

Typological Study and Physicochemical Analysis of Small Mirrors and Bronze Arrowheads Excavated from the Minamida B Site and Kunorishiyakata Site in Shiga prefecture

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The theme of this paper is whether the lead isotope ratios of small-sized bronze artifact from the late Yayoi period are consistent with the analysis results pointed out for Dotaku (Bronze Bell), which is one of the theme of this joint research. Thanks to the courtesy of the Omihachiman City, we analyzed the small bronze artifact excavated from the Kunorishiyakata site and the Minamida B site.

As the basic work, which is important information for determining the date of the artifacts to be analyzed, we show their unearthed contexts at excavation and the typological explanation of the material. And then we suggest the results of the lead isotope analysis of each material artifacts. As a result, it was found that all small bronze artifacts were deposited between the end of the late Yayoi period and the beginning of the Kofun period. In addition, as the result of a formal examination of the type of the small-sized bronze artifact that was analyzed, the small-sized mirror found from the Minamida B site was assumed to have been produced in northern Kyushu during the early stage of the late Yayoi period. It was pointed out that there was a possibility that there was a gap of time before deposit within the site. Correspondingly, only the bronze mirror excavated from the Minamida B site showed the lead isotope analysis value of region 'A', and the results of other materials were concentrated in region 'a'. As a result, the direction of change of Dotaku in lead isotopes after the late Yayoi period, which is one of the focal points of this research, was observed in small bronze artifact as well.

Key words: small bronze artifacts, lead isotope analyses, Late Yayoi period