Interaction between the Jomon Farmer and the Yayoi Farmer in the Beginning of the Yayoi Period along the Old Kawachi Lake

Fujio Shin'ichiro

This paper considers the process and mechanism by which wet rice cultivation began in the Osaka Plain, using the Frontier Theory from European prehistoric archaeology. For about the past 30 years or so there have been two broad approaches when discussing the question of the beginning of wet rice cultivation in this region. According to one, rice farmers from further west of the region came and settled, and interaction began while coexisting with the Kinki Jomon man hunters and gatherers who had already lived there for some time, resulting in the spread of wet rice cultivation. These are the "migration and outsider" and "segregation" theories. Then there is the "indigenous" theory, according to which Kinki Jomon people obtained wet rice cultivation technology and became farmers. The basis for these two interpretations is the relationship between Jomon implements presumed to have been used by native inhabitants and the Ongā River implements presumed to have been used by people from the west. That is to say, these interpretations are based on whether both existed simultaneously or whether there was a time interval. Since there are virtually no known archaeological sites in the Osaka Plain where these two groups of implements have definitely been found together, so far a decisive factor with the potential to determine either simultaneous coexistence or a time interval has been lacking.

In the study described here, a comparison using the calibrated calendar years for the groups of implements calculated based on C 14 values of carbonized materials adhering to the two types of implements revealed that some items in both groups existed at the same time. This period extends for as long as 100 to 150 years. What is more, rice paddies at this time did not have standardized irrigation systems and the implements themselves belong to the stage prior to the standardization of Yayoi implements. Consequently, this represents a preparation period for Jomon society to make the switch to Yayoi society after they had started cultivating rice, which means that standardization required a period of 100 to 150 years.

As a result of interaction between a small number of newcomers and a large number of natives in the Osaka Plain in the beginning of the Yayoi period when characteristics of Jomon culture were still much in evidence, the culture of the newcomers took more than 100 years to become integrated across the entire region. This is similar to Frontier Theory. In conclusion, the study
shows that the situation was a far cry from the conventional explanation that society developed rapidly due to the increase in the volume rice production in an extremely short time after it began.

Key Words: Interaction model, native, Nagara type pottery, Ongagawa type pottery, Old Kawachi Lake, Kinki, Yayoi