



February 29 (Thu), 2024, 18:30h (JST) / 10:30 (CET)

Christ, Codices, Coding: Applying AI to Jesuit Written Artefacts

Sophie Takahashi, Ruhr University Bochum/DIJ Tokyo

Between 1595 and 1610, amid the “Christian century” in Japan, the first recorded contacts between Europeans and Japanese are taking place. In the Jesuit Colleges in Kyushu, lectures are delivered on Aristotelian philosophy, theology, and Ptolemaic cosmology. These are handed down to us in a tripartite work on science and religion, packed with foreign technical terms and intricate diagrams on the earth and the universe.

In Germany, almost 450 years later in 2019, this work is discovered in the Herzog August Bibliothek Wolfenbüttel: the manuscript Cod. Guelf. 7.5 Aug. 4° is the first complete Japanese translation of the so-called *Compendia* compiled in Japan. Its potential to yield insights into cultural translation and dissemination of knowledge (hitherto based on an incomplete translation) have long been noted. However, previous research has mainly credited Pedro Gómez as the single author (and sometimes even translator) of all three parts, while the authors, translators, and chronology of the entire compilation process remain unknown.

Bridging the gap between computer science and historical linguistics, this talk will present a novel approach of understanding this written artefact by applying the possibilities artificial intelligence offers. How can the rapid development of AI benefit authorship attribution and chronological allocation? I will address the challenges of finetuning AI-powered tools to historical Japanese, training AI models for text recognition in multiple text directions and writing systems, coding scripts tailored to historical romanization, and conducting quantitative analysis of a comparative text corpus of Jesuit codices. This study on translation – as it was carried out by the pioneers of Western knowledge transfer in Japan – yields results for intercultural and transdisciplinary queries, e.g., how to approach language barriers in religious and scientific discussions and how AI can help us to unlock the past for our future.

Sophie Takahashi is a PhD candidate affiliated with Ruhr University Bochum, Faculty of East Asian Studies. Since April 2023 she has been a PhD student at the DIJ. Her research focuses on translation, writing systems, history of science, and digital humanities. Recent publications include “[The Samurai and the Cross: The Jesuit Enterprise in Early Modern Japan \(Book Review\)](#)” in *Contemporary Japan* (2023) and “『キリシタン文庫』目録に未収録の日本語誓文 (ARSI Jap. Sin. 36, 196r–199v) [Beyond the *Kirishitan Bunko* catalogue’s blind spot: An overlooked Japanese oath in ARSI Jap. Sin. 36, 196r–199v]” in *Bulletin of Association for the Study of Kirishitan Culture* 162 (2023).

About:

The DIJ History and Humanities Study Group is a forum open to scholars working on Japan in any field of the humanities. This session is organized by Harald Kümmerle. All are welcome to attend.

Venue:

Online and DIJ Tokyo: <https://www.dijtokyo.org/access/>

Hybrid Event:

On-site participation: Registration is required via email to kuemmerle@dijtokyo.org until February 28.

Online participation: Please register via our [webpage](#). Log-in data will be provided after registration.