

The Polyhedral and Elusive Nature of Geyao

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Abstract For the last six and a half centuries, a lot has been written about Ge ware, but mostly in a fragmentary way that has made the understanding of this ceramic ware complex and confusing. Major archaeological excavations of the past 30 years have provided scholars with an unprecedented and unexpected wealth of material that has allowed them to piece together a much more detailed history of Chinese ceramics from the 10th to the fourteenth century (and beyond). However, the identification of Ge ware and its production place still elude the academic community. After analysing ancient literary records on Ge ware and related archaeological excavations, this paper suggests a new approach to the subject in the attempt to break the deadlock in which experts have got entangled.

Keywords Ge ware. Longquan kilns. Laohudong kilns. Chinese ceramics. Guan ware.

Summary 1 Introduction. – 2 Textual Evidence. – 3 Archaeological Evidence. – 4 Conclusion.



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1 Introduction¹

For the last six and a half centuries, a lot has been written about Ge ware, but mostly in a fragmentary way that has made the understanding of this ceramic ware complex and confusing. Major archaeological excavations of the past 30 years have provided scholars with an unprecedented and unexpected wealth of material that has allowed to piece together a much more detailed history of Chinese ceramics from the 10th to the fourteenth century (and beyond). The kiln site producing the mysterious Ru ware has been positively identified at Qingliangsi, Baofeng (Wang 1991; Henansheng 2008, 2009); the official kilns run by the Xiuneisi have been located in Hangzhou just outside the Southern Song imperial palace (Du 2002b; Qin, Du 2004; Du 2004); excavations undergoing at Zhanggongxiang, Ruzhou, at the time of writing may reveal the site manufacturing Northern Guan ware, the first kiln set up by the court; so-called ‘numbered Jun’, believed to be an official ware of the Northern Song court has been redated to the Yuan-Ming period (Qin, Zhao, Li 2003; Li 2008; Rastelli 2011); we have a very precise chronology for the Ding complex (Beijing yishu bowuguan 2012), as well as for Yaozhou (Rastelli 2008), where explorations have recently resumed; the Longquan area and Jingdezhen kiln complex have been thoroughly excavated. The list could be easily extended, except for Ge ware, which continues to elude the academic community.

The real conundrum is that, unlike Ru ware, which was identified by Sir Percival David in 1936 (David 1936-37), we cannot define with certainty the outer look of Ge ware, thus making the search for its manufacturing place tentative and so far inconclusive. Our sources of information are ancient literary records and archaeological material, but as they do not tally, experts continue to disagree on the basic cornerstones, that is, its physical features, where and when it was fired.

2 Textual Evidence

The earliest text describing Ge ware is the *Zhizheng zhi ji* 至正直记 (Faithful records of the Zhizheng reign [1341-1368]) where the author Kong Qi 孔齊 calls it “Gegedong 哥哥洞” and then “Gege 哥哥”:

In winter 1355 I bought a *ding* [shaped] incense burner of Gegedong ware in Hangzhou. It has a fine body, and although new, its colour is lustrous like that of old vessels. Knowledgeable people still doubt about it, but when I met Wang Deweng, he said that recent Gege

¹ It is the Author’s choice to use both classical and modern simplified Chinese characters, respectively for classical and modern sources.

ware was exactly like old Guan ware and that they can be distinguished only by very careful examination. (Kong [1363] 1991, *juan* 4)

Kong Qi does not specify the location of the kiln site, he only discloses that he bought his incense burner in Hangzhou and that recent Gege ware is exactly like Guan ware; the character *dong* 洞 in “Gegedong” is the same as in “Laohudong 老虎洞”, the place in Hangzhou where Southern Song Guan ware was fired, but this is too insignificant a factor to link the two. Kong Qi connects Gegedong/Gege with Hangzhou, but in a very loose way that prevents us from concluding that at the end of the Yuan dynasty Ge ware was manufactured in Hangzhou.

In order of time, the next literary source discussing Ge ware is the *Ge gu yao lun* 格古要論 (Essential Theories on Antiquities), published in 1387 by Cao Zhao 曹昭 (1387; David 1971), who under the paragraph dedicated to Ge ware reports:

Old Ge ware is blue/green (*qing* 青) in colour, the shading is uneven and it has iron foot and purple mouth.² Pieces with good colour are like Dong ware, nowadays they are rare. Those made in groups are late Yuan, those newly fired have coarse body and unpleasant colour.³ (Cao 1387, lower *juan* 卷, f. 2a)

Cao Zhao seems to distinguish three phases of Ge ware: old, late Yuan and early Ming; the old ones, fired sometime before the late Mongol period, are characterised by dark footrim and mouthrim and the glaze colour is blue/green like Dong ware. Dong ware is described by Cao Zhao in the previous paragraph as: “Light blue/green with many fine lines, purple mouth and iron foot. In comparison with Guan ware, it has no red colour, the quality is coarse and unrefined, not as smooth and glossy as Guan ware. Nowadays it is rarely seen” (Cao 1387, lower *juan* 卷, ff. 1b-2a). Like Kong Qi twenty-five years earlier, Cao Zhao compares early Ge to Guan ware, but he does it indirectly through a genre – Dong – that has never been positively identified; according to him, Dong is similar, although inferior, to Guan ware, and the best-coloured Ge is equivalent to Dong ceramics. The ‘iron foot and purple mouth’ feature first mentioned in the *Ge gu yao lun* will become a constant factor repeated in many texts. It is worth noticing that the character for Dong ware in the *Ge gu yao lun* is 董 which does not correspond to *dong* 洞 in Kong Qi’s “Gegedong”.

