



K876. 3 53

# 明清一色釉瓷

## Monochrome Ceramics Of Ming And Ching Dynasties

Jointly presented by the Min Chiu Society and the Urban Council.

Hong Kong

敏求精舍■香港市政局聯合主辦

8-2-77-10-4-77

Hong Kong Museum Of Art

香港藝術館



HONG KONG POLYTECHNIC

NK 4165 ·5 ·M5 C.2

PRINTED BY
THE GOVERNMENT PRINTER
HONG KONG
香港政府印務局印

Published By The Urban Council Hong Kong

Designed By Hong Kong Museum Of Art

香港市政局出版 香港藝術館設計

## 目錄 Contents

市政局主席獻詞	8
序	10
前言	13
展品借出者	20
中國朝代年表	22
紅色釉器	25
紫色釉器	41
藍色釉器	49
綠色釉器	61
青瓷	69
黃色釉器	77
褐色釉器	85
爐鈞、仿汝、官、哥窰釉器_	97
黑色釉器	105
白色釉器	109
展品目錄	123

Message From The Chairman	
Urban Council, Hong Kong	9
Introduction	10
Foreword	13
List of Lenders	20
Chinese Dynasties & Reigns	22
Red Wares	25
Purple Wares	41
Blue Wares	49
Green Wares	61
Celadon Type Wares	69
Yellow Wares	77
Brown Wares	85
Robin's Egg,	
Ju,-Kuan,- and Ko-Type Wares	97
Black Wares	105
White Wares	109
List of Exhibits	123

### 市政局主席 獻詞

#### Message From The Chairman Urban Council, Hong Kong

香港藝術館自一九六二年成立以來,已經主辦了 超過一百八十多個展覽,其中以本港及中國藝術 為主要範圍。而中國歷代瓷器的展出,更屬藝術 館節目的重要部份。

因此,市政局與敏求精舍,於一九七七年香港藝術節期間,合辦這個明淸壹色釉瓷展覽。這個本港首次最盛大的單色瓷展得以順利舉行,實有賴敏求精舍全人對藝術館活動的一貫支持,市政局在此深致感謝。

只有得到藝術家及藝術愛好者的通力合作,市政局才能進一步充實香港的文化生活。香港藝術館除了贊助本港藝術家把作品公開展出,同時亦鼓勵藏家把藏品公諸同好,使本港市民在這次香港藝術節的特展中有機會欣賞到藏家精選珍藏的名瓷。

香港市政局主席 沙利士

一九七六年十二月十八日



More than 180 exhibitions have been held since the Museum opened in 1962. Most were on local and Chinese art. Indeed, the display of Chinese ceramics is a major feature of the Museum programme.

The Council is consequently proud to present jointly with the Min Chiu Society this exhibition of Ming and Ch'ing Monochromes during the 1977 Hong Kong Arts Festival. It is the first ever held here on such a large scale. For this opportunity the Council is obliged to the members of the Min Chiu Society who have given unfailing support to Museum activities.

It is only by the combined effort of all artists and art lovers that it becomes possible for the Council to do more to enrich cultural life in Hong Kong. And, the Hong Kong Museum of Art encourages local artists to show their works to the public and also expert collectors to give the people here the opportunity to view and admire the precious ceramic pieces that they have assembled with such discriminating knowledge, as is now the case in this Festival Exhibition.

A. de O. Sales Chairman

M. de O. Lales

Hong Kong, 18th December, 1976

#### 序 Introduction

敏求精舍和香港藝術館合辦的展覽,這回已是第三次。以前在一九六六年舉行了明代書畫瓷器展覽。又在一九七〇年舉行明淸兩代名畫展,所有展品皆由敝會會員提供,經過了愼重甄選,方始展出。故此甚得好評。這次展覽是爲着响應一九七七年香港藝術節而發起,比較更有意義。

展覽的主題是明清單色釉瓷器,範籌雖似狹窄了一點,但是,單色釉瓷器,實是明清兩代陶瓷業的最佳成就之一,是值得作專題介紹的。而且單色釉的種類繁多,展品雖然未算包羅萬有,但已略備概要,可供愛好者欣賞之餘,作爲參攷印證。

The Min Chiu Society has on more than one occasion in the past co-operated with the Hong Kong Museum of Art of the Urban Council in mounting exhibitions, the most notable of which were the exhibition of "Ming paintings, calligraphy and porcelain" in 1966 and the exhibition of "Ming and Ch'ing paintings" in 1970. The present exhibition is another joint venture which has been organized as part of the activities of the 1977 Hong Kong Arts Festival.

