

EASTICA2011 Seminar

# Digital Archive for the Creation of Knowledge

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- The historical role of the Japan Digital Archives Association
- Digital archives of cultural resources
- Changes in digital archives of cultural resources
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- Standardization of digital archives
- Promotion of MLA coordination in the digital world
- Conclusion: Digital archives as a means of creating new knowledge

# What are digital archives?

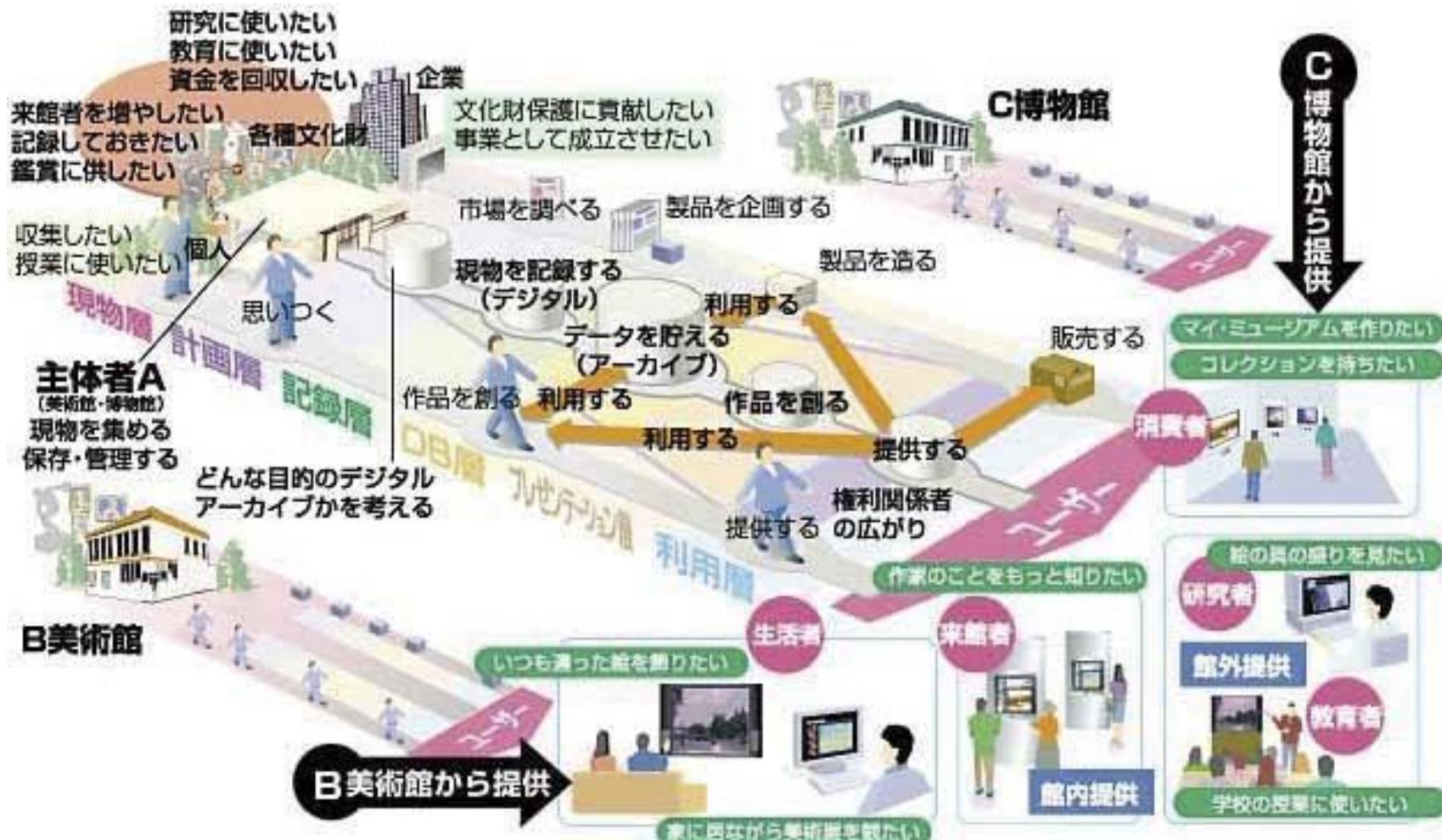
- Double meaning of digital archives
  - Digitized archives (in Japan)
    - Various subject, local promotion and economic policy
  - Digital cultural heritage
    - Cultural resources, MLA coordination and cultural policy
- Born-digital (archives)
  - A third and original meaning of digital archives?
- 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

