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International exchange in Ceramics between Japan, Korea, China

Summary
The traditional ceramics cultures of China, Korea and Japan have deep connections, and in Japan those cultures and techniques matured and developed into styles unique to Japan. Those cultures once again were passed onto China as shown in the under-glaze of Liling. Through reflecting on the history of Ceramics in Japan and also conducting research in Japan, Korea and China, I was able to discover that the exchange of cultures, technique and people led to the innovation of traditional ceramics in these three countries.

Introduction
At first, I would like to introduce the Ceramic Society of Japan, which gave me the recommendation, then I will make a presentation on ceramics in Japan along the topics of the Arts and Sciences. Tokyo University of the Arts is the only one national arts university in Japan and it has the history of 125 years during which it produced many talented artists. This university can be said as the university for training artists, therefore, my presentation will focus on the Arts.

Importance of firing, clay and craftsmanship in ceramics
The difference of Ceramics from the other arts is that it is strongly affected by intense fire. The significance of ceramics are firing in the first place, clay in the second, and the craftsmanship in the third. I will explore these three significant points.
The most important point for ceramics is firing. Firing process is influenced so much by the laws of nature and often does not turn out as one wishes. The atmosphere inside the kiln during firing also has a great influence on the quality of the ceramic pieces. The results of the firing vary depending on the atmosphere inside the kiln in the oxidizing fire condition and in the reducing fire condition. Firing in oxidizing fire condition is defined as the oxidizing state where the glaze and the pigments are combined in the burning process. Firing in reducing flame condition, on the other hand, reverses this process to remove parts or all of the oxygen from the oxides and produce metals of original form with less or no oxygen.
The second important element in ceramics is clay. In Japan, the clay obtained locally were used in ceramic production and created product, which varied with places. The ceramic wares are classified into earthenware, ceramics, stoneware and porcelain depending on the results of the firing. Earthenware is fired at around 950°C. Ceramics are glazed and fired at 1100°C to 1300°C. Stoneware is fired at high temperature between 1250°C to 1300°C for a long period of time. Porcelain is shaped using kaolin made of porcelain stone, then glazed with transparent glaze and fired at over 1250°C. The surface is vitrified and translucent.
The third important element is the craftsmanship. The craftsmanship involves production techniques such as the use of potter's wheel, hand-build, and use of strings of clay, and the decoration techniques such as under glaze iron decoration, blue-and-white ceramics, glaze painting and white glaze.

A Brief History of the Innovation of Ceramics in Japan

I will explain the changes in ceramics of Japan and the exchange made with East Asia using the examples of Japan's national treasures over different periods of time: The Jomon ware (Cord-marked pottery) of ~10,000 years to 3rd Century B.C., Yayoi ware of 3rd Century B.C. to 3rd Century A.C., the Sueki ware of the Kofun (tumulus) period of 4th to 7th Century, Koryo Celadon ware's influence on Japanese Ceramics during the Heian to Momoyama Periods of latter 8th to the end of 16th Century, and the impact of Korean Ceramic Artists during the Edo Period of 17th to 19th Century, and the development of Mingei development during the Modern Era.

Research result of Underglazed coloring technique using 'Dami' (painting method) and "Sumi-hajiki (sumi and paulownia mixture repelling water-method)"

I will then explain my current research on "The development of the under-glaze decoration technique through the relationship between China, Korea and Japan". Under-glaze is the technique of applying decoration to the work before it is glazed. The research is made from the aspect of blue-and-white porcelain and five-color underglaze ware.

During the 16th Century, the technique of blue-and-white porcelain from China and Dami spread to Arita in Japan, and resulted in the blue and white porcelain and 'Kinrande' (gold-painted porcelain) which later called Arita ware. The Sumi-hajiki used in the blue-and-white porcelain developed into the style unique to Japan during the period of isolation in the Edo Period. That technique was passed onto Liling in China in the 20th Century and developed into ceramics with the sense of colors unique to China.

In this research I investigated how Dami and Sumi-hajiki changed from the aspect of historical exchange and the techniques in porcelain making. I also looked into the historical changes of the coloring of Jingdezhen's current blue-and-white zaffer and its X-ray analysis as well as the coloring after firing of the Liling's underglaze pigments in 8 colors; lemon yellow, blue, reddish brown, red, dark green, white, purple, and black, and identified the components of the pigments from the X-ray analysis list.

I will conclude my presentation by showing the different techniques of Dami and Sumi-hajiki of Arita, Jingdezhen and Liling, demonstrating the international exchanges of ceramics between Japan, Korea and China.

CV

1948 Born in Sano, Tochigi Prefecture, Japan.
1975 Completed postgraduate studies at the Tokyo University of the Arts.
1981 Fumio Shimada Solo Exhibition at Mitsukoshi Department store.
2006 The International Society for Ceramic Art, Education and Exchange (ISCAEE) in Tuing hua University in China.
2007 ISCAEE in England.
2008 ISCAEE in Kenya.
2009 International Jury member for the 2009 5th World Ceramic Biennale and ISCAEE in Korea.
2010 Fumio Shimada Exhibition at Yoshizawa Memorial Museum of Art, Sano.
2011 12th Fumio Shimada Exhibition at Mitsukoshi department store at Nihonbashi, Tokyo.
2012 International Jury member for the 1st World Ceramic Competition in Jing De Zeng.

Present

Tokyo University of the Arts, Ceramic Department, Professor

ISCAEE President. IAC Member. Guest Professor at Tsinghua University and Chinese Academy of Arts, Beijing, China.