The subject of the exhibition, which is monochrome porcelains of the Ming and Ch'ing periods, is by no means as monotonous as its title suggests. The production of monochrome porcelains was one of the great achievements of ceramic art during the Ming and Ch'ing periods and deserves some attention and study. Although it has not been possible to include examples of every known type in the present exhibition, there

現時所謂單色釉,其實可以分為兩大類。其一是 用高溫和瓷胎一次燒成的,如祭紅、祭藍、豆青 、粉靑等。另一種是用燒成的白瓷加色釉後,再 用低溫烘成的,如各種黃釉、茄皮紫、胭脂水等 。前者是名副其實的「單色釉」,而後者可稱為 「單色彩」。

一般稱爲「龍泉」的高溫釉器,其表面顏色可由 灰至橄欖綠或靑綠色;薄的或厚的、透亮的或不 透明的都有。其起源可遠溯至商代。其後唐代或 唐代前的越窰、宋代的龍泉、耀州、臨汝、鈞、 官等窰器都屬於這系統。此釉的呈色金屬爲鐵,

are perhaps enough pieces to demonstrate the richness and variety of these wares.

The term monochrome, in fact, covers two types of wares. The first is a porcelain with a coloured glaze fired at high temperatures together with the body; examples are the "sacrificial red", "sacrificial blue" and the various celadons. The second is produced by using an enamel colour over glazed white porcelain and fired at a lower temperature a second time, such as the aubergine, rouge and the various yellow monochrome glazes. The former are "monochrome glazes", while the latter may be called "monochrome enamels".

The general class of high-fired wares known as "celadons" with a surface glaze of grey to olive-green and bluish-green, thin or thick, clear or somewhat opaque, has an ancestry as early as the Shang period in Chinese history. The glaze

因釉中鐵份的多少及火焰的變化而產生不同的色調。用其他金屬作呈色元素的單色釉,如藍釉用 鈷、紅釉用銅,則始創於元明之際或稍早的時候。到了淸初,紅、藍、綠三種單色釉都有很大的 發展。紅釉有祭紅、郎紅、豇豆紅之分,藍釉則有祭藍和雪花藍等。以鐵爲呈色的釉,品類最多,由豆靑至靑綠或灰綠都有,及仿宋代官窰等。至於單色釉的名目則比實際的品種爲多。這是因爲同一種釉色往往有不同的名稱。

另一種單色釉,即以上所謂「單色彩」,肇始於

展。色彩的種類也增加了很多。如十八世紀初從 西方輸入的胭脂紅釉等。有時瓷釉是直接施於器 坯上再蓋上無色的鉛釉,也有完全不施釉的。 清代瓷器到乾隆後期,便甚少創新製作,而且一般質素也漸漸降低。清代後期的成品很少達到清早期的那般完美。

明代宣德年間。明代的釉上彩主要有黃、綠、紅

三種顏色,而用作「單色彩」者則以黃色居多。 展出的黃釉器中,有數件是屬於明代的。這種單

色釉器到了清代康熙晚期至乾隆早期有很大的發

colour is due to the presence of ferrous iron in the glaze, the different colours and shading being the result of varying firing conditions, together with the amount of iron present. The Yueh wares of pre-Tang and Tang (618-906 A.D.), the Sung (960-1276 A.D.) celadons such as Ju, Kuan, Lung-chuan, Chun, Yao-chou and Lin-ju, all belong to this class. The use of other metals to produce other coloured glazes began in the 14th century or earlier when blue and red monochrome glazes came in, using cobalt for the blue and copper for the red. Advances and refinements in technique using the same metals basically during the Kang-hsi reign of the Ch'ing period brought about many newer kinds of red, blue and green finishes. During this time, three kinds of red glazes were commonly used: sacrificial red, Lang-yao, and peach-bloom, each with its own characteristic features. A variation of the blue glazes is what is known as powder-blue which was produced as an overall somewhat dotted underglaze blue by spraying the cobalt on the body before glazing. The greatest variety was achieved in the iron glazes which range from a clear pale peagreen to a pale blue-green and a greyish-green — apart from several other glazes in imitation of the Kuan wares of the Sung. It should be mentioned in this connection that there are many more names than the glazes they represent.