² *Tiezu zikou* 鐵足紫口 literally means ‘iron foot and purple mouth’, but it refers to specific effects: the unglazed footrim turned dark, reddish brown when reoxidizing at the end of the firing cycle, while the mouthrim, where the glaze ran very thin, assumed an ochre-brown tinge.

³ Ove non diversamente specificato le traduzioni sono dell’Autrice.

The *Xuande dingyi pu* 宣德鼎彝譜 (Manual of Sacrificial Vessels of the Xuande Reign [1426-1435]), dated 1428 (Lü 1428), but circulating at the earliest from the end of the fifteenth century,⁴ is the first text to link Ge ware to the Song dynasty in *juan* 卷 6 and 8, where two different types of incense burners are discussed and both are said to imitate the elegance of Song Ge ware.

In 1539, Lu Shen 陸深 (1477-1544) in his *Chunyu tang suibi* 春雨堂隨筆 (Jottings from the Hall of Spring Rain) supplies new pieces of information on the aspect and kiln location of Ge ware: it is characterised by shallow/light white broken veins called *bajisui* 百圾碎 (hundred fragments) and was produced in the Song dynasty at Liutianyao in Longquan by the elder of two brothers, whose surname is Zhang, and this is why it was named 'Ge' (Lu [1539] 1936, 6). Kong Qi and Cao Zhao had compared Ge with Guan ware, but they did not reveal the production place of Ge ware; we may be induced to infer that it was Hangzhou because the city is mentioned and we know that the Guan kilns were located there, but the two fourteenth century authors do not suggest it.⁵ What casts doubt on the reliability of Lu Shen's statement is that the story of the two Zhang brothers is suddenly brought up roughly 250 years after the Southern Song dynasty had ended, and no previous literary record on the Longquan kilns mentions them.⁶

Subsequent texts, written from the mid-sixteenth century,⁷ report the story of the two Zhang brothers to explain the origin of the

4 The *Xuande dingyi pu* 宣德鼎彝譜 (Manual of Sacrificial Vessels of the Xuande Reign [1426-1435]), attributed to Lü Zhen 呂振 (1365-1426) and Wu Zhong 吳中 (unknown dates), among others, often quotes from the *Da Ming hui dian* 大明會典 (Collected Statutes of the Great Ming Dynasty) planned in 1372 with the title *Huang Ming hui dian* 皇明會典 (Collected Statutes of the Magnificent Ming Dynasty), changed to *Da Ming hui dian* by imperial edict in 1496, published in 1508 and revised during the Longqing (1567-1573) reign period (Qin 2002, 17).

5 As a matter of fact, Kong Qi refers to Qingyuan 庆元, one of the counties in Chu prefecture 處州 producing Longquan ware, but he does in rather disparaging terms: although coarse, blue/green wares from Qingyuan look exquisite in comparison with pieces ordinarily sold on the streets (Kong [1363] 1991).

6 The main pre-fourteenth century sources discussing Longquan kilns are: the *Jilei bian* 雞肋編 (Compilation of Things of Little Value) by Zhuang Chuo 莊綽, published in 1133 (Zhuang [1133] 1983); the *Yun lu man chao* 雲麓漫鈔 (Casual Writings by the Foot of Cloud Mountain) by Zhao Yanwei 趙彥衛, appeared in 1206 (Zhao [1206] 1996); the *Tan zhai bi heng* 坦齋筆衡 (Notes from the Tranquil Study) by Ye Zhi 叶寘, compiled in 1211 (Ye 1211). Texts on the Longquan kilns are listed by Huang, Luo, Zhou (2011, 64-9).

7 The most notable are the 1561 edition of the *Zhejiang tongzhi* 浙江通志 (Zhejiang Gazetteer) (*juan* 8, *Dili zhi* 地理志 Geography section) revised by Hu Zongxian 胡宗宪 (1512-1565) and written by Xue Yingqi 薛應旂 (1500-1574) (Xue, Hu [1561] 1983, 444); the *Qi xiu lei gao* 七修類稿 (Manuscript Arranged in Seven Categories) (*juan* 6, *Shiwu lei* 事物類 Things) by Lang Ying 郎瑛 (1487-1566), published in 1566 (Lang Ying [1566] 1959, 833); the *Shuo lue* 說略 (Small Talk) by Gu Qiyuan 顧起元 (1565-1628) in 30 *juan* printed in 1613 (Gu 1613, *juan* 23); the *Tiangong kaiwu* 天工開物 (The Exploitation of the Works of Nature) by Song Yingxing 宋應星 (1587-1666), published in 1637 (Song [1637] 1936, middle *juan*).

name 'Ge' and consequently place Ge kilns in Chuzhou, more precisely at Liutian in Longquan. Except for the 1561 edition of the *Zhejiang tongzhi* 浙江通志, which explicitly states that it is unknown when the Zhang brothers were active, the other sources link them to the Song dynasty.

