Panel 4: Digitization, Preservation, and the Impact of New Technologies

Joshua Mostow (UBC), "Technologies of Learning and Popular Literary Literacy in Early Modern Japan"

This paper examines the variety of technologies, both in writing and in printing, that were used to educate early modern Japanese in the *Hyakunin isshu* (hereafter HNIS, One Hundred Poets, One Poem Each) anthology. This text was the foundation of literary and cultural literacy in the period, studied and memorized by all classes and all genders. Although dating from the 1230s, by the seventeenth century the technologies used in the reception of the HNIS were multiple and some were linked to the annual calendar. So, for example, the text of a HNIS poem might be used for *kaki-zome*, or the ritualistic first piece of calligraphy produced by children and adults at the new year. In fact, since girls learned literacy through calligraphic copying, one of their principal educational texts throughout the year was the HNIS. New Years was also a time for the playing of *uta-garuta*, a card game that divided the poems into their upper and lower hemistiches and inscribed on playing cards and then had the latter spread out while someone read out the former at random, requiring players to find and capture the corresponding lower hemistich. Such cards appear to be a unique technology designed in Japan for the memorization of verse. These cards could be mass-produced by woodblock printing, or hand-written. In the latter case, the calligrapher might be a relative (parent, grandparent). Calligraphic copy-books (*tehon*) could also be produced by a relative, local dignitary (temple priest) or, in the highest classes, an aristocratic scion of a hereditary calligraphic school. But they were also increasingly produced through woodblock printing, sometimes accompanied by illustrations of the poems (*e-iri*) and/or written commentary (*chū-iri*). These last products represented a kind of popular literary literacy, whose interpretations might differ significantly from those of the more educated and elite. But it was these that found their way into other forms of popular culture, such as ukiyo-e woodblock prints. This presentation will be given in conjunction with The One Hundred Poets digitization project currently being completed at the UBC library. Participants are asked to explore the data-base at: https://open.library.ubc.ca/collections/hundred

Saeko Suzuki (Tateuchi Cataloger for Japanese Retrospective Conversion, University of Washington), "Practices and Issues in the Digitization of Japanese Premodern Materials in Academic Libraries"

This paper will explore the development of best practices when making Japanese premodern and manuscripts available to users in research environments worldwide. It will do so using the experience of the metadata project of One Hundred Poets Digital Collection in UBC. The paper will also discuss unique issues of Japanese language collections. As other databases, the One Hundred Poets Digital Collection has two characteristics: hypermedia and intangibility. These characteristics enable an increased level of access to rare books or manuscripts by users beyond geographical proximity. Users from academic communities can access the open source for research or teaching materials anytime anywhere. In particular, users can identify or compare the digitized items with similar/same items from onsite or online resources visually. The possibility of conducting comparative analyses was hardly available in paper-based environments. Digitization can also help preserve fragile original items without placing any restrictions on their use. In addition to bringing great benefits to users of Japanese premodern

materials, the experience of this metadata project brings several issues to the forefront. The first is the gap that exists between researchers' information needs and the searchable information made possible by the application of North American cataloging rules. The second relates to the limitations of current technology, e.g., the management of classical Japanese character sets. The third issue is the potential risk of those in the born-digital generation disregarding the materiality of texts, illustrations or books, and their cultural and historical significance. This case study of One Hundred Poets Digital Collection project will help with the development of a model for East Asian language databases as well as help facilitate collaboration between scholars and information specialists to develop future online scholarship.

Tōru Tomabechi and Kiyonori Nagasaki (International Institute for Digital Humanities, Tokyo), "The SAT Project: Toward a New Ecosystem for Buddhist Studies"

While paper media still remain a dominant mode of cultural transmission, the development of digital technology has become an important factor that compels us to revise our attitude towards the very notion of culture, its conservation, study and propagation. In the domain of Humanities, research activities have been increasingly facilitated by digital resources such as electronic texts and digital facsimiles. Furthermore, as exemplified by the Transcribe Bentham project conducted at the University College of London (http://blogs.ucl.ac.uk/transcribe-bentham/), the progress in Web technology has made possible large-scale, globe-wide collaboration among researchers.

Since its inception in 1994, the SAT project (http://21dzk.l.u-tokyo.ac.jp/SAT) has been providing a database of Buddhist canonical texts and related materials, which has now become an indispensable tool for scholars in various areas of research. In 2005, the project also included in its scope a new digital "ecosystem" for Buddhist Studies, which would constitute a collaborative research environment on the Web. In such an environment, the retrieval of information is expected to be made more convenient and easier through linked network of Web databases provided by separate projects, while each participating project maintains its autonomy and independence as much as possible. In addition, the SAT project recently started the digitization of the 12-volume iconographical section of Taishō Tripiṭaka. The new image database, expected to be published soon on the Web and to become a part of the ecosystem, is currently under preparation by art historians using a collaborative annotation system based on the International Image Interoperability Frameworks (IIIF) and the Open Annotation standards. In this paper, we will present the general picture of the SAT project as well as some details on its strategical and technical aspects.