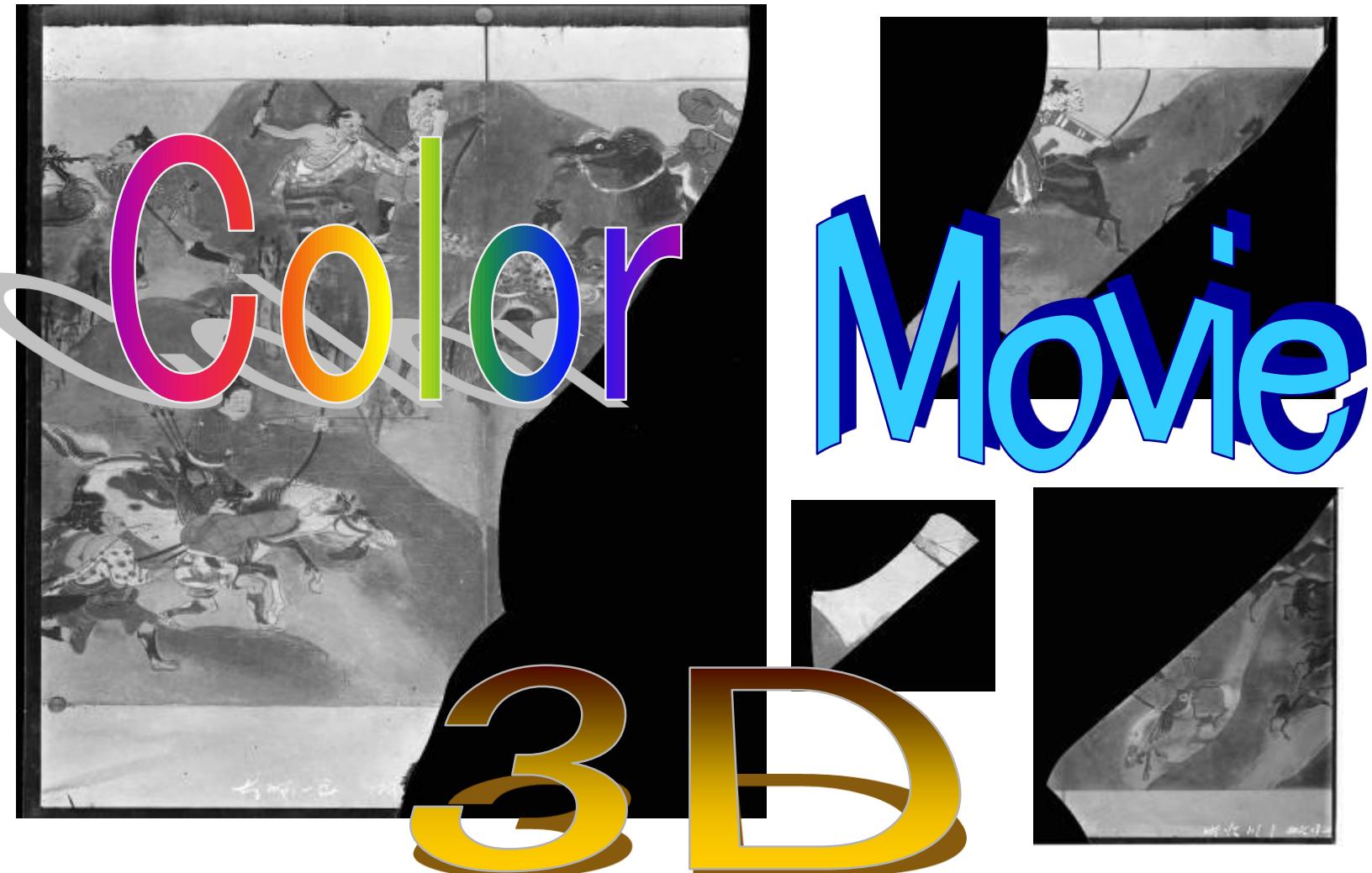


After

# Digital restorations of dry glass plates

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

# Application of digital restoration



# Color digital restored “Shikagarizu”



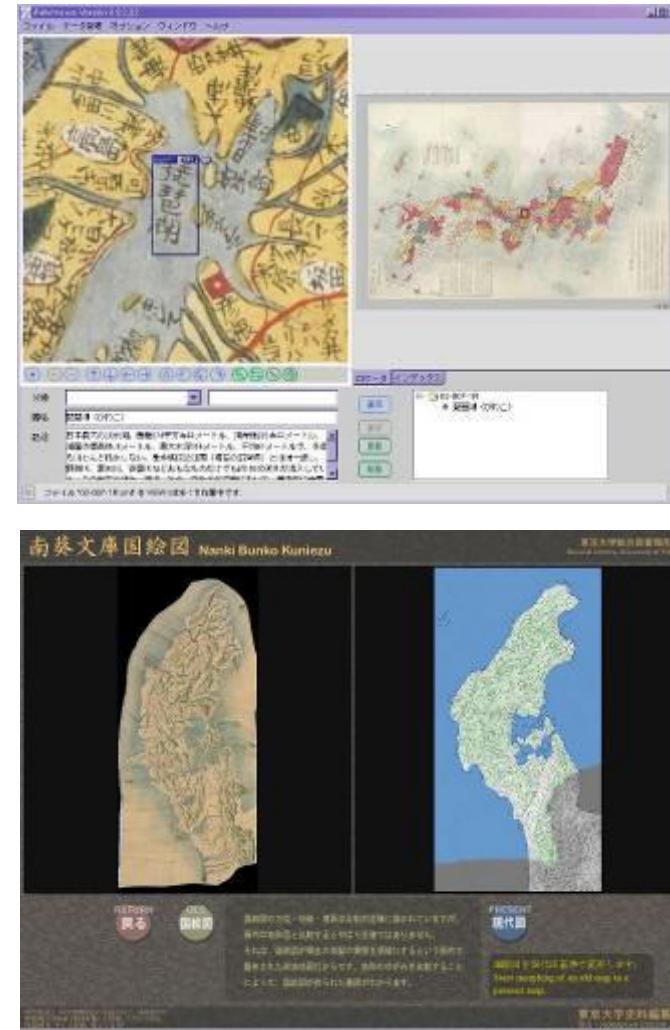
# Digital archives of Kuniezu

- 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 exhibition

