EASTICA2011 Seminar

Digital Archive for the Creation of Knowledge

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- The historical role of the Japan Digital Archives Association
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What are digital archives?

- Double meaning of digital archives
 - Digitized archives (in Japan)
 - Various subject, local promotion and economic policy



- Digital cultural heritage
 - Cultural resources, MLA coordination and cultural policy
- Born-digital (archives)
 - A third and original meaning of digital archives?
- Problems and confusion
- Digital archives of cultural resources

Japan Digital Archives Association

- JDAA 1996-2005
- collaboration among industry, government and academia
- Local promotion
- Fusion of technology, culture and economy
- Digital archive roadmap
 - Standardization of digital archiving process

Digital archive roadmap



Factors for success and failure

- Learn from failure
 - Organizations and people as promoter of digital archiving
 - Suitable planning for objectives and use of digital archiving
 - Budgets
 - Technology

Our laboratory's initiatives

- Digital archives of cultural resources
 - Digital restorations of daguerreotypes
 - Digital restorations of dry glass plates
 - Digital archives of Kuniezu
 - Digital archives of "Sekisuizu"
 - Integrated Digital Archives of Cultural Resources

Digital restorations of daguerreotypes

- Announced by the French Academy of Sciences on January 9, 1839
- Invented by Louis Jacques Mandé Daguerre (1787-1851)
- Possessed by the Historiographical Institute of The University of Tokyo
- Yasuda Zenichiro photographed by Fredericks in New york, 1860
- Near infrared camera designed for cultural artifacts → Digitization → splice

Daguerreotype of Yasuda Zenichiro



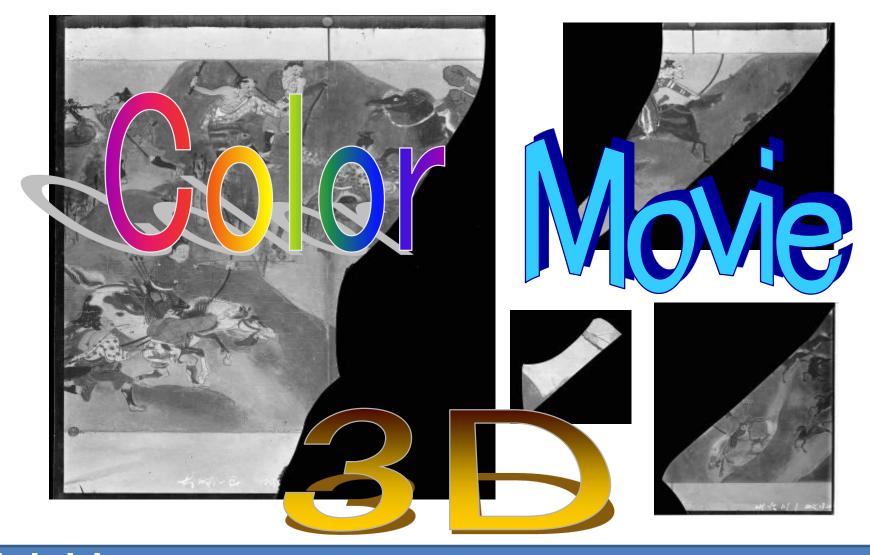


Before After

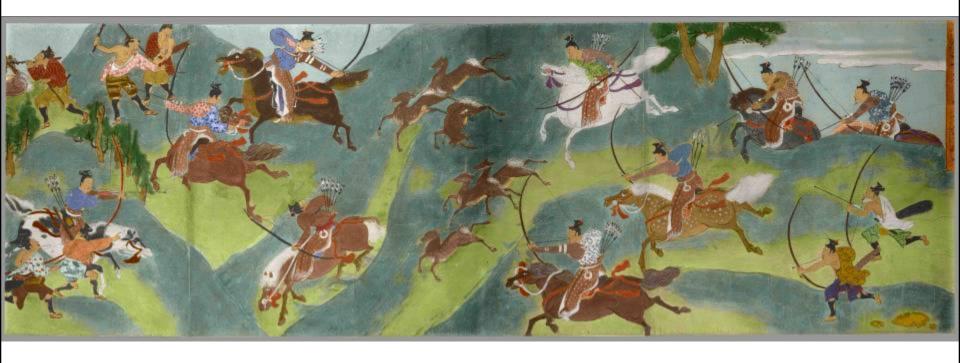
Digital restorations of dry glass plates

