

THE MADNESS  
OF CHINESE  
PORCELAIN:

WHAT'S WITH  
THE CHICKEN  
CUPS??

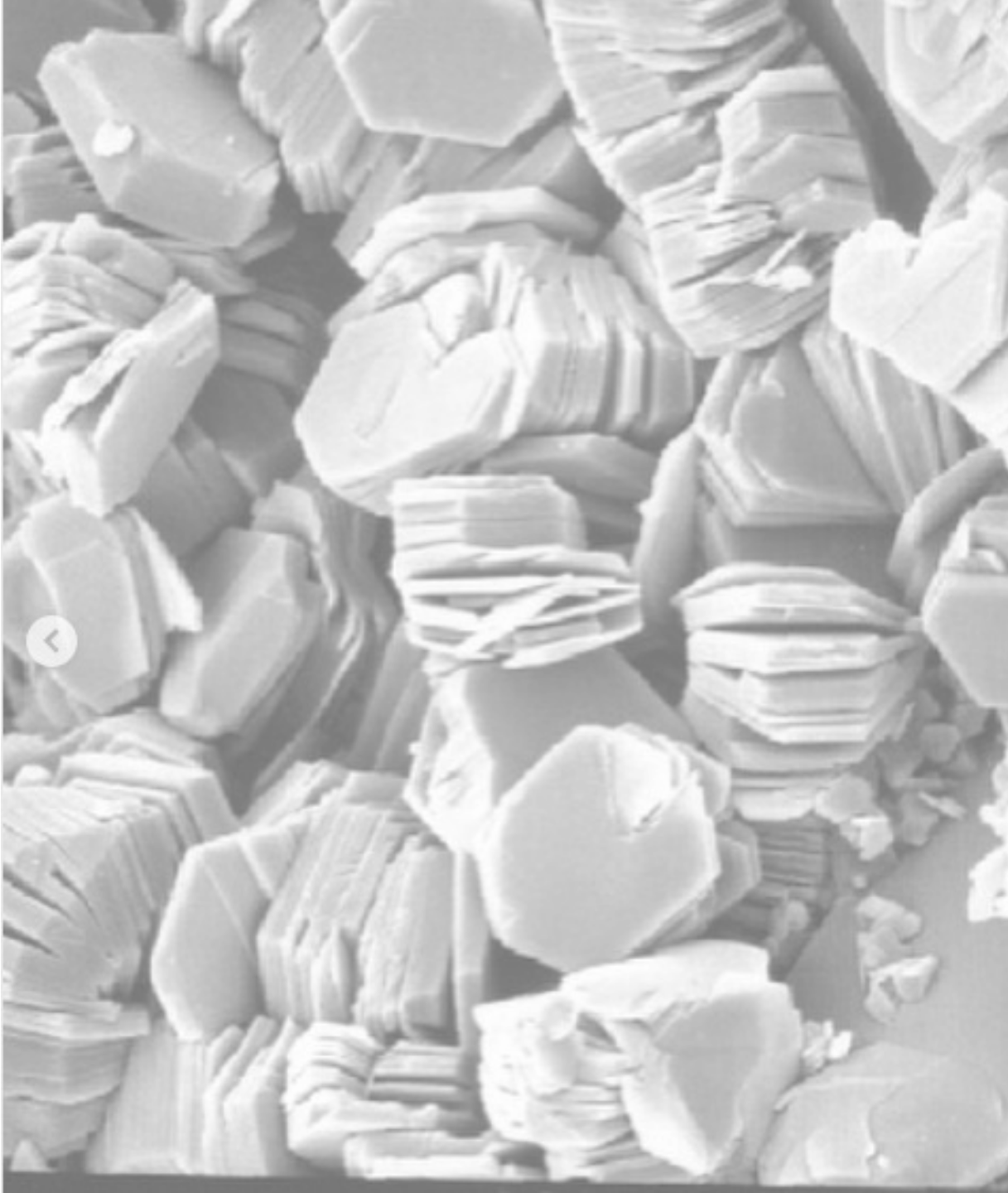
Distinctive ceramic art  
showcasing Islamic innovation  
and beauty