# Photographing and viewers of Kuniezu



Studio at the Tokyo National Museum



Two interfaces of a viewer

# Digital archives of “Sekisui”

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

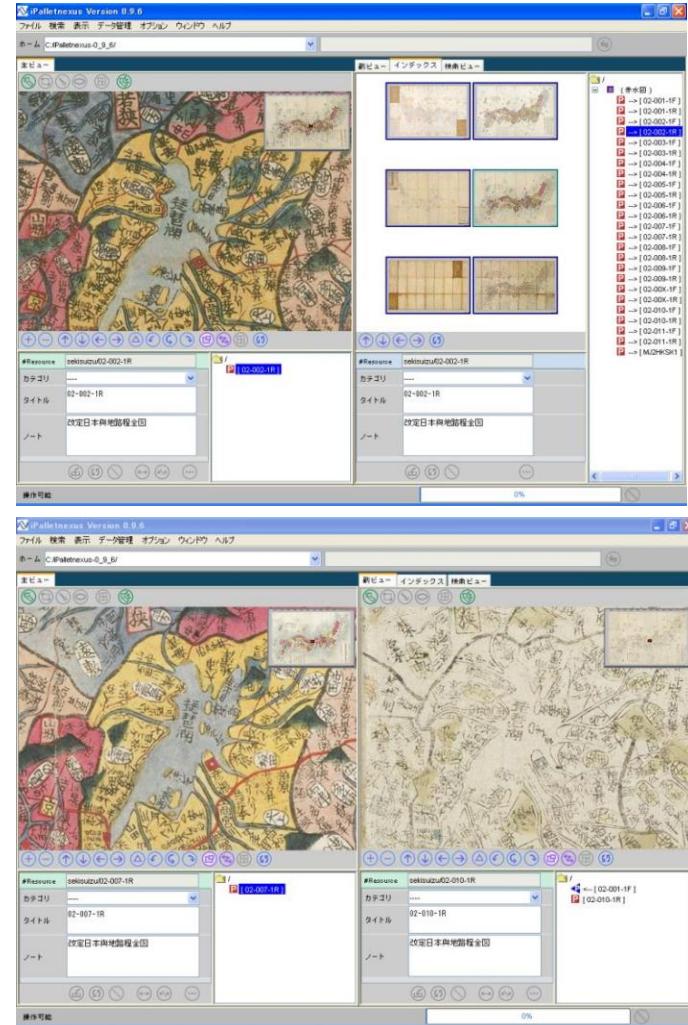


Nagakubo Sekisui

# Photographing and viewers of “Sekisuizu”



Studio at the Historiographical Institute