- Dry glass plates: Taisho-Showa periods (the first half of the 20th century)
- Degradation
 - Chemical
 - Physical
 - Human
- "Daisenji Engi Emaki" painted in early Muromachi period (middle 14th century)
- Original picture scroll lost by fire in 1928
- Single → Multiple

Application of digital restoration



Color digital restored "Shikagarizu"



Digital archives of Kuniezu

- Collection of the General Library, the University of Tokyo
- 37 local maps created by order of the Edo shogunate
- "Large, plane, color, detailed" objects
- Film → digitization
- Developing a viewer
- Double purposes: research and public exibition

Photographing and viewers of Kuniezu



Studio at the Tokyo National Museum





Two interfaces of a viewer

Digital archives of "Sekisuizu"

- "Kaisei Nihon Yochi Rotei Zenzu" ("Sekisuizu")
- Published in 1779 by Nagakubo Sekisui (1717-1801)
- Woodprint, colored
- Film → Digitization
- Double purposes
- Meta data : Dublin Core
- MLA coordination needed

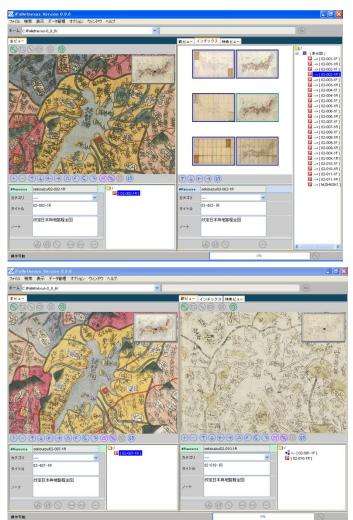


Nagakubo Sekisui

Photographing and viewers of "Sekisuizu"



Studio at the Historiographical Institute



Two interfaces of a viewer

Integrated Digital Archives of Cultural Resources

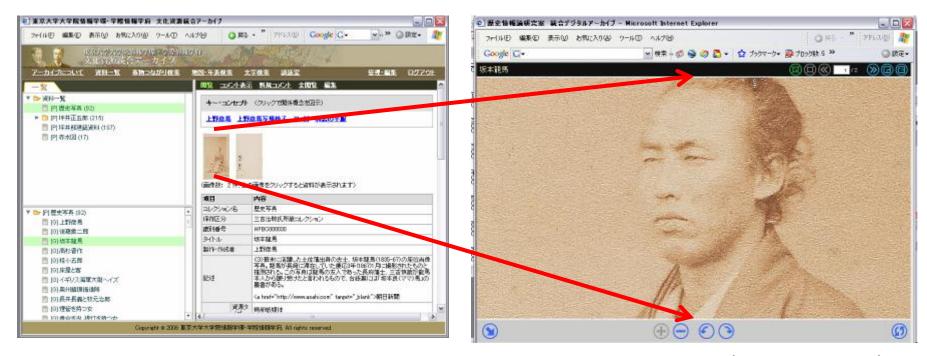
- Integrated: different fields, formats, etc.
 - "Sekisuizu"
 - Historical photographs by Ueno Hikoma (1818-1904)
 - Documentation created by Tsuboi Shogoro (1863-1913)
- Digital photographing
- Reference: Ontology (words, time, space)