# WHAT IS CLAY?

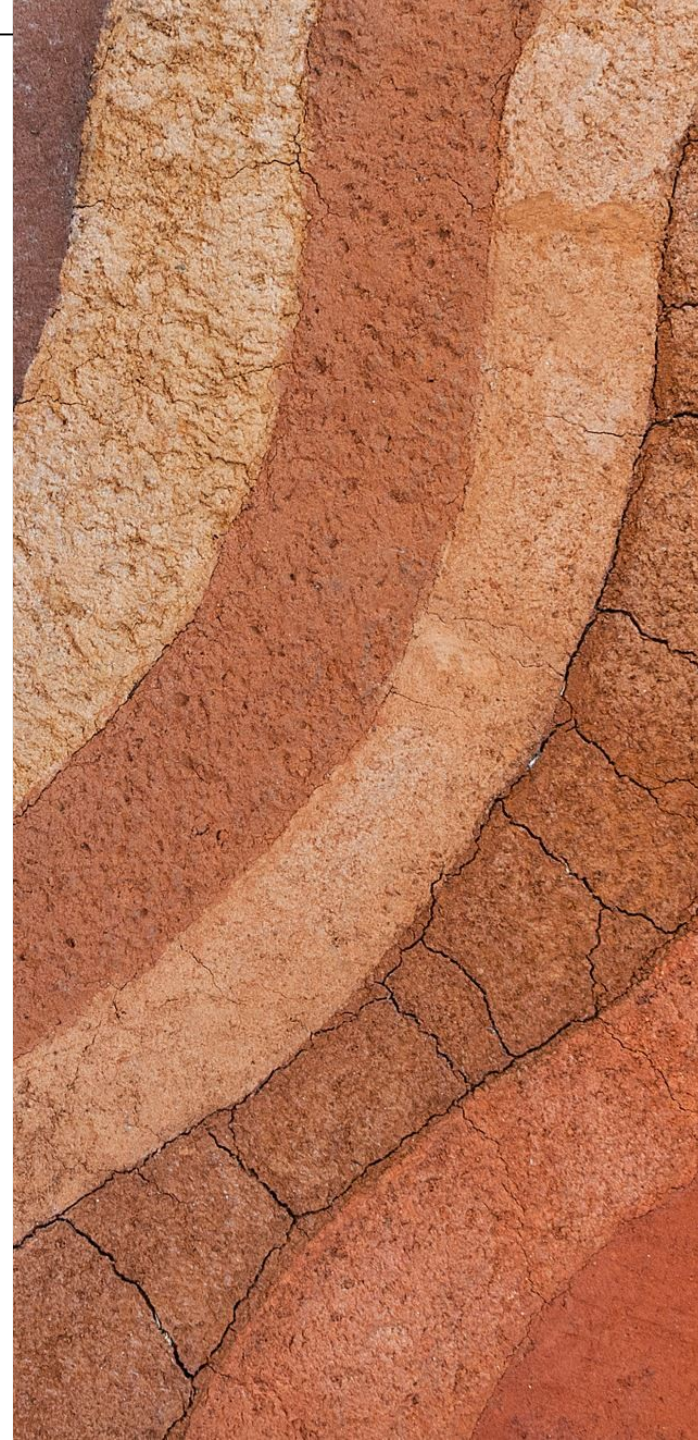
# CLAY

- Clay is a naturally occurring, fine-grained earthy material composed of one or more clay minerals, often with traces of quartz and metal oxides ( [iron](#) , magnesium, potassium, sodium, and calcium). It forms from the weathering of rocks like [feldspar](#) (granite) over long periods and has the unique property of becoming soft and plastic when wet, allowing it to be easily molded, but then hardening into a rock-like substance when dried or fired.
- Under a microscope, clay appears as flat, thin, and often hexagonal-shaped platelets (tiny plates). These platelets are made of [silica](#) and [alumina](#), and when wet, they can easily slide past one another, giving clay its characteristic [plasticity](#) and ability to be molded. Under an [electron microscope](#), these microscopic plates are seen to form stacks, which contributes to why clay shrinks and can crack when it dries.
- Silica, Alumina, Water+ other elements in small amounts
- Looking for clay.