The other class of monochromes, the monochrome enamels, began in the reign of Hsüan-te in the Ming period. Over-glaze enamels used included mostly these three colours, yellow, green (both glassy in appearance) and red (which is mat), but the yellow enamel was the main colour for

本人謹希望這個以一色釉瓷器為主題的展覽,能 提高一般人仕對明淸陶瓷的興趣,亦可提供有關 瓷釉更多的參考資料,使學者對一色釉瓷能作更 進一步的研究。

敏求精舍執行委員會主席 莊貴侖

monochromes. There are several examples of the yellow wares of the Ming period in the present exhibition. Again this class of monochromes was greatly developed in the late 17th to early 18th centuries, covering the period from the late-Kang-hsi to early Ch'ien-lung reigns in the Ch'ing period. New colours were used for the first time during this period, such as the famous "rose" colour which was a western importation at the beginning of the 18th century. In some cases, the biscuit was decorated by the direct application of enamels covered over with a colourless lead glaze and in other cases left entirely unglazed.

The production of high quality monochromes, like all other classes of porcelains, declined in quality from the time of the late Ch'ien-lung period and practically no new colours were invented in the second half of the Ch'ing

dynasty. The monochromes of this later period very seldom attained the perfection of the early Ch'ing reigns. The main accent in this exhibition is on wares from Ching-te-Chen in Kiangsi, but some white monochromes of Te-hua ware from Fukien (blanc-de-Chine) are also on display. Also some glazes, such as the "flambé" glaze, which are not strictly monochromes, have been added on account of traditional classification.

It is hoped that the selection of monochrome wares in this exhibition will prompt the interest of the public in the subject and further research that leads to a better knowledge in the field of ceramic art.

Quincy Chuang Chairman Min Chiu Society

#### 前言 Foreword

雖然中國陶瓷歷史非常久遠,但陶匠們能廣泛地運用靑、褐釉類以外多種不同的顏色釉則實始見於唐代。至宋代雖然多種瓷釉的顏色已相繼試製成功,但能集色釉之大成而使中國瓷器在色釉方面大放異彩的,實爲明、淸兩代的瓷匠。明、淸兩代的瓷器,在色釉製作方面,品類之多,爲前代所未見。此次展覽是特爲介紹明、淸兩朝在單色釉方面的成就。

展場中的展品並不依照年代先後編排; 概此展覽 以介紹顏色爲主,故展品亦以顏色分組陳列。展 出的單色釉器,間有描金或窰變等器出現,此乃

Although glazed pottery has a very long history in China, it was in the T'ang Dynasty (618-907) that potters began to take a serious interest in the use of more coloured glazes other than the simple families of greens and browns. The glazing techniques of many basic colours in porcelain were introduced in the Sung Dynasty (960-1279). Yet the triumph of the potters in the mastery of the widest range of glazing techniques was seen in the coloured wares of the Ming and Ch'ing Dynasties. It is to the monochrome wares of these two dynasties that this exhibition is dedicated.

The grouping of the exhibits in this exhibition does not follow the usual chronological arrangement. Instead the exhibits have been grouped according to their general colour because it is colour which is the main feature of the display. Occasionally monochrome wares are embellished with gold or silver as will be seen in

依據傳統分類習慣而選出。

一般中國人都愛用紅色,故紅色的裝飾常見用於 節日及喜慶宴會等場合。紅色釉雖然在瓷器史上 比多種其它色釉出現稍晚,但在明、清單色釉器 中仍不失爲主色之一。以氧化銅製成的紅釉,最 早的出現而引人注目的,是宋代鈞窰器上的紫紅 。而逗人喜愛的祭紅釉器則於元代方有所成,至 明代早期才臻完善。展場中早期紅釉器的例子有 明永樂朝的紅釉高足杯(展品一)及宣德朝的紅 釉碟(展品二)。二者皆有暗花紋飾。

the exhibition, but nonetheless these embellished pieces are traditionally classified among monochrome wares.