The only two authors out of the chorus are Gao Lian 高濂 (1573-1620) and Wang Shixing 王士性 (1547-1598)⁸ who relate Ge to Guan ware, rather than Longquan, and declare that it was made at Fenghuangshan – the site of the Jiaotaxia kilns, first discovered in 1930. According to Gao Lian, so-called Guan ware was fired by the Xiuneisi for the emperor, the kilns being in Hangzhou at Fenghuangshan, while Ge ware was fired by private potters. Wang Shixing is more concise: he simply affirms that Guan and Ge wares were made at Fenghuangshan, but he specifies that this happened in the Song dynasty, while Gao Lian does not mention the period when Guan and Ge were manufactured.

Qing dynasty authors do not provide any new insight on Ge ware,⁹ they simply re-propose what their Ming predecessors had written, at times generating even more confusion.¹⁰ The prevailing notion was that Ge ware was produced in the Song dynasty by the elder of two brothers in Longquan. Its distinguishing features were the so-called 'purple mouth and iron foot' apparently denoting a dark body, a pale glaze varying from bean green to millet beige, and crackles.

In modern research crackles are a crucial feature in the identification of Ge ware, however in ancient literature up to the end of the sixteenth century, when they are described, they are referred to as *duanwen* 斷紋, literally 'broken lines', usually pale in colour, called *bajisui*, that is, 'one hundred fragments' alluding to their density and

⁸ Gao Lian 高濂 (1573-1620) is the author of the *Zun sheng ba jian* 遵生八箋 (Eight Discourses on the Art of Living), published in 1591 (Gao 1591, *juan* 14, ff. 44a-46a), while Wang Shixing 王士性 (1547-1598) wrote the *Guang zhi yi* 广志绎 (Further Elucidations on my Extensive Record of Travels) in 1597; the relevant section is in *juan* 4, *Jiangnan zhu sheng* 江南诸省 (Provinces in the Jiangnan region) (Wang [1597] 1981, 70).

⁹ The most influential Qing texts mentioning Ge ware are the 1655 (Shunzhi reign, 1644-1661) and 1761 (Qianlong reign, 1735-1796) editions of the *Longquanxian zhi* 龍泉縣志 (Longquan County Annals) (Longquan 1655; 1762); *Yanshan zhai zaji* 硯山齋雜記 (Jottings from the Inkstone Mountain Studio) by Sun Chengze 孫承澤 (1592-1676), *juan* 4 (Sun Seventeenth Century); the *Wuli xiao shi* 物理小識 (Little Understanding of the Laws of Nature), by Fang Yizhe 方以智 (1611-1671), *juan* 8 (Fang Seventeenth Century); the *Nanyao biji* 南齋筆記 (Notes on the Southern Kiln) published in the 1730s or 1740s by an anonymous writer (AA [eighteenth century] 1936); the *Taoshuo* 陶說 (Description of Pottery) by Zhu Yan 朱琰, printed in 1774 (Zhu [1774] 1947); the *Wenfang sikao tushuo* 文房肆考圖說 by Tang Bingjun 唐秉鈞 (unknown dates), published in 1778 (Tang 1778); the *Jingdezhen taolu* 景德鎮陶錄 (Record of Jingdezhen Ceramics) by Lan Pu 藍浦 (unknown dates), appeared in 1815 (Lan [1815] 1947).

¹⁰ Lan Pu, for example, in his *Jingdezhen tao lu* interprets the *Ge gu yao lun* as saying that the clay used to make Gegeyao came from Hangzhou (Lan [1815] 1947, *juan* 6, f. 3b).

to the appearance of the surface of the vessel which looks as if made of many fragments pieced together.¹¹

The first to elaborate on crackles is Gao Lian in 1591: he classifies the ice-cracks type in eel-blood colour as the best, followed by those similar to plum blossom petals stained with ink, and in third position small fragmented lines (*xi suiwen* 細碎紋). Gao then introduces the concept of ‘concealed lines’ (*yinwen* 隱紋) and likens the pattern on Guan ware to crab’s claws and that on Ge ware to fish roe.¹² A few years later Zhang Yingwen 張應文 (Zhang 1595, upper *juan*, ff. 9b-10a) proposes the exact same classification as Gao Lian’s, and in the 1620s Gu Yingtai 谷應泰 adopts Gao Lian’s ‘crab’s claws’ and ‘fish roe’ definitions to distinguish between Guan and Ge wares (Gu 1621-1627, *juan* 5, ff. 2b-3a). One hundred and fifty years later Zhu Yan 朱琰 reports the same expression when quoting Gu Yingtai’s *Bo wu yao lan* 博物要覽 (Essential Survey of All Things of Interest) (Zhu [1774] 1947, *juan* 2, f. 7b), and so does Tang Bingjun 唐秉鈞 in 1778 (Tang 1778, *juan* 3, ff. 31b-32b). In his influential *Jingdezhen taolu* 景德鎮陶錄 (Record of Jingdezhen Ceramics) of 1815, Lan Pu 藍浦 attributes the distinction to the *Tang shi si kao* 唐氏肆考, which apparently also adds that on crazed pieces the crackles are big and small:¹³ this is the first time that an author hints at the presence of a double network of crackles. A century later, Xu Zhiheng 許之衡 (d. 1925) explains that Ge ware is characterised by large and small *suikuaiwen* 碎塊紋 or ‘fragmented lines’ called *kaipian* 開片 (Xu [1915] 1936, *juan* 1), literally ‘divided sections (of a larger piece)’,¹⁴ an account shared by Chen Wanli 陈万里 in 1928 ([1928] 1989). In modern research the double mesh of crackles is regarded as a distinguishing feature unique to Ge ware and it is commonly referred to as *jinsi tiexian* 金絲鐵線 or ‘golden thread and iron wire’, a term hinted at as inherited from old texts, although