Two interfaces of a viewer

# Integrated Digital Archives of Cultural Resources

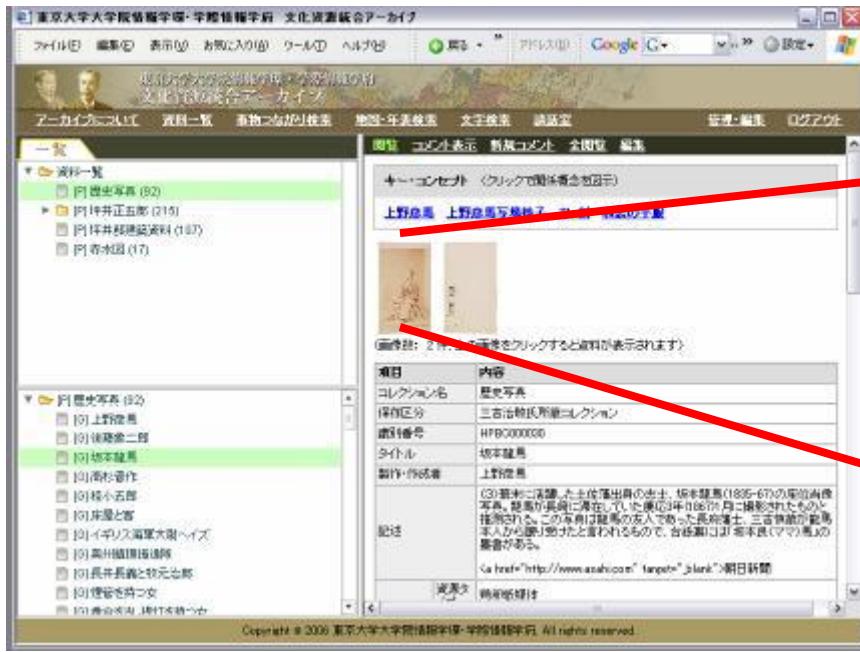
- Integrated : different fields, formats, etc.
  - “Sekisuizu”
  - Historical photographs by Ueno Hikoma (1818-1904)
  - Documentation created by Tsuboi Shogoro (1863-1913)
- Digital photographing
- Reference : Ontology (words, time, space)