Red is a favourite colour of the Chinese and is always much used in festivals and on auspicious occasions. It is not surprising therefore that this first group, the red wares, dominates this exhibition, although the red glaze appeared relatively later than many other glazes. The earliest, significant copper red glaze was that found in the Chun wares of the Sung Dynasty. Accomplishment in the much loved copper-red wares did not reach its proper heights until the Yüan Dynasty and was brought to perfection in the early Ming Dynasty. Examples of these Ming red wares are seen here in the Yung-lo stemcup with "an-hua" (secret) relief decoration (Exhibit 1) and the Hsüan-te dish with incised decoration ( Exhibit 2).

清代康、雍、乾三朝的陶瓷藝人把紅釉器製作技巧再度提高,並創出一連串的新品種。較著名的有郞窰(展品三至六)、豇豆紅(展品七至一二)、玫瑰紅(展品一九)、胭脂紅(展品二〇至二二)、珊瑚紅(展品二三至二五)等。郞窰與豇豆紅同屬高溫釉。前者有不同深度的紅;後者則變化更大,其色調包括由棗紅至淺紅之間各種色澤,間或雜以綠斑。胭脂水與珊瑚紅則屬低溫釉,常以吹釉法施於已燒成的白瓷器表面,再放入低溫窰內燒成。

第二組展品爲紫色釉器,此種以氧化錳爲呈色劑

Potters of the Ch'ing Dynasty with the greater range of techniques at their disposal introduced a series of new varieties of red glaze. The more notable ones are the Ch'ing "Sang-de-boeuf", or "Lang-yao" (Exhibits 3-6), the peach-bloom (Exhibits 7-12), the ruby-red (Exhibit 19), the crimson-pink (Exhibits 20-22) and the coral-red (Exhibits 23-25) of the K'ang-hsi, Yung-cheng and Ch'ien-lung reigns. Both the "sang-de-boeuf" and peach-bloom are high-fired glazes. While the former has a wide variation of tints, the latter is often characterized by its unexpected shading from a pinkish-red to a maroon colour with occasional patches of green spots. The pinks and coral-red belong to the lowfired group often being applied as a thin layer on the feldspathic glazed vessels by blowing as a spray, through a gauze.

The second group is of aubergine and violet wares. The aubergine colour, coming from the

的紫色釉最早出現於明代「三彩」器上。至清代 ,紫色的單色釉器逐漸普遍。康熙時期的茄皮紫 多爲發亮的深紫色(展品二八、二九)。其中亦 有紫藍釉器,內外均刻有細緻花紋(展品三四) 。各種深淺調子的紫色釉器在康熙以後陸續有燒 造,分爲刻花或光身二種,至清末仍有出品(展 品三二)。

在紫色釉器之後,在展場中繼續介紹的為藍釉器。早在唐時,鈷藍已被採用來燒造當時流行的低溫彩色釉陶器。此次展出藍釉瓷器,屬於明代的有二件,清代的有十九件。該兩件明朝深藍色釉

manganese in the glaze, first appeared in the "San-tsai" wares of the Ming Dynasty. It became popular in monochrome wares of the Ch'ing Dynasty. Many of the aubergine wares produced in the reign of K'ang-hsi are of a very dark lustrous tone (Exhibits 28 and 29) while some violet wares of the same period are decorated with very fine incised patterns on inner and (or) outer walls (Exhibit 34). Aubergine wares in various tones with or without incised patterns were produced till the end of the Ch'ing Dynasty (Exhibit 32).

The colour which follows naturally is blue. As early as the T'ang Dynasty, cobalt blue was used in the decoration of the famous low fired mortuary wares. Presented here are two specimens of the Ming Dynasty and nineteen of the Ch'ing Dynasty in different shades of blue. The two Ming bowls in this exhibition are all in dark blue. (Exhibits 35,36) The two bowls which have in-

碗均刻有龍紋,一在碗內,一在碗外。碗底俱塗有褐色瓷漿,為晚明此類器皿的典型例子(展品三五、三六)。清代的官窰藍釉器中,祭藍似極普遍(展品四一至四五)。這可能是當時供應全國各地宗廟祭祀之用而遺留下來的。