¹¹ In his *Ge gu yao lun*, Cao Zhao notices that Dong ware is characterised by many fine lines and as he compares Ge to Dong, we can assume that Ge ware also has many fine lines (Cao 1387, lower *juan* 卷, ff. 1b-2a). Lu Shen ([1539] 1936, 6), Wang Shizhen ([1597] 1981, 70) and Lang Ying ([1566] 1959, *juan* 6, Shiwu lei 事物類 Things) all define as “one hundred fragments” the many crackles on Ge ware.

¹² The “crab’s claws” definition to describe crackles on Guan ware had already been applied by Cao Zhao in his *Ge gu yao lun*; the difference in terminology is that Cao Zhao uses the term *wen* 紋 (Cao 1387, lower *juan* 卷, f. 1b), while Gao Lian uses *yinwen* 隱紋 or “concealed lines” (Gao 1591, *juan* 14, f. 42b).

¹³ Lan Pu (Lan [1815] 1947, *juan* 6, f. 3b) says to be quoting the *si kao* 肆考 of the Tang family (Tang shi 唐氏), that is, the *Wenfang sikao tushuo* 文房肆考圖說 (Illustrated notes from the study room) by Tang Bingjun (Tang 1778), which however does not report anything about a double set of crackles on Ge ware. Given the short chronological distance between the publication of the *Wenfang sikao tushuo* (1778) and the *Jingdezhen taolu* (1815), this discrepancy does not invalidate the conclusion that the double mesh of crackles on Ge ware was noticed very late in time.

¹⁴ In modern research, *kaipian* has become the technical term for ‘crackles’ on glazed wares.

this is not the case.¹⁵ This definition appears for the first time in an eighteenth century anonymous text, the *Nanyao biji* 南窑笔记 (Notes on the Southern Kiln), in relation to Guanyao (spelt with the character *guan* 觀, rather than the usual *guan* 官), but not when discussing Ge ware (AA [eighteenth century] 1936). For its first use in relation to Ge ware, we need to wait for two hundred years, when Sun Yingzhou 孙瀛洲 lists the many different colours of Ge crackles (Sun 1958, 62). In 1962 Chen Wanli, elaborating on his previous statement, affirms that the double mesh of crackles is the main characteristic of handed down Ge ware (distinguishing it from Ru and Guan), and because the big ones are usually black and the small ones soy brown, they are called “golden thread and iron wire” (Chen 1963, 31). This is how the double crazing and its descriptive name become a constant attribute in the description of Ge ware, but as the concept of “the five famous wares of the Song dynasty”, this is a modern formula (Rastelli 2016). The *jinsi tiexian* is indeed a characteristic of ‘handed down’ objects, that is, specimens now in the collections of the National Palace Museum in Taipei, the Palace Museum in Beijing, the Shanghai Museum, the British Museum, the Metropolitan Museum of Art, the Freer Gallery of Art - for this reason in this paper they will be referred to as ‘museum Ge’ [fig. 1]. In time, this category has virtually come to coincide with Ge ware, mainly because it was recognised as such by the Qianlong emperor who had his poems inscribed on some of the pieces in his possession. In recent years, some of these specimens have been re-dated to the Ming and Qing periods, thus showing that the attributions made by the Qianlong emperor, and later by the compilers of the catalogues of the imperial collection when it became of public dominion, were based on what at the time was believed to be Ge ware (Qingshi [1925] 2004; Lundun 1935; Qin 2017, 96).

At the 1992 symposium on Ge ware organised by the Shanghai Museum, Wang Qingzheng confirmed the singling out of two types of Ge ware: the so-called handed down Ge from imperial deposits, characterised by cream colour (*mihuang* 米黃) glaze (only a minority has dark body and *huiqing* 灰青 [greyish green] glaze), a double network of crackles of the type ‘golden thread and iron wire’, mostly fired standing on the vessel footring supported on pads (rather than on spurs), shapes popular in the Yuan dynasty; the manufacturing kiln of these pieces, which all share imperial qualities, is still unknown. The second group, consisting of specimens excavated from Yuan and early Ming tombs and hoards, is characterised by a dark body, ‘purple mouth and iron foot’, *huiqing* glaze (although rarely it can be *yuebai*

15 In an essay dedicated to Ge ware in Yuan and Ming literature, Li Baoping (2004, 260) noted that this characteristic did not appear in Ming records and suggested that maybe the colouring effect was artificially obtained after the Ming dynasty.