# 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

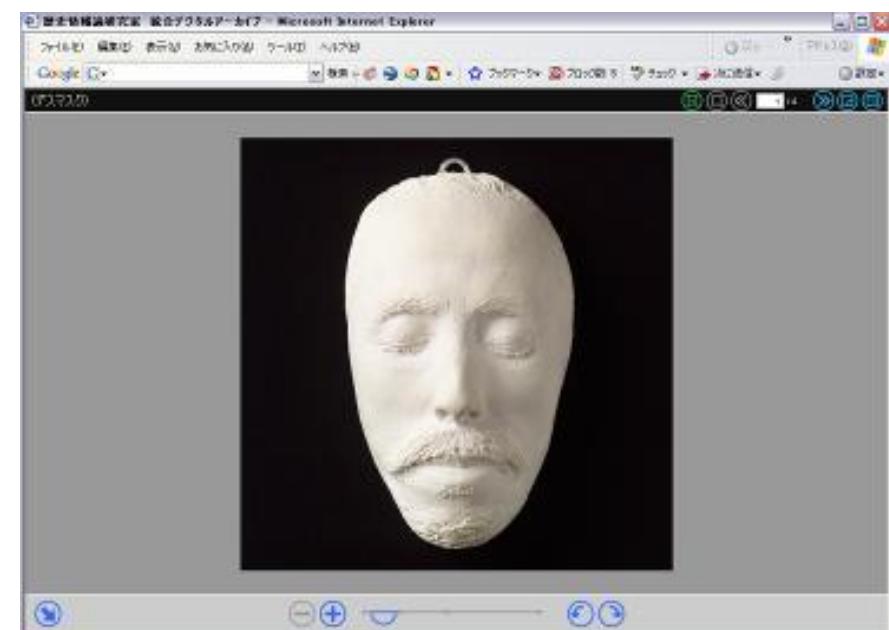
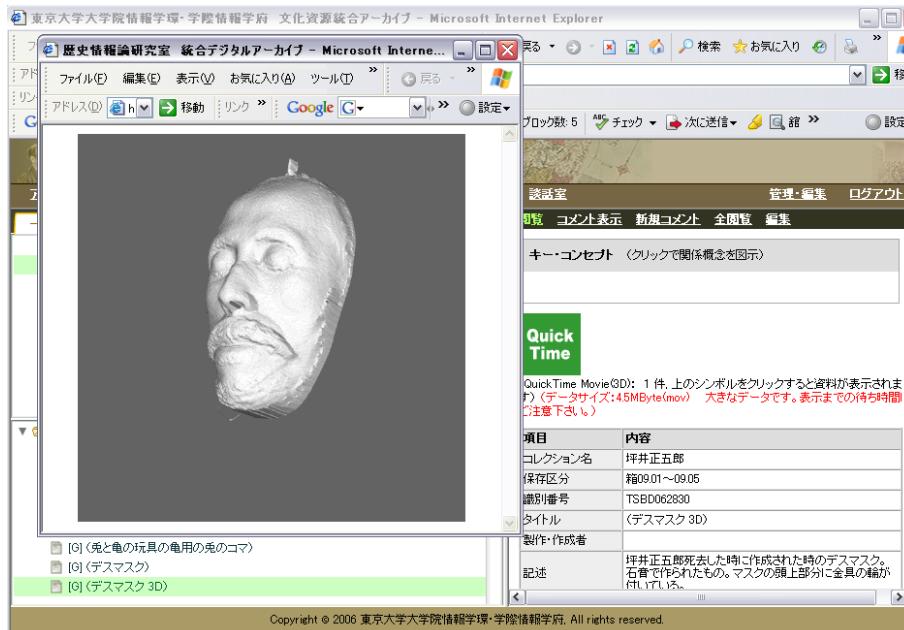


Meta data



Sakamoto tyoma(1836-1867)

# 3-dementional data



Death mask of Tsuboi Shogoro

# Reference : words, time, space



Words



Time



Space

# Cooperative construction

This screenshot shows a Microsoft Internet Explorer window displaying a historical photograph of Kōzō Ueda. The image is a sepia-toned portrait of a man in traditional Japanese clothing. A blue rectangular box highlights a specific area of the photograph. To the right of the image is a detailed metadata form titled 'コメント表示' (Comment Display). The form includes fields for 'コレクション名' (Collection Name), 'タイトル' (Title), '保存区分' (Storage Category), '識別番号' (Identifier), 'タイトル' (Title), '製作・販売者' (Creator/Publisher), '記述' (Description), '資源タイプ' (Resource Type), '形態式情報' (Format Information), and '他の資料との関連性' (Relationship with other materials). The '記述' field contains a long text entry about the photo, mentioning it was taken by Kōzō Ueda and is a copy of a painting by Kōshō Ueda.

Common annotation

This screenshot shows a Microsoft Internet Explorer window displaying a dialogue thread for a historical photograph of Matsunaga Maru. The page title is '東京大学大学院情報学環・学際情報学府 文化資源統合アーカイブ'. The dialogue is centered around a photograph of Matsunaga Maru, which is highlighted with a green background. The thread includes several comments from users, such as '【#399】 「坂本龍馬【A3】」に対するコメント' and '【#383】 「オキシジョンコ」「坂本龍馬【A3】」に対するコメント'. The interface includes standard navigation buttons like back, forward, and search.