# TYPES OF CLAY BODIES

- **Earthenware:** Fired in the range of 800°-900° Celsius. Earthenware is porous; unless the piece is glazed, capillary action will pull liquid through the porous walls. Earthenware ranges in earthtones from buff, grey, brown, white and black.
- **Stoneware:** Fired to the range of 1100° - 1200° Celsius. Because of stoneware's high firing temperature, the particles of silica in the clay body melt and fuse in a process known as vitrification, making stoneware impervious to liquids, even without glaze. Stoneware can also vary in color.
- **Porcelain:** Employing two white clays, Kaolin and Petuntse ("China Stone"- low iron fusible feldspar mineral). Porcelain is fired in the range of 1300° -1400° Celsius. As with stoneware, porcelain's high firing temperature results in vitrification, making it impervious to liquids even with out glaze. When properly mixed and fired, Kaolin and Petuntse create a fine grained, white ceramic ware that is translucent, due to its high silica content.



# CHINESE PORCELAIN

The first true, high-fired translucent porcelain was developed by the Tang Dynasty (618–907 CE).

From the 9th century onward, Islamic merchants started to import Chinese ceramics via the Indian Ocean Silk Road routes. These exotic objects were cherished in the Islamic world and became an inspiration for local potters.

Tang Dynasty Chinese Porcelain has been found in present day Iraq (Samarra and Ctesiphon) and Iran (Nishapur).

Chinese traded silk, ceramics, tea, spices, paper

In return the middle east traded horses, glassware,

## Chronology of Later Dynastic China

**Tang Dynasty 唐朝** 618 – 907

**Song Dynasty 宋朝** 960 – 1279

**Northern Song 北宋** 960 – 1127

**Southern Song 南宋** 1127 – 1279

**Yuan Dynasty 元朝** 1279 – 1368

**Ming Dynasty 明朝** 1368 – 1644

**Qing Dynasty 清朝** 1644 – 1911

# Technological advances

How did they get to the high temps needed to vitrify the clay?  
Mass production, stacking, and use of molds.