Figure 1 Brush washer. “Museum Ge” ware. Stoneware with blue/green glaze. Dated by the Museum’s label to the Song dynasty. H. 3.5 cm. National Museum of China. Photograph by the Author

月白 [pale bluish-white]), one net of crackles and shapes similar, but not identical to those of Song Guanyao; this type of Ge could correspond to that described in the *Zhizheng zhi ji* and the *Ge gu yao lun*, dating to the Yuan and early Ming dynasties.¹⁶

It thus appears that, besides ‘golden thread and iron wire’ crackles, another distinguishing feature of ‘museum Ge’ singled out by modern scholars is the cream colour of its glaze.¹⁷ This hue is mentioned in the literature, but only in late sources: in 1815 Lan Pu affirmed that Ge ware came in either *mise* 米色 (cream colour) or *fenqing* 粉青 (light greenish-blue) (Lan Pu [1815] 1947, *juan* 6, f. 3a), and a century later Xu Zhiheng distinguished between cream and pea green (*doulü* 豆綠) ([1915] 1936, *juan* 1).¹⁸ A different term suggesting a yellowish hue was used at the end of the sixteenth century by Gao Lian who listed three different colours, the best being *fenqing* 粉青 (light greenish-blue), followed by *danbai* 淡白 (whitish) and finally by *yohui* 油灰 or ‘putty’, that is, greyish-yellow: this seems to be the first time that a yellowish tinge was acknowledged. If we look at Guan specimens excavated from the Laohudong kiln site, we notice several examples coated with a yellowish glaze, which was not intentional but was rather the result of misfiring: the coating was meant to be *fenqing* 粉青 (light greenish-blue), but accidental oxidisation caused it to turn yellow. The same happened when firing Ge ware, but it was not the best colour and in fact Gao Lian classified it as the last preferable hue.

¹⁶ The symposium proceedings were never published; for a summary of the main presentations see Chen 1994; Vainker 1993. The identification of these two types of Ge ware had been presented by Wang Qingzheng in a paper for *The Oriental Ceramic Society* (Wang 1989-90).

¹⁷ In the concluding remarks at the end of the Geyao conference in Shanghai in 1992, Wang Qingzheng affirmed that the two main characteristics of Ge ware are the *mihuang* glaze and the “golden thread and iron wire” crackles. Wang also noted that early sources do not mention this glaze colour and that literature from the middle Ming period is not reliable (Chen 1994, 82).

¹⁸ In an earlier text (eighteenth century), the *Nanyao biji* 南窯筆記 (Notes on the Southern Kiln), had appeared the term *mise* 米色 when describing a lowly valued subcategory related to Di ware (AA [eighteenth century] 1936).

In written records, Ge ware was often compared with Guan and its colour was usually described as *qing* (blue/green) in various shades, however, there are also frequent references to the pale tone of Ge ware described as *dan* 淡 (light), *danbai* 淡白 (whitish), *shaobai* 稍白 (slightly white), *yuebai* 月白 (pale bluish-white) and *danya* 淡牙 (pale ivory).¹⁹ This can be intended as paler than Guan ware or whitish as some ‘museum Ge’ specimens (fig. cat 50). The first interpretation favours a Ge ware similar to Guan, that is, Wang Qingzheng’s second category, while the second reading suggests so-called ‘handed down’ or ‘museum Ge’. The pale tone does not depend on a different glaze recipe, but rather on firing conditions, which in this case did not reach the already low maturing temperature of 1220-1240° C typical for Guan ware (Kerr, Wood 2004, 583).

Looking at ‘museum Ge’ specimens in the Taipei Gugong and Beijing Gugong collections, it appears that the majority is coated with a pale, cold tone glaze rather than a cream colour one and, as a matter of fact, in recent years the prominence of cream colour ‘museum Ge’ has been de-emphasised: Qin Dashu, for example, states that in the vast majority of cases, the glaze is either graphite grey (*qinghui* 青灰) or pale bluish-white (*yuebai* 月白), while only a few pieces are light greenish-blue (*fenqing* 粉青) or cream colour (*mihuang* 米黄) (Qin 2017, 96-7). Lü Chenglong describes most ‘museum Ge’ glazes as *huiqing*, and only a few as *mihuang* or *fenqing* (Lü 2017a, 338; Lü 2017b, 28-31). This lack of consistency in the description of the glaze hue by contemporary scholars reveals how subjective (and therefore slippery) the issue of colour is. On one point modern experts seem to agree: no kiln site so far excavated matches ‘museum Ge’ specimens.

3 Archaeological Evidence

In the nineties, scholars recognised two types of Ge ware (Chen 1994; Wang 1989-90):²⁰ the first and most important was ‘museum Ge’ which, not fully complying with descriptions in literary documents, left a little space for a second type consisting of pieces excavated from tombs and caches [fig. 2] which was too different from ‘museum Ge’ to be grouped together.

¹⁹ These terms appear respectively in Lu Shen’s *Chunyu tang* ([1539] 1936, 6), Gao Lian’s *Zun sheng ba jian* ([1591] 1988) and Gu Qiyuan’s *Shuo lue* (1613, *juan* 23); the last two are both from the *Nanyao biji* (AA [eighteenth century] 1936).

²⁰ This does not mean that the academic circle agreed on this classification: as a matter of fact, different (and sometime wild) interpretations were put forward. See for example, Li Huijing (1994) who stated that “handed down Ge ware” was in fact Xiuneisi Guan ware, while Ge kilns, which were private enterprises, were Longquan kilns producing black-bodied blue/green ware.