Dialogue

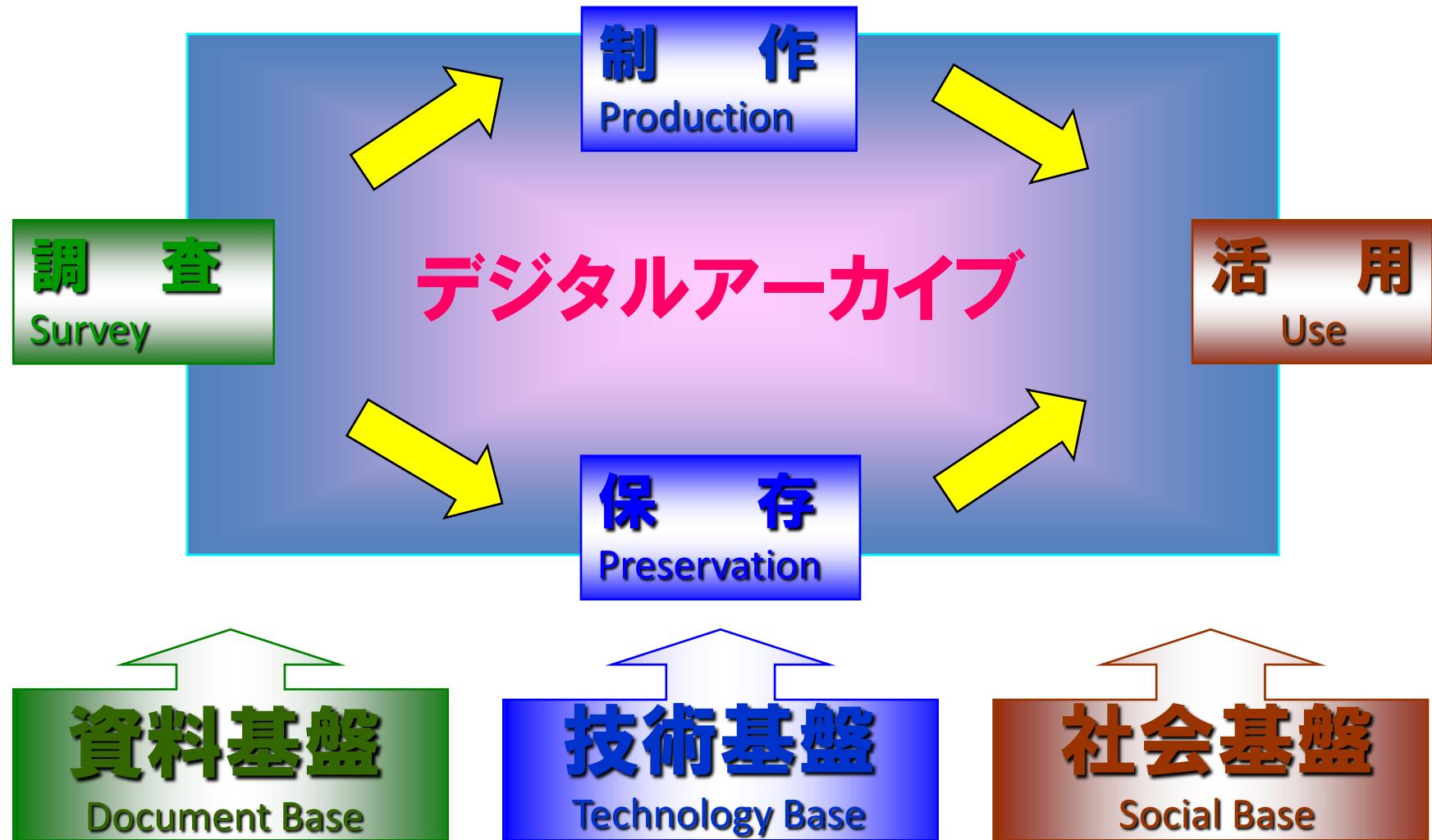
# Bases of digital archives

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.....



# 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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