

The Functionality, Spirituality and Diversity of Korean Jar 'Onggi' Lee, Boo-Yun

Abstract

Onggi, which could be seen in any Korean residence in the past, is a kind of household good. It is a earthenware that every home had a dozen or tens of them, Onggi with the longest history of Korean ceramics has been widely used regardless of regions and classes. In this regard, it is the true hero in the history of Korean ceramics. Onggi, which could be seen in any Korean residence in the past, is a kind of household good. Its traditional value recognized as a Korean folk material related representing Korean unique folklore and emotional life. However, with its technique, materials, patterns and usage, it is maintaining the longest tradition since the pre-historic age till the modern age.

There are two kinds of Onggi making techniques: one is making flat bottom first and building the wall with coils (kwon sang technique), which originates from the pre historic age, and the other is building the wall with slab on the bottom (Chaebaqui technique). Due to the sands and the large grains in the clay, there are tinny air tunnels formed in the wall, and the inside and the outside of Onggi can be connected through the capillary tubes because glass phase is not formed. Those air tunnels helps preserve the temperature in the jar, helps circulation, providing proper amount of air because of active ventilation, and it protects the food against acidification. Another characteristic of Onggi is far infrared rays radiated from the ware.

Onggi can be regarded as a historic data of Korean people.



Concept of Onggi

Being one of the traditional ceramics, which were produced most in quantity, is categorized as earthenware from the view point of ceramic engineering. Having been together with the life of Korean people and attached to Korean traditional life as a part of the living space, its historical values, aesthetic values, and traditional values were not highlighted as much as those of Goryeo celadon or Chosun White porcelain.

Its traditional value recognized as a Korean folk material related representing Korean unique folklore and emotional life.

However, with its technique, source materials, decoration patterns, and use maintaining the longest tradition since the pre-historic age till the modern age. Onggi can be regarded as a historic data of Korean people.

Onggi is specifically refers to the earthenware or the porcelain treated with glaze glistening in red, not based on the concept categorizing ceramics and earthenware. Korean who enjoy fermented food has have used earthenware as containers for the fermented foods since long time ago including the three nation's period, it has been most useful ware for fermenting wine and sauces.

We can say that Onggi production has continued developing because of the need for the containers for the fermented foods.

The special term Ong (옹) has been used to indicate earthenware jars in old booklets.

In the book Sun hwa bong sa Koryo dokyong do (선화봉사고려도경) written by Suh

Kum who wrote people's lives in Koryo dynasty, Ong (옹) had been used to describe a

water jar. And it was also described that Dai Ong (대옹) as a storage jar for rice and earthenware jars as a storage jar for fruits and vinegars were buried under the ground.

Considering Ong referred to the big jars in the records, Ong remained the indication of earthenware jars until the Goryeo dynasty.



In the book Se jong sillok jiriji (세종실록지리지), Sinzung donggukyuji sunglam

(신증동국여지승람) in the category of folk goods, the producing areas were divided into 'Dogi so' (Place for earthenware making) and 'Jagi so' (Place for porcelain making). The book *Imwon Gyungjeji* (임원경제지) also wrote that they called the biggest jar, the jar used in everyday life, the jar for fermenting and for the storage 'Ongaingii'(옹앵이).

Ong indicated earthenware jar.

In a broad sense, Onggi include Pure dok (푸레독), an earthenware that is not glazed,

Ot ware(옻그릇), an earthenware that is glazed, and Ban ogii (반오지) which is not glazed but with glittering surface because of high temperature plasticity. They all kept in Korean earthenware traditions which lasted from the pre-historic stage until the contemporary era.

Purodok and Banoggi have kept the traditions of grey hard earthenware of the Three Nations period. Ot ware has kept the tradition of glazed ware with high qualities. Thus, the concept of Onggi means a kind of earthenware and generally refers to earthenware jars. And then 'Ong' indicating earthenware is called a big jar in recent years.

History of Onggi

The history of Onggi started from the pre historic age of Korea.

Having sustained the making techniques, the feature, and the functions of traditional earthenwares separately from ceramics, this powerful tradition has made large jars until today.

When exploring the origin of Onggi from techniques, source material, glaze, and plastic working in Onggi, the source materials and the techniques are originated from the earthenwares in the prehistoric times, the shapes and the patterns are originated



from the earthenware jars without patterns, Jabaigi (자배기) with handles of bronze

age of Korea, Siru (시루) in the Koguryo period, jar with handles (손잡이 동이), and round Jars.