Figure 2
Bottle. Stoneware with blue/green glaze. Southern Song dynasty (1127-1279). H. 22 cm. Excavated from the Laohudong kiln site, Hangzhou. Southern Song Guan kiln Museum, Hangzhou. Photograph by the Author

With new millennium archaeological discoveries in Hangzhou and Longquan, we now tend to distinguish three types of Ge ware: two related to the above-mentioned kiln sites [figs 3, 6], in addition to ‘museum Ge’. When the Laohudong site was discovered and excavated between 1998 and 2001, it was identified as the Xiuneisi kiln mentioned in literary sources (Wang 2000; Du, Ma 2000; Hangzhoushi 2002; Du 2002a; Du 2002b; Qin, Du 2004). The upper layers were safely dated to the Yuan dynasty as they included kiln setters with inscriptions in ‘Phags-pa (‘square script’), the writing system devised during the reign of Kublai Khan (r. 1260-1294) to unify all the languages spoken in his empire (Ragagnin, Jantsan forthcoming). Shards from these layers, in particular from the second (that is, the older one), are generally coated with either *qinglu* 青绿 (dark green), *qinghui* or *qinghuang* 青黄 (greenish yellow) glaze, rather thickly applied on a greyish black or yellowish-brown body. Their similarity with objects unearthed from Yuan and early Ming tombs and hoards²¹ is undeniable, as their connection with Guan ware, which seems logical, as the specimens were made at the same kiln site during the following dynasty. What is less straightforward is the nature of the wares manufactured under Mongol rule: Guan was the official ware made for imperial use by the government-controlled Laohudong factory, but was Laohudong still an imperial kiln during the Yuan dynasty? Judging from the inscription *guanyao* 官窯 (official ware) painted in brown under the glaze on the base of a few bowls, it would seem so, but the absence of a pit containing pieces that had not met the imperial quality standards and had been consequently smashed points to the contra-

²¹ For some of the most interesting tombs and hoards see Li 1972; Shen, Xu 1982; Hu 1986; Wang, Wu 2005; Gao 2011; Lin, Zheng 2015.



Figure 3 Fragment of an incense burner. Stoneware with blue/green glaze. Yuan dynasty (1279-1368). H. 7.5 cm. Excavated from the upper layer of the Laohudong kiln site, Hangzhou. Hangzhou Institute of Cultural Relics and Archaeology. Photograph by the Author

Figure 4 Fragment of a brush washer. Stoneware with blue/green glaze. Southern Song dynasty (1127-1279). Excavated from the Wayaolu kiln site, Xiaomei town, Longquan city. Zhejiang Institute of Cultural Relics and Archaeology. Photograph by the Author

Figure 5 Sherds. Stoneware with blue/green glaze. Southern Song dynasty (1127-1279). Excavated from the Wayaolu kiln site, Xiaomei town, Longquan city. Longquan Museum. Photograph by the Author

Figure 6 Fragment of a dish. Stoneware with blue/green glaze. Southern Song dynasty (1127-1279). Excavated from the Wayaolu kiln site, Xiaomei town, Longquan city. Longquan Museum. Photograph by the Author

ry (Du 2002a, 13). It is possible that the manufacture was controlled by Yuan officials, but the objects were no longer destined for the imperial court. Another question is whether the products were called Ge ware. This is difficult to ascertain, but their outer aspect seems to tally with the Gegendong and Gege ware described in Yuan and early Ming written records. If this assumption is correct, the production of this kind of Ge ware (admitting that it can be so named) stopped not long after the Yuan dynasty was vanquished, as archaeological evidence shows that the Laohudong kiln was shut down.

As scholars could not fully agree on the identification of the specimens retrieved from the upper layers of the Laohudong kiln site, they opted to call them by the fuzzy name of “Ge type” (Qin 2017, 100). In time other definitions have been adopted: Qin Dashu (2017) uses “imitation Guan”, while Lü Chenglong (2017a; 2017b) prefers “Ge (Guan)”.

The situation at the Longquan kilns is much more intricate, given the enormous scope of the manufacturing area: 187 kiln sites have

been counted in the southern section, comprising the four townships of Xiaomeizhen, Zhatianzhen, Lanjuxiang and Jianchi, while the eastern zone includes 216 kilns distributed over Longyuan, Anren, Daotai and Yunhe counties (Qin 2015, 43). In the Southern Song and early Yuan periods, the best objects came from the kilns in Dayao, Jincun (both in Xiaomeizhen) and Xikou (in Zhatianzhen), some pieces from Dayao and Xikou closely imitating Guan ware made at the Laohudong imperial factory. Guan-inspired Longquan pieces can either have the typical pale grey Longquan body or a very dark one. The latter was achieved by using high-iron red clays (*zijintu* 紫金土), rather than the typical Longquan blend of white porcelain stone and ferruginous clays (Kerr, Wood 2004, 249-65). Until the discovery of the Wayaolu kiln site in the Dayao cluster (Xiaomeizhen) in 2011-12,²² it was believed that the production of black-bodied blue/green ware (*heitaqingci* 黑胎青瓷) had started in the middle Southern Song dynasty at the Dayao and Xikou centres, where it was made together with typical pale body Longquan ware from the early thirteenth century (Zhu 1989, 18). The excavations at Wayaolu unearthed a kiln dating to the early-to-middle Southern Song dynasty, active for a very short period of time, producing blue/green ware mainly with black body and a small percentage with a pale grey one. The former tends to be very thin and usually covered with a rather dark, glassy and densely crackled glaze [fig. 4], while a minority of pieces shows a thick, lustrous, light greenish-blue (*fenqing* 粉青) coat [fig. 5]. A new excavation campaign at the Wayaoyang kiln site, Xikou cluster, in 2010-11 confirmed it as the main site for the production of high-quality black-bodied blue/green ware.²³ Among the sherds unearthed from the Wayaolu and Wayaoyang kilns, a specific sub-type characterised by