## Song Dynasty kilns

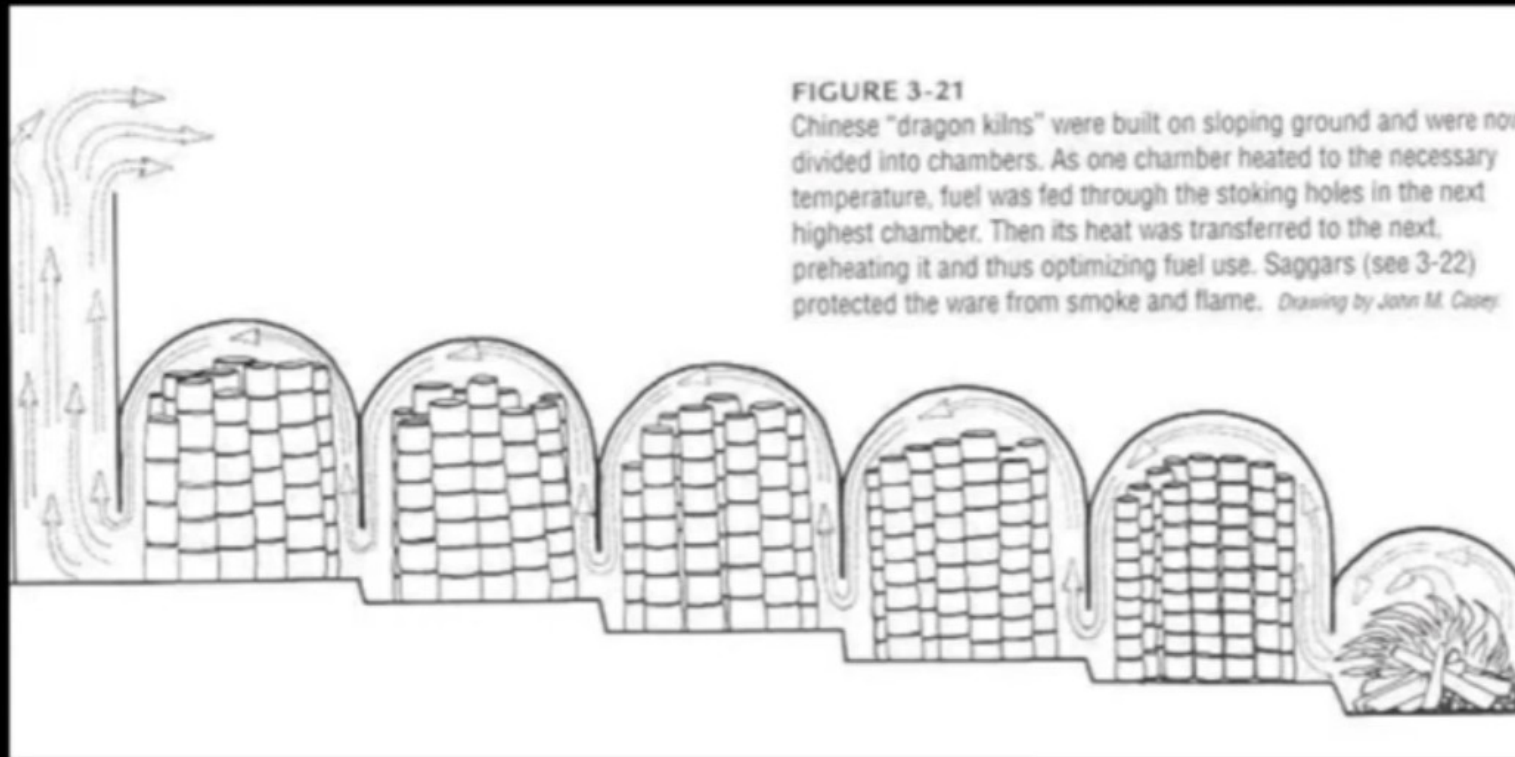


FIGURE 3-21

Chinese "dragon kilns" were built on sloping ground and were now divided into chambers. As one chamber heated to the necessary temperature, fuel was fed through the stoking holes in the next highest chamber. Then its heat was transferred to the next, preheating it and thus optimizing fuel use. Saggars (see 3-22) protected the ware from smoke and flame. *Drawing by John M. Gaoey*



FIGURE VII.4. An incomplete, quart-tankard capacity stoneware sagger, with a Swan Tavern pint mug seated within it. William Rogers's pottery, Yorktown, Virginia, ca. 1724-1739. U.S. National Park Service Collection.

Illustration from *Hands in Clay* by Charlotte Speight and John Toki

Covered Jar  
Chinese; Tang dynasty,  
9<sup>th</sup> century



Tang dynasty (618–907)  
Porcelain with white glaze (Xing ware)





**Circular Dish with Floral Décor**  
**Chinese; Northern Song period, 11<sup>th</sup> – early 12<sup>th</sup> century**  
**Ding ware: porcelain with off-white glaze over incised**  
**and carved decoration**  
**Private Collection**

Northern Song

Golden age of the Monochrome scroll paintings. The ceramics reflect this aesthetic. Incised and floral decoration. Sometimes would have dragons but mostly floral. Unglazed rim. They were fired on their rims

