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Many pieces are enriched by a range of wood-fired effects, which tend to develop across surfaces in ways that organically complement their three-dimensional forms. In a sense, such surfaces record the flow of kiln gases and the deposition of fly ash during the long firing process. The ceramist can influence (but not dictate) the development of atmospheric features by judicious “stacking” of work in the kiln. Some photos of stacked pots in situ (post firing) are included in the display cases near the lobby seating.

text by Hideo Mabuchi, hmabuchi@stanford.edu
The Iron Spectrum

Iron is one of the most abundant elements in the Earth’s crust and thus a ubiquitous component of ceramic materials. Iron compounds are strong colorants for both clay bodies and glazes; they produce or contribute to reds, blacks, browns, blues, greens and yellows depending on chemical context. The whitest, most translucent porcelain clay minerals are special in a geochmical sense because of their extremely low iron content. A mere one percent (by weight) of iron oxide in an otherwise clear glaze formula can, under optimal firing conditions, produce the sky- or water-blue color of celadon glazes like those on 7 8 11. Higher concentrations of iron oxides contribute to the yellow of kiseto glazes such as those on 34 36 , while yet higher concentrations are at work in glazes such as 28. Iron slip painted underneath a white shino glaze creates the red marks on 33 34. As mentioned on the preceding page, iron present in the clay body itself plays an important role in determining the surface qualities of unglaezd work that has been fired in a wood-burning kiln, or with modern atmospheric firing processes such as soda, salt and kazegama (gas firing with blown wood ash). For example, iron contributes essentially to the flashing color of 10 and to both the flashing and the green tint of the melted ash drips on 18 (both kazegama).

Scientific analysis is providing fascinating insights into the subtle chemistry and physics of the iron spectrum of ceramic colors. In 2017 the Stanford Program in Ceramic Art, Science and Culture hosted a symposium called The Red and the Black: Art and Science of Iron-bearing Ceramic Surfaces; videos of the presentations and directions to a small exhibit of micrographs in the Stanford Nano Shared Facilities can be found at the CASC link below. Video of a related ceramics panel discussion can be viewed via the NCECA link. The Stanford Archaeology Center is hosting a small exhibit that explores iron-bearing ceramic surfaces of contemporary and ancient artefacts from around the world; directions can be found at the SUAC link.

CASC/Red & Black

NCECA Panel

SUAC/In the Surface

Tradition and Evolution

East Asian ceramic traditions have evolved over thousands of years with notable high points in many regions from the tenth century through early modernity. Among the most potent influences on contemporary ceramic production, both in Asia and in the West, are the classic styles developed during the Chinese Tang and Song Dynasties (617-1279), the Korean Goryeo and Joseon Dynasties (918-1910), and the brief yet prolific Azuchi-Momoyama Period in Japan (1568-1600).

The development and refinement of porcelain and celadon glazes in China had a profound impact on ceramic production across Asia and eventually in the West. For a survey of Song Dynasty celadons, see pp. 60-120 in the volume Song Ceramics* on reserve with this exhibition. The contemporary piece 13 was made by a Canadian artist in Jingdezhen, China, and exemplifies a modern take on the celadon tradition. Similarly, 8 utilizes traditional porcelain and celadon materials but asserts a modernist aesthetic in its form and glazing, while 7 represents a more traditional style of celadon-on-stoneware vessel.

Korean styles of the Goryeo and early Joseon were broadly reproduced in Momoyama Japan (generally by Korean potters transported there, willingly and unwillingly), and continue to be admired and imitated today. This strong influence can be seen by comparing plates 30, 58, 57 from the volume Sense of Beauty* with the contemporary 3 43. The influx of Chinese kiln and glazing technology via Korea into medieval Japan likewise facilitated the development of autochthonous ceramic styles such as shino during the Momoyama period, in response to rapidly evolving aesthetics connected to the tea ceremony. The continuity of these traditional styles can be appreciated by comparing plate 25 from Sense of Beauty* with the contemporary 3 34, while a very modern take on shino is provided by 41. The contemporary 16 sports a North American version of shino glaze, combined with the addition of granular feldspar to the clay body to achieve an overall effect paying tribute to the traditional wood-fired, unglaezd local clay work from Shigaraki such as 12. Modern jars such as 1 2 32 are inspired by precursors such as the majority of the works in the volume Ceramics of Medieval Japan*. Contemporary teabowls 3 23 24 28 30 32 reflect Chinese (Song Ceramics* pp. 122-126), Korean and Japanese (Sense of Beauty* plates 24, 25, 29-32, 57) influence; some seek seamless stylistic continuity while others strive for originality in this most venerated of forms.

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Sponsored by the Center for East Asian Studies; East Asia Library; Program in Ceramic Art, Science and Culture; Department of East Asian Languages & Cultures; Ho Center for Buddhist Studies; Department of Art & Art History; Iris & B. Gerald Cantor Center for Visual Arts. Curated by Hideo Mabuchi, Ellen Huang, Tiger Zhou.

Firing: Process and Trace

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