22 The archaeological report has not been published yet. I had the rare opportunity to collect information and handle the excavated material as a participant in the specialists' meeting discussing Longquan black-bodied blue/green ware and Ge ware held in November 2012 in Longquan city. Some details are published by Qin Dashu (2017, 104; 2015, 48), Shen Yueming and Zheng Jianming (2018, 67-9). Among the scholars antedating the beginning of Longquan black-bodied blue/green ware, there is Shen Yueming (2020, 17-18). This antedating would subvert the accepted chronological relationship between Guan ware made at the Laohudong kiln site and Wayaolu black-bodied blue/green ware which would be earlier than Guan ware (Yu 2011-12, 26).

23 Samples of black-bodied Longquan ware were discovered at the Dayao cluster already in the 1950s (Zhu, Ren 1963, 27-35), igniting the debate on the nature of these pieces as imitation Guan or Guan ware themselves, which would include the Longquan centre in the imperial kiln system. The Wayaoyang kiln site was one of those yielding black-bodied sherds, as reported by Zhu Boqian (1989, 17-18). The archaeological report of the 2010-2011 excavation has not been published yet. I had the rare opportunity to collect information and handle the excavated material as a participant in the specialists' meeting discussing Longquan black-bodied blue/green ware and Ge ware held in November 2012 in Longquan city. Some details of the excavations are published by Qin Dashu (2017, 104; 2015, 50-1), Shen Yueming and Zheng Jianming (2018, 67-9).



Figure 7 Fragment of a dish. Stoneware with blue/green glaze. Southern Song dynasty (1127-1279). Excavated from the Wayaoyang kiln site, Xikou town, Longquan city. Longquan Museum. Photograph by the Author



Figure 8 Fragment of a bowl. Stoneware with blue/green glaze. Southern Song dynasty (1127-1279). Excavated from the Wayaoyang kiln site, Xikou town, Longquan city. Longquan Museum. Photograph by the Author

Figure 9 Sherds. Stoneware with blue/green glaze. Southern Song dynasty (1127-1279). Excavated from the Wayaolu kiln site, Xiaomei town, Longquan city. Longquan Museum. Photograph by the Author

evident whitish crackles stands out [figs 6-7]. Its visual aspect evokes the ‘one hundred cracks’ (*bajisui*) effect mentioned in 1539 by Lu Shen and succeeding writers, arousing the interest of Chinese experts and turning on the spotlights on the quest for Ge kilns. Shen Yueming (2020 and Shen, Zheng 2018) is firmly convinced that Longquan black-bodied blue/green ware is Ge ware; Qin Dashu (2017, 104-8) accords a special position to the Wayaolu kiln site and calls Longquan black-bodied blue/green ware ‘Longquan Ge’, while Lü Chenglong (2017a, 337; 2017b, 26) believes this sub-type to be the Ge ware described in late Ming sources. If it is true that the distinct crackles on some of the specimens from the Wayaolu and Wayaoyang kilns recall the *bajisui* effect, their visual appearance needs further investigation and not all black-bodied blue/green wares fall in this category. The sherd in figure 8 from the Wayaoyang kiln site is an imitation of Guan ware [fig. 8], as are the sherds in figure 9 from the Wayaolu kiln site [fig. 9]. The effort is evident in the thick, translucent, bluish, unc-



Figure 10 Ding-shaped incense burner. Excavated in 2001 from the Laohudong kiln site. H. 12.5; \varnothing 14.5 cm. Hangzhou City Museum. Image by the Author

Figure 11 Deep washer. Excavated in 2001 from the Laohudong kiln site. Hangzhou City Museum. Image by the Author

Figure 12 “Longquan Ge” ware with whitish crackles; the glaze is slightly overfired, but overall successful. Excavated from the Wayaoyang kiln site during the 2010-2011 campaign. Longquan Museum. Photograph by the Author

Figure 13 “Longquan Ge” ware with whitish crackles; the glaze is slightly overfired, but overall successful. Excavated from the Wayaolu kiln site during the 2011-2012 campaign. Longquan Museum. Photograph by the Author

tuous, jade-like, crackled glaze and in the thin, black body. The latter in particular was alien to the Longquan area which, on the contrary, abounded with light-firing porcelain stone or grey-firing stoneware clays, thus suggesting that black-bodied wares were exceptional and made with a very specific intent – or under explicit request. This is confirmed by the fact that the black body was employed for less than one hundred years between the very end of the 12th century and the demise of the Southern Song dynasty.