Onggi techniques and pattern making

There are two types kinds of Onggi making techniques succeed: one is making flat bottom first and building the wall with coils (kwon sang technique, 권상법) from the pre historic age and the other is building the wall with slab on the bottom

(Chaebaqui technique,채바퀴 타렴 성형 방법, Yunjuk technique,윤적법). All

these earthenware making techniques are succeeded to the Three Kingdom's hardend grey earthenware, Goryeo and Yi dynasty's grey earthenware, Koryo's glazed greenish brown earthenware, dark brown glazed wide lid jar. As for the techniques for surface decoration, pasting clay band on the surface technique (Dol dai

decoration,돌대장식) was succeeded from the pre historic earthenware, making

wavy patterns with finger scrubbing out the glaze was used often in the Three Kingdom Period, and the pressed patterns made with finger joints and the pressed decorations on the clay band at equal intervals was the same type of technique which was used for the decoration of the earthenwares in the ancient times like the earthenwares in the stone age and the clay coffin in Mahan. These types of surface decoration weren't used in Koryo's greenish porcelain or Yi dynasty's white porcelain. Unique decoration method applied to the ceramic body right after wheel throwing has been succeeded from the pre historic earthenware making techniques and today's Onggi artists succeed the same method.

The origin of shapes and the development of glazed earthenware

The basic shape of Onggi jar has the open lid without neck, round jar with bloated belly from the ceramic shoulder, and flat bottom. It has been succeeded from the jar without patterns in Gojoesen bronze age. The basic shape of the earthenware jar without patterns was seen in the earthenwares in the Kokuryo dynasty which had been succeeded from the late Chosun period. Kokuryeo earthenwares with Onggi shape were found in 1998 by Seoul National University museum exploring team at Koguryeo historic site at Acha mountain foortress, Kuiidong in Kuri city.



As for the appearance, Kokuryeo earthenwares excavated from Koguryeo historic site at Acha mountain fortress, Kuiidong in Kuri city included the water jar, Siru, Jabaigi with wide band handles on both side and which can be seen at today's Jangdok dai (Onggi jar stands), and the flat jar lids are similar to today's Onggi. We can see the same Onggi shapes in Siru and jars in the 3rd Koguryeo's mural.

Today, the glazing techniques resulted in the development of the high quality earthenwares with glittering surface and more glazed Onggi are produced. The glazes used for making Onggi contain red clay with high percentages of iron oxide and ash glaze.

As the glaze used in Gurim earthenwares 1200 years ago was succeeded to Goryeo, The earthenwares were developed into greenish brown, dark brown, and black glazed earthenware, and then succeeded to Onggi glaze which combines clay and ash.

We can trace the production of glazing Onggi in the written documents such as

'Chosunsillok jiri ji' (조선실록지리지) in which it was said that there were Onggi

firing places at Chogyegun (초계군), Jinjumok (진주목), and In 'Kyungguk dai jun'

(경국대전) in which it was said that there was an Onggi maker at

Gonjunwyegonjangjo (공전외공장조) and Yimchun (임천) in Chunchungnam do.

Considering that it was specifically described that there were 2 Onggi places among 185 earthenware making places and there was 1 Onggi maker among 104 ceramic artists in the written document, we can presume that they continuously produced high quality glazed earthenwares.

Mr. Pierre Louis Jouy, who was an ornithologist, wrote in his records about the ceramics in the Chosun dynasty in late 19th century from 1883 to 1885 that "Brown and black glazes were painted both inside and outside the surface of the ceramics and they are decorated with wavy patterns."

Considering his written document, we can presume that Onggi in the Chosun Dynasty in late 19th century were mostly dark brown glazed earthenwares.



Onggi for preserving food

Because of the sands and the large grains in clay, there are tinny air tunnels formed on the wall, and the inside and the outside of Onggi can be connected through the capillary tubes because glass phase is not formed.

Those air tunnels helps preserve the temperature in the jar, helps circulation, providing proper amount of air because of active ventilation of air, and it protects the food against acidification.

It is known that Onggi Jar excretes waste matter from the body.

It is proved by our being able to see white salty materials on the surfaces of soy sauce, and miso sauce jars. In other words, because of the osmotic pressure, the excessive salt from the soy sauce and miso sauce are excreted outside.

Based on the experiments in which the flowers in the Onggi last longer than the flowers in glass vase and in which the fishes sealed in the Onggi outlived the fishes sealed in glass containers which died after 2~3 days, we can see the fine air tunnels working.

There are some research result that there are much more air inside the Onggi than glass wares or perfectly glazed porcelains.

Another characteristic of Onggi is far infrared rays radiated from the ware. Commission Internationale de l'Eclairage (C.I.E) defines that infrared rays are ray waves between 3.0~1000 um, but the wave length of the infrared ray used in engineering is between 2.5 to 30 um, which is 4~0.5 eV week energy, with no chemical activities. There have been various researches conducted for preserving foods.

The studies using special enzyme and medicines have been conducted, but recently, the studies in a physical means of using the strong penetrating power of infrared ray radiators are under progress to prevent the early degradation of food quality.