清代的藍釉器如紅釉器一般,有多種不同的色調,如康、雍兩朝的灰藍釉器(展品三九)、雪花藍釉器(展品四〇)與粉藍釉器(展品四七、四八)等。同見於康熙朝的又有月白釉器。這是一極淡的淺藍色釉瓷器(展品四九、五〇)。單色釉的另一發展乃見於十八世紀時寶石藍釉與翠藍

cised dragon patterns, on the inside of one but on the outside of the other, with the bases covered by a brown slip, are typical examples of the wares of the late Ming period. In the Ch'ing Dynasty the sacrificial blue is quite commonly found among imperial wares (Exhibits 41-45). Like the red glazes, the other blue glazes of the Ch'ing Dynasty demonstrate a wide variation of tones. There are the greyish-blue (Exhibit 39), the powder-blue (Exhibit 40) and the lavender blue (Exhibits 47, 48) of the K'ang-hsi and Yung-cheng reigns. Also produced in the K'anghsi period was a blue glaze which faded down to a very pale moon-light shade, known to the Chinese as "moon-white" but is better known in the western world as "clair-de-lune" (Exhibits 49,50). An interesting development of the blue glaze in the 17th and 18th centuries was the revival of interest in the turquoise and peacock blue glazes (Exhibits 51-54) whose ancestry can

釉的再度流行(展品五一至五四)。該兩種釉均 屬低溫釉類,以氧化銅爲呈色劑。其早期出現可 追溯至宋代的磁州窰器。

第四組為青瓷以外的綠色釉器。遠至漢代,綠釉已極普遍。此種綠色釉乃以氧化銅釉在氧化焰中燒成,如果釉內含有不同份量的鉛,即可產生不同調子的綠色(展品五八至六四)。綠釉中有名「蘋果綠」的(展品六〇至六二)。它原是指一種因用火不當,使原應為紅色的卻被燒成青綠色的瓷器。康熙末期,瓷匠為仿製此類釉器,乃以低溫綠釉加在有迫裂紋的白瓷上而獲致類似的釉

be traced to the Tzu-chou wares of the Sung Dynasty, applied as an overall medium-fired alkaline copper oxide glaze.

As early as the Han Dynasty (206B.C.-220A.D.), a green glaze was used on pottery wares. A green colour is produced when a copper oxide glaze is fired in an oxidation flame, and, by varying the amount of lead in the glaze, a wide range of greens can be produced (Exhibits 58-64). Originally the term "apple-green" refers to a kind of green wares which was meant to be red but had been misfired. The same term now, however, also refers to an imitation of the former glaze produced by late K'ang-hsi potters who applied a low-fired green glaze over a feldspathic glazed and crackled vessel.

Another family of green wares, perhaps the most famous, are the celadons (Exhibits 66-79). Originating in the Shang Dynasty, they reached their heights

色。此種釉亦同樣被稱爲「蘋果綠」。

另一組展品為黃釉器。大部份的黃釉是以氧化鐵為呈色劑。唐朝的黃釉是一種含有三氧化二鐵的低溫鹼性釉。當時是以黃釉直接施於坯身的;因釉吸取坯土內的鐵質,逐呈出較深的褐黃色。後來康熙三彩的黃色亦是如此。在明代早期,一種含銻與鐵的黃釉已被運用。以此釉施於已燒成的長石釉器上,入低溫窰再燒,即可得光亮清純的黃色。其後更因懂得施用較薄的長石釉,黃釉器皿乃更臻精緻。其中且有刻花或雕花在器身上的。在康、雍年間,因粉彩的流行,乃有以氧化錫

加入黃釉內,製造出一種前所未有的不透明而極 鮮艷的黃色。爲便利各種黃釉的分辨,名目如鷄 油黃、米黃、檸檬黃等,逐相繼出現(展品八〇 至九一)。

明、清瓷匠甚多喜愛研究宋代瓷釉。此可見於展 覽場中其它各組的仿宋窰器。其中以仿龍泉爲最 普遍(展品六六至七九)。其它仿汝、官、哥等 窰亦頗多(展品——至—二三)。該等仿宋釉 器,一般製作水準甚高,顯示明、清兩代製瓷技 法的進步。

first during the Sung Dynasty and again in the Ch'ing Dynasty. They are produced by the reduction of ferric to ferrous oxide in the glaze,

Most vellow glazes are derived from iron salts. The T'ang yellow glazes came from ferric oxide in a low fired alkaline glaze. In the earlier Ming period, a new clear yellow glaze was evolved from antimoniate of iron fluxed with lead. This was applied in a second firing as an overglaze on the high-fired feldspathic glaze normally found on the usual white porcelain, imparting a brilliant clear yellow colour. Later on, a thinner feldspathic layer was used, resulting in the finer yellow wares of the late Ming and Ch'ing, often accompanied by an incised or moulded decoration on the body. Sometimes, the yellow glaze was put directly onto the high-fired body, resulting in a darker brownish yellow colour, owing to absorption of the iron of the body into the glaze. During the K'ang-hsi - Yung-cheng transition period, with the use of powder enamels, a tin oxide was added to the yellow glaze, giving the glaze an opacity and sharp brilliance never seen before. To differentiate the various shades of yellow glazes, terms like "lemon yellow", "egg-yolk yellow" or "imperial yellow" have been given (Exhibits 80-91).

