluorescent background leads to some uncertainty in the measurement of the band area. The band area was calculated for each spectrum using the blocks of the graduated paper by visual examination (the procedure is described in more detail in Figure S2). The fitting lines were determined by Origin 6.0 software tool using a linear regression analysis. It should be noted that the error of area measurement is considered to be mostly about $\pm 10\%$.

或多或少荧光背景会导致谱带面积测量出现偏差。通过目检，使用刻度纸块计算每个光谱的谱带面积（详细程序请见图S2）。通过Origin 6.0软件工具使用线性回归分析确定了拟合线。应注意的，我们认为面积测量误差约为10%。

In Figure 9, we observe a similar slope for the glazes of celadons or stoneware and porcelains, lower than that of stained glasses. With this mathematical representation used, the band area depends exponentially on the inverse of elapsed time and the slope of the fitting line is similar to the activation energy, as in the case of the expression of ion diffusion versus time following the Arrhenius rule. Rather similar activation energy is thus observed for the glazes of celadons or stoneware and porcelains whereas a much higher one is the case for stained glasses. It was not possible to determine the parameter according to the linear regression analysis for the terra cotta glazes due to the lack of similar modern samples. However, when the data for the terra cotta glazes and the porcelain overglazes are considered together in linear regression analysis, the slope (activation energy) of the fitting line is even higher than that of stained glasses, making the fitting line almost horizontal. Thus, we can strongly suggest that these observations are consistent with the chemical composition of the glazes in the regarding sample groups. In the case of stained glasses, the potash-based composition makes them less resistant to corrosion due to the easy exchange of K⁺ ions with H⁺ and/or H₃O⁺ ions. [8] However, the celadons or stoneware and porcelain samples include glazes with a higher durability due to their lime- and feldspar-based composition (i.e., “alumina-rich”), making them corrode relatively slower than stained glasses.

在图9中，我们发现青瓷或炆瓷和瓷器的釉料斜率相似，比彩色玻璃的斜率要低。使用这种数学表达式，谱带面积指数取决于经过时间的倒数，拟合线的斜率类似于活化能，正如遵循阿伦尼乌斯定律的离子扩散对时间的表达式的表达式的情况。因此，在青瓷或炆瓷和瓷器的釉料中发现的活化能相当相似，而彩色玻璃的活化能则要高得多。由于缺少类似的现代样品，无法根据釉陶的线性回归分析来确定参数。然而，当在线性回归分析中将釉陶数据和瓷釉数据放在一起考虑时，拟合线的斜率（活化能）甚至高于彩色玻璃的斜率，使得拟合线几乎呈水平。因此，我们坚定地认为这些观察结果与相关

样品组中釉料的化学成分一致。对于彩色玻璃，由于钾基组合物中的钾离子容易与氢离子和/或H₃O⁺离子交换，使得其耐腐蚀性较差。[8]但青瓷或炆瓷和瓷器样品的釉料具有更好的耐久性，这是因为它们的石灰和长石成分（即“富含氧化铝”）使得它们的腐蚀速度相对低于彩色玻璃。

On the other hand, the effect of chemical composition is very dominant in the cases of lead-based terra cotta glazes and porcelain overglazes concerning the amount of lead which increases the reactivity of the glaze and make them the most corroded. As a result, the correlation between elapsed time (age) and Raman intensity is mostly valid for the sample groups that are the most resistant to corrosion. However, it is also clear that more data are necessary to build up the empirical law concerning the “H₂O/OH” band area as a possible dating tool. It should also be noted that spectra from each sample were recorded on three spots in this study, and the most representative one was used for the area calculation. Obviously, a statistical approach could improve the efficiency of the method, especially if only one type of object is studied.