It is common knowledge that crackles are technically a fault occurring during the cooling stages, although on Ru and Guan wares not only they were not considered a defect, on the contrary, they were appreciated as an enhancement. crazing ensues especially if the amount of silica in the body is low, the glaze is thinner and of the lime-type, and the temperature increases.²⁴ Recent analysis on

24 I am very grateful to Professor Nigel Wood for the explanation.

sherds from the Wayaolu, Wayaoyang and Jiaotianxia kiln sites shows that the percentage of silica in the body is lower than 70% (Huang Y. et al. 2018), thus making crazing virtually inevitable. Crackles behave very randomly and it is difficult to distinguish ceramic types produced at the same kiln site on the basis of the kind of network they develop. The objects illustrated in figures 10 and 11 were both excavated from the Southern Song levels at the Laohudong kiln site: they show different types of crackles, but they are classified as Guan ware [figs 10-11]. The kind of specimens that have attracted the attention of Chinese scholars are similar to that illustrated in figure 4: the dark olive green glaze is rather unappealing and, as a matter of fact, such objects were overfired and semi-oxidised (hence discarded). Better results were achieved with samples such as those in figures 12 and 13 [figs 12-13].

As to the whitish tinge of the crackles, most likely it is a discolouring effect due to long burial in the ground.²⁵ Therefore, we should picture these samples as intentionally crazed, but the crackles looking not so deeply marked - but rather as they appear in figure 8, which looks like a close imitation of Guan ware, or figure 12, characterised by light white broken veins called *baijisui* or one hundred fragments. Most specimens unearthed from the Wayaolu and Wayaoyang kilns sites present the whitish crackles - the main difference between the two locations being that, on the whole, a higher percentage of sherds from Wayaoyang shows an unctuous, bluish-green glaze, some with dark crackles, very similar to those characteristic of Hangzhou Guan ware.

Overall, black-bodied Longquan specimens seem imitations of Hangzhou Guan ware and to set aside those with a denser mesh of whitish crackles does not seem fully justifiable, as most samples are misfired and the crackles' tinge is affected by seeping water during long burial. One good motive to call black-bodied Longquan specimens 'Ge ware' would be to differentiate them from the only true Guan ware made at the Laohudong and Jiaotianxia manufactures. The same reasoning can be applied to Yuan dynasty Laohudong pieces: very similar to the Southern Song production, only slightly lesser quality and most likely not used at court, they were distinguished by a different name: Ge.

Without resolute archaeological evidence, it is difficult to untie the knot of Ge ware, unless we try to pursue a different line of inquiry. Rather than insisting on making written sources, 'museum' and 'archaeological' Ge to fit together, we hypothesise the existence of different types of Ge, depending on the interpretation given in time. Judging from the descriptions, it is possible that fourteenth- and six-

²⁵ I am very grateful to Professor Nigel Wood for sharing this theory with me.

teenth-century writers referred to two different kinds of blue/green ceramics when discussing Ge ware. More specifically, according to modern scholars' understanding of written records and archaeological finds, it seems that Yuan dynasty Laohudong wares relate to early texts, while the Longquan black-bodied blue/green type evokes late Ming literature (except for Gao Lian's *Zun sheng ba jian* and Wang Shixing's *Guang zhi yi*). The third kind, 'museum Ge', still orphan of its original birthplace, was identified by the Qianlong emperor and its definition was further refined in the twentieth century with the addition of the *jinsi tiexian* double network of crackles as a distinguishing feature. Is it possible that Ge ware was manufactured at more than one kiln and at different times? At this point, only new archaeological discoveries can offer a clue.

4 Conclusion

Despite the huge research efforts made over the past fifty years, the positive identification of Ge ware still eludes us. At present we are faced with three different groups of ceramics, only one of which is labelled as "Ge". This is what is by now commonly known as "handed down" or "museum Ge", which consists of specimens in the Qing imperial collection and recognised as Ge ware in the eighteenth century by the Qianlong emperor. On this basis, objects were catalogued when the Forbidden City was opened to the public in 1925 and since then the label has been applied to specimens with similar characteristics. As "museum Ge" was until recently the only materially extant type, in the twentieth century it came to coincide with Ge ware. Its manufacturing site has not been located yet. On the contrary, the other two groups come from archaeologically excavated kilns - Laohudong in Hangzhou and Wayaoyang and Wayaolu in Longquan, but neither has been positively identified as Ge ware by the academic community because they do not satisfy the modern interpretation of records written since the fourteenth century. Literary sources have been minutely scrutinised by many scholars with inconclusive results, as they do not provide precise-enough descriptions of Ge ware. Old records are valuable in ceramic research, but to interpret archaeological results in accordance with literary sources written many centuries ago in order to confirm their veracity can lead to distorted and sterile conclusions. One way to avert this is to consider the possibility that, by Ge ware, Kong Qi and Cao Zhao intended pieces manufactured at the Laohudong kiln site in the Yuan dynasty, while Lu Shen and his followers applied the same name to objects produced during the Southern Song period by some kilns in the Longquan area, characterised by a close mesh of whitish crackles. Another way is to disengage archaeological work from preconceived ideas and ana-

lyse the material evidence from the many Longquan kiln sites from the “horizontal perspective”, that is, to compare unearthened material datable to the same period, but excavated from different sites. This requires reliable stratigraphic studies of the sites and a well-knit group of scholars working patiently together for several years, but in the end it will provide a safe chronology for the manufacturing activities in the vast Longquan ceramic district. It will also reveal the connections among individual sites and clusters and the mechanics of production. This dynamic approach might offer new and unexpected insights into the history of Chinese ceramics without necessarily obliging to written records.

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