Many Ming and Ch'ing potters were ardent admirers of the monochrome glazes on the Sung wares. This may be seen from the large number of Ch'ing Dynasty wares made in imitation of the monochromes of the Sung Dynasty. The most widely imitated were the celadons (Exhibits 66-79), Kuan (Exhibits 114-120), Ko (Exhibits 121-123) and Ju wares (Exhibits 111-113). These wares were often of very high quality. They demonstrate the mastery of the Ch'ing potters over the use of glazes and potting techniques. While imitating Sung wares, the Ming and Ch'ing potters also made

在模仿宋代釉器過程中,明、清瓷匠同時亦有改良與創新。從宋代鈞窰器變化而出的有多種窰變釉,包括火熖紅(展品二七)及爐鈞(展品一〇八至一一〇)等,又從宋代建窰天目釉變化而出的有茶葉末、鐵銹及芝蔴醬等釉類。此最後三種釉色,主要是運用釉中的三氧化二鐵變化而成或茶葉末是指一種遍佈深黃綠色微粒的深褐色釉。此種釉質乃因氧化鐵內含有適量的錢而產生(鐵器品九八至一〇三)。茶葉末釉適宜施在含有鐵醬高的坯胎上;這樣可獲致最佳的茶葉末色。鐵銹釉之所以得名,乃因其色極像鐵銹。其釉面充滿有金屬光彩的微粒(展品一〇四至一〇七)。

innovations and improvements on some of the famous traditional Sung glazes. For example, from the Chün wares, the flambé glazes including the Robin's egg were derived (Exhibits 27, 108-110). and from the "temmoku" wares of the Sung period, came the cafe au lait, the tea-dust and the iron-rust glazes which were all derived from ferric oxide. Tea-dust is a name given to the glaze composed of fine speckles of green and vellow crystals evenly spread over a dark background. (Exhibits 98 - 103) It is produced by firing a ferric oxide glaze in the presence of magnesium. Tea-dust glaze was best when applied onto a vessel of a high iron content clay. The iron-rust glaze is so called because it has a colour resembling that of rusty iron, speckled all over with metallic crystals. It was achieved by applying a high iron content glaze over a black glaze and firing the piece by raising the temperature slowly and also allowing it to cool down slowly after

此種效果乃以含鐵量高的氧化鐵釉施在黑釉上面 所燒成。燒鐵銹釉器,窰溫增加要慢。燒後也要 使窰溫慢慢降低才成。芝蔴醬的釉質較茶葉末與 鐵銹釉爲光潤。其色可從黃褐至深啡不等。釉面 有沉着的金屬光澤(展品九二至九七)。芝蔴醬 與鐵銹釉均適宜施於景德鎭潔白幼緻的瓷土造成 的器皿上。

展場中的黑色釉組,乃專介紹康熙朝出品的烏金 釉器。在康熙以前的黑釉單靠三氧化二鐵來呈色,所得的都不是純正黑色。這種經改良的烏金釉 是在三氧化二鐵中混以含有錳與鈷的礦石燒成。

firing (Exhibits 104-107)." Cafe' au lait" has a surface texture finer than both the tea-dust and iron-rust. Its tints range from rusty to yellowish brown with some emitting a muffled metallic sheen(Exhibits 92-97). Unlike tea-dust, both cafe' au lait" and iron-rust were applied on the fine white porcelain clay of the Cheng-te-chenwares.

K'ang-hsi period produced an improved black glaze and this forms the next group in the Exhibition. This was the mirror-black produced by adding manganese and cobalt to the traditional iron-black glaze used in Sung wares. The resulting glaze was a true black, lustrous and smooth (Exhibits 124-127). But the presence of cobalt often caused a trace of blue to be seen at the edge of the black glaze.

White wares have been produced in China since prior to the T'ang Dynasty and have always held