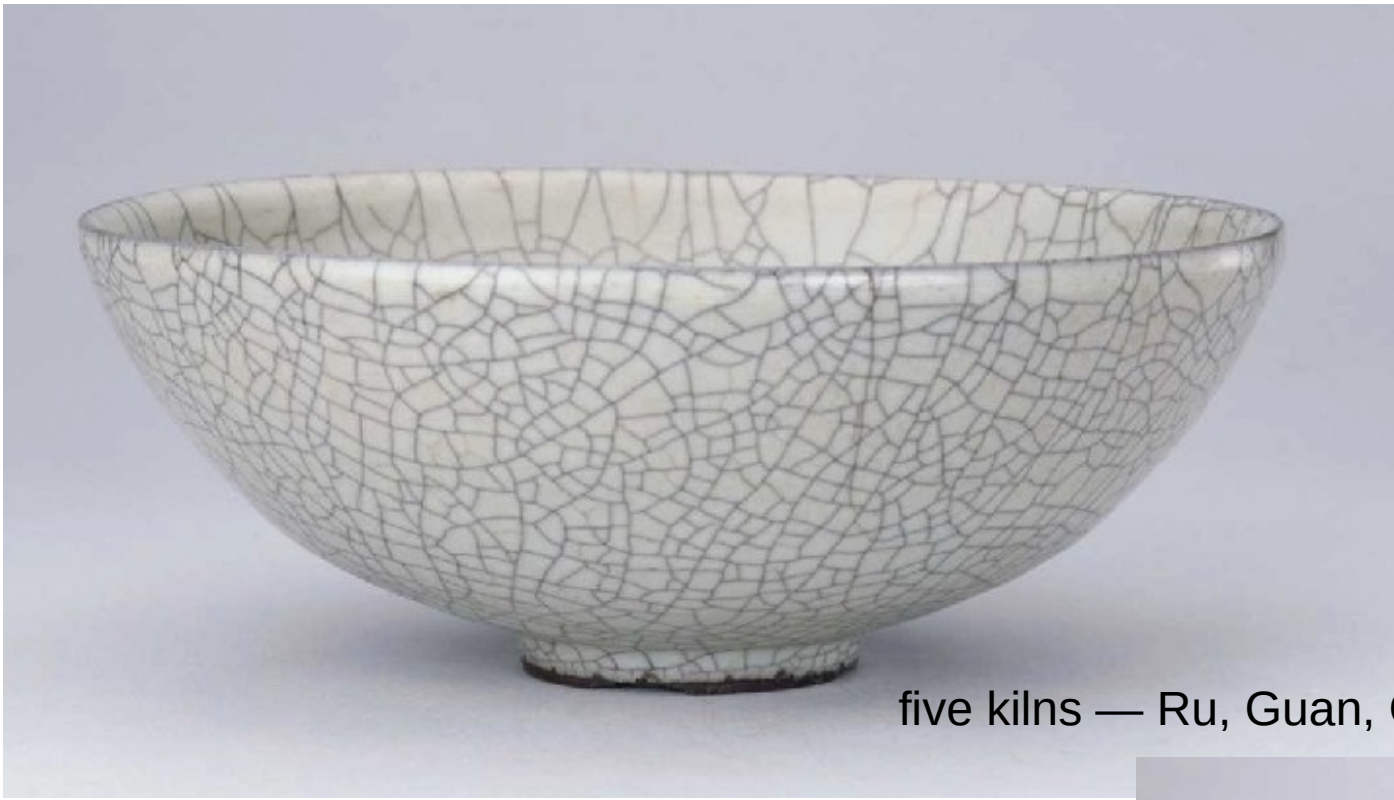
# EUROPE VS. CHINA

1226- 1275 ENGLAND EARTHENWARE (BRITISH MUSEUM)



960-1234 NORTHERN SONG DYNASTY PORCELAIN (BM)





five kilns — Ru, Guan, Ge, Ding, Jun





**Conical Bowl with Floral Décor**

**Chinese; Southern Song period, 12<sup>th</sup> – 13<sup>th</sup> century**

**Qingbai ware: porcelain with pale blue glazed over  
incised decoration**

**Harvard Art Museums, Cambridge, MA**



Known as Qingbai, literally bluish-white, this type of porcelain features a jade-like glaze surface, often with fluent carving decoration, such as vegetal scrolls on this vase. Qingbai porcelain was a dominant product from Jingdezhen, a major ceramic center in south China, from the twelfth to the thirteenth century. These objects were not only widely produced for the domestic market but also for export to Japan, Southeast Asia, and as far as East Africa.

Southern Song (1127–1279)–Yuan (1271–1368)  
dynasty

Met Museum

**Charger with Garden Décor**  
**Chinese; Yuan dynasty,**  
**mid-14<sup>th</sup> century**  
**Blue-and-white ware: porcelain**  
**with decoration painted in**  
**underglaze cobalt blue**  
**Harvard Art Museums**





The blue and white ware was being exported to the middle east. The potters were trying to write script they were not familiar with.

# COBALT BLUE UNDERGLAZING



Left: Scrolling lotus flask, Ming dynasty, Jingdezhen, China, 1426–35 (© The Trustees of the British Museum);  
right: Mosque Lamp, c. 1510, fritware, Iznik, Turkey (© The Trustees of the British Museum)



**Left image:** Ming plate with grape design, 15th century, Jingdezhen kilns, Jiangxi. British Museum.

**Right image:** Stone-paste dish with grape design, and "dollar pattern" border, Iznik, Turkey, 1550-70. British Museum.



The design was drawn in cobalt blue on the unfired vessel. After glazing and high-temperature firing, the images were filled in with overglaze enamel pigments and then it was fired at a lower temperature to bring out the vibrant colors. Known as “chicken cups” for their imagery, these vessels convey a core Chinese value: nurturing the young is essential for the continuation of the family line.

Ming Dynasty-British Museum