Interface of Integrated Digital Archives of Cultural Resources



http://cr-arch.chi.iii.u-tokyo.ac.jp/hdadb/index.html

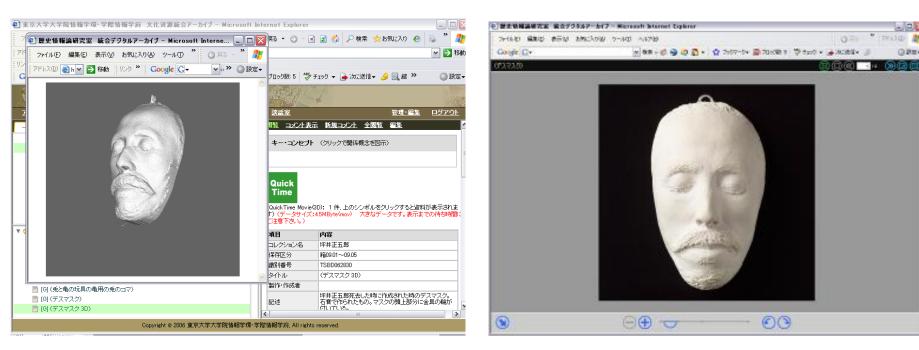
Meta data and image enlargement



Meta data

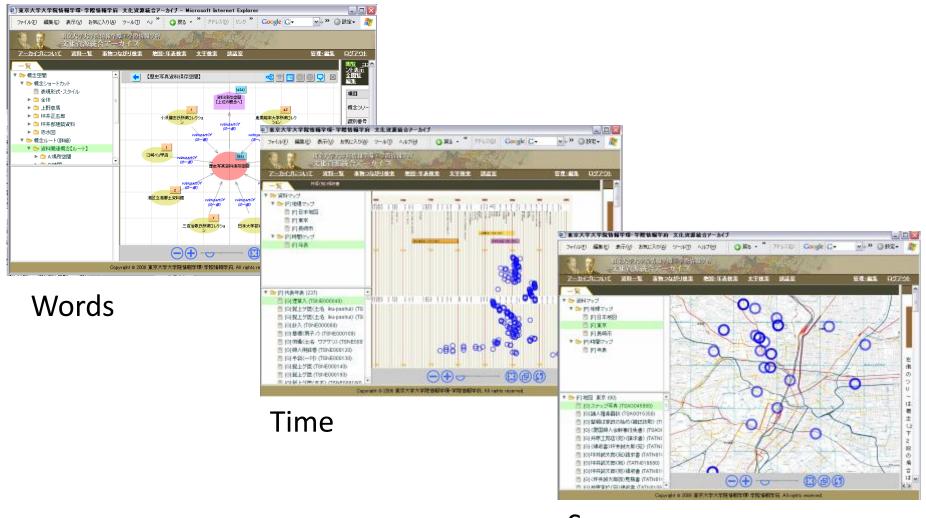
Sakamoto tyoma (1836-1867)

3-dementional data



Death mask of Tsuboi Shogoro

Reference: words, time, space



Space

Cooperative construction



Common annotation



Dialogue

Bases of digital archives

デジタルアーカイブ Digital Archive

図書館・博物館・美術館・文書館・資料館 官公庁・企業・家庭・個人.....



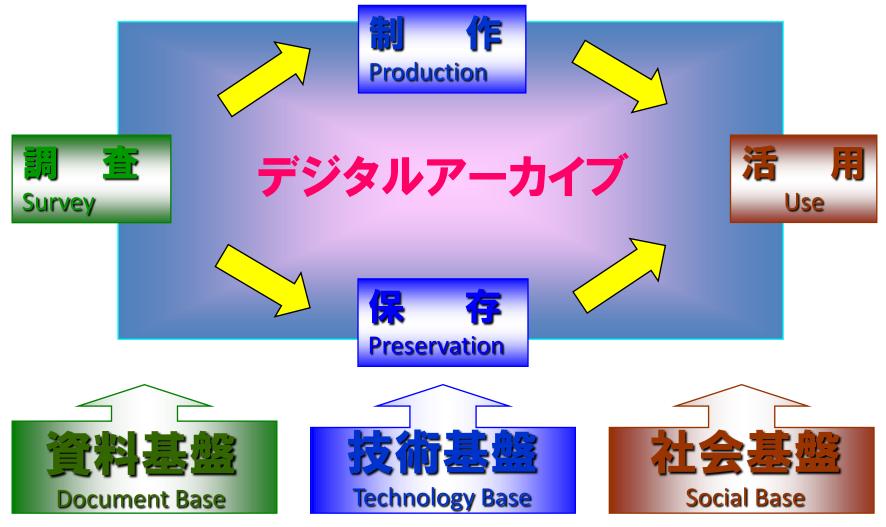




人的資源基盤

Human Resources Base

Process of digital archives



Standardization of digital archives

- "Handbook for digitizing cultural resources" in 2011 http://www.center.iii.u-tokyo.ac.Japan/handbook
 - Contributing to the creation and accumulation of highly reliable data
 - Ensuring consistency of processing of digitization of cultural resources by articulating the flow and methodology
 - Articulating to society at large the utility and significance of the digitization of cultural resources

MLA coordination in the digital world

- MLA + Community center, Industry, University?
- Obstacles
 - Laws
 - Budgets
 - Human resources
- More promotion of coordination in the digital world
- Archives taking a leading part
 - public + private / currently or non-currently used

Future of Digital archives

- A means of creating new knowledge-
- Future role of digital archives



Bases for creating new knowledge



- Able to share and use freely information
 - Standardization
 - MLA coordination

Thank you very much

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