

【Humanities and Social sciences (Humanities)】

A Study of Constructing of the Historical Ontology with Digitizing of Historical Materials

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【Outline of survey】

The goals of this study are: 1. To digitize images in films of historical materials collected and stored over the years in the Historiographical Institute of the University of Tokyo, and to define specifications of collected historical materials by digital imaging (Borndigital), and to put the defined specifications into practice on a trial basis, 2. To add meta-data to them and to build a seamless system for processes ranging from storing data in the Archive Hub (digital image storage of historical materials) to making image data available for public use, in order to promote high-grade computerization and sharing of research resources, and 3. To promote research of images and texts based on the digital image materials in the Archive Hub, establishing the historical ontology that integrates time and space information centered on historical figures. To achieve these goals, the workload will be shared between research groups specializing in system development, those specializing in historical knowledge and image material research, and those specializing in text research. First, the order of priority for digitizing materials will be defined on the basis of the magnitude of deterioration of films and the level of urgency thereof, and microfilms in existing collections will be digitized. Next, specifications for collecting materials by digital imaging (Borndigital) will be established and the system will be put into practice on a trial basis, and a server for storing the materials will be constructed. A system required for constructing the Archive Hub for managing materials obtained by research visit will then be developed. After that, meta-data about the collected data (e.g. owner, collected date information, and material group name) and newly prepared catalog data will be added to the data, which will be stored in pre-defined locations on the server. Meanwhile, leading-edge projects will simultaneously be promoted in the fields of images and texts.

Above all, this academic research showcases the evolution of existing organized research and storage systems for Japanese historical materials into the digital phase, and implementation of advanced computerization of research resources existing in the form of collected historical film materials.

【Expected results】

The system will connect text materials, which are retrieved from a search module as historical knowledge, directly with the images related to such historical material, thereby dramatically promoting network-based sharing of resources. Constructing the historical ontology, which means creation of the Historical Wissenschaftslehre (Historical Epistemology), will serve as a frontrunner in the development of Historical Informatics, and will greatly contribute to the maturation and development of the studies of Japanese history.

【References by the principal researcher】

- The Possibilities of Handwriting Analysis: Issues Concerning a System for Searching Kao.
KAGAKU, Vol76-2, p183~186, 2006.
- An Analysis of Historical Documents Concerning Kumagai Naozane's Priesthood and Death:
Case Study on Text Criticism of "Azumakagami".

Tokyo Daigaku Shiryo Hensan-jo

KenkyuKiyo, No15, p33~54, 2005.

【 Term of project 】 FY2008-2012

【Budget allocation】

151,900,000 yen (direct cost)

【Homepage address】

<http://www.hi.u-tokyo.ac.jp>