What can archaeomagnetism contribute for Southeast Asian archeology?

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Southeast Asia has various ethnic and cultural groups with rich historical traditions. The elucidation of the history in Southeast Asia has progressing rapidly since the middle of the 19th century, when archeological research by European researchers began. However, many details of the relationship between the archeological sites are still unclear. One of the reasons is that the relationship between the relative ages of the archeological artifacts from each archeological site is still unclear. Because if the designs of the archeological artifacts are significantly different, it will be difficult to construct one series based on typology. However, the physical quantities such as archaeomagnetic data are just numerical values, they are less susceptible to cultural differences and may be used to construct relative chronologies that can link many archeological sites distributed in a wide area.

On these backgrounds, we are currently planning a research to construct a dataset combining archaeology, art history and archaeomagnetism, then to create a foundation for applying to the elucidation of cultural and social structural changes in Southeast Asia, and finally to reapply the results to geoscientific research. Specifically, we plan to study the following three themes; (1) A more detailed description of the history of two cultures from the 4th century BC to the 15th century AD in central Vietnam (Sa Huynh Culture and the culture of the kingdom of Champa), (2) Age estimation of an unknown archaeological site from southern Vietnam, and (3) Construction of a secular variation curve of geomagnetic two components (intensity and inclination) in Vietnam.

In this presentation, we will introduce the outline of this research project and consider its potential.

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