另一方面，对于铅釉陶和瓷釉，化学成分的影响非常显著，铅的含量增加了釉料的反应性，使其腐蚀情况最严重。因此，经过时间（年龄）和拉曼强度之间的相关性对于最耐腐蚀的样品组来说最为适用。然而，这显然需要更多的数据来建立关于“H₂O/OH”谱带面积的经验法则，来作为可能使用的定年工具。还应注意的，在本研究中，将每个样品的光谱记录在三个点上，使用最具代表性的一个点来计算面积。显然，统计方式可提高该方法的效率，特别是在只研究一种类型对象的情况下。

Figure S3 shows the as-recorded and wave-corrected Raman spectra of the Qing Famille Rose porcelain sample (Q-r) obtained from preliminary measurements performed on the section of shards at different distances from the glaze surface in the high wavenumber region. [16,26] Unfortunately, in this preliminary work, the selected wavenumber window (3,000–3,800 cm⁻¹) being too small hinders the clear observation of all the components. However, the measurements show very well that the intensity is relatively stronger at ~3,170 cm⁻¹, just at the limit of the window in the spectrum, which is the closest one to the surface (Figure S3, left). This is due to the fact that the corrosion phenomenon is initiated at the very surface of glass due to the presence of protonic species resulting in the formation of a corrosion layer (hydration layer). As expected, the more distant spectrum represents almost no signal of the protonic species. In the case of focusing towards the inner structure of glaze, the signal of the protonic species is lost due to the limited thickness of the corroded layer (see also Figure S4 for the low wavenumber region from the glaze towards the paste). It is thus important to use a high magnification microscope objective ($\times 100$ or $\times 200$) and to focus the spot precisely at the very surface of the sample.

图S3显示了清代彩釉瓷器样品（Q-r）的记录和波修正拉曼光谱，产生该光谱的方式是对高波数区釉面不同距离的碎片部分进行初步测量。[16, 26]不幸的是，在这项初步工作中，由于选定的波数窗口（3,000–3,800 cm⁻¹）太小，未能清晰观察所有成分。但测量清楚表明，3,170 cm⁻¹左右处的强度相对较强，恰好在光谱窗口的极限处，该窗口与表面最接近（图S3，左侧）。这是由于质子物质导致腐蚀层（水合层）形成，而腐蚀现象一开始出现于玻璃的最表面。不出所料，更远的光谱几乎不存在质子物质信号。如果聚焦于釉料内部结构，质子物质信号会由于腐蚀层的有限厚度而丢失（参见图S4，以了解从釉料到糊料的低波数区域）。因此，必须使用高放大倍数的显微镜物镜（ $\times 100$ 或 $\times 200$ ）并将束斑精确聚焦在样品的表面。

5 | CONCLUSION

结论

In this study, the possibility of a comparative dating or authentication procedure on the basis of the Raman signature of protonic species accumulated at the surface of glass or glaze is investigated for the first time by using a selection of glazed pottery samples from different origins and time periods (from ca. 11th century up to the present time).

在本研究中，通过选择不同来源和时间周期的釉陶样品，首次研究了根据积累在玻璃或釉料上的质子物质的拉曼信号进行比较定年或鉴定的可能性（从11世纪至今）。

As in the case of the absolute Raman intensity collected from similar types of glasses with varying degrees of corrosion, the evaluation of the relative Raman intensity of the protonic species signature at the sample surface proved to be useful as a means of comparative dating or authentication especially for celadons or stoneware and porcelain samples, which have a lead free chemical composition. The modern fakes can also be identified by no visible signature of protonic species but a fluorescence signal. We can conclude that the information about the age of glazed pottery can be obtained by this procedure depending strongly on the glaze composition and weakly on the environmental conditions of preservation. The method appears to be more appropriate to detect fakes than to provide an accurate dating; thus, it can specifically be proposed as a fast and non-invasive method for the discrimination between old and modern artefacts (copies or fakes) in terms of authentication. Additionally, the efficiency of the method will be strengthened with the integration of more data collected from very similar objects.

如同从不同腐蚀程度的类似类型玻璃收集的绝对拉曼强度的情况一样，经证实，对样品表面质子物质特征的相对拉曼强度进行评估，可作为比较定年或鉴定的手段，特别是对于含无铅化学成分的青瓷或炆瓷和瓷器样品。同样，如果未发现质子物质特征但发现荧光信号，则可判定为现代仿制品。我们认为，可以通过这一程序获知釉陶的年代信息，其主要取决于釉料成分，保存的环境条件则次要。这种方法似乎更适合检测仿制品，而非进行准确定年；因此，其可作为专门鉴别新旧手工艺品（复制品或仿制品）的快速和非侵入性方法。此外，整合相似对象的更多收集数据可提高该方法的效率。

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