Digital Humanities in Taiwan

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Outline

1. Digitization Projects in Taiwan
2. Research Center for Digital Humanities in National Taiwan University
3. Other DH activities
National Digitization Effort

- National Digital Archives Program (NDAP) of the National Science Council (NSC) – from 2002 to present
- National Repository of Cultural Heritage (NRCH) of the Council for Cultural Affairs – from 2002 to 2006
NDAP/TELDAP

- Precursor – Three initiatives from 1998 to 2001 on digital museums, digital archives and international DL collaboration
- First phase 2002 – 2007: NDAP
- Second phase 2008 – 2012: combining NDAP and E-learning to become TELDAP
Goals of NDAP

- Digitize archives and artifacts kept in about 10 institutions that reflect the national cultural heritage
- Sub-projects that explore connections with digital content industries
- Extensive and systematic training of people to ensure the continuity of know-how
- Development of metadata according to subject areas
Goals of TELDAP

- Goals of NDAP, plus
- Active international collaboration
- Incorporate DA into e-learning
Outcome/Uniqueness of NDAP

- Over 2,000,000 items in the union catalogue [http://digitalarchives.tw/index.jsp](http://digitalarchives.tw/index.jsp), covering a wide spectrum of subjects
- A national program, top-down approach
- Lead by scholars and museums, not libraries (only libraries participating are NCL and NTU)
- Tries to connect with the cultural/digital content industries since the very beginning
- Excellent and systematic training programs that disseminate digitization know-how to the society at large
NRCH of CCA

- Focus on local cultural heritage
- Over 1,500,000 items, supplement NDAP’s shortage of local content
- NRCH + NDAP: provides a comprehensive digital landscape of Taiwan’s cultural heritage
Cultural, social and Biological Diversity in Taiwan
Digitization effort at NTU

- Started in 1996
- Joined NDAP in 2002 and participated in NRCH (the only institution that’s in both)
- The digitalization of the collections in NTU involves a wide variety of content and object types
- Also actively helped other institutes with know-how, especially on building systems and tools
A Glimpse of DARC

- DARC: Digital Archives Resource Center in NTU
  - Taiwan Historical Collections (National Taiwan University Library)
  - Herbarium (Institute of Ecology and Evolutionary Biology)
  - Insect (Department of Entomology)
  - Geosciences (Department of Geosciences)
  - Anthropological Collections (Department of Anthropology)
  - Zoology (The Institute of Ecology and Evolutionary Biology)

- http://www.darc.ntu.edu.tw/
Danxin Archives 淡新檔案
Japanese anthropologist Miyamoto Nobuto (宮本延人) with his assistants in the field studies
Research Center for *Digital Humanities* of NTU

- Founded in 2006
- **Goals**
  - Coordinate digitization effort within NTU and with other institutions
  - Bridge the gap between digital archives community and scholars in humanities
  - Enhance interaction between humanities and IT
  - Build infrastructure for digital humanities
RCDH of NTU

- Over 6,000,000 images, 200,000 metadata records and 160,000,000 words of original texts.
- Taiwan History Digital Library (THDL): Documents related to Taiwan from the Ming and the Qing government and Land deeds
- Judicial court archives and statistical reports of the Japanese colonial period
- Archives of KMT (the Nationalist Party) and Taiwan Consultative Council
- Records of social movements in Taiwan
Scholars need more than a collection of material. They need tools to retrieve, observe, analyze, and explore the content.

We believe IT can/should provide such an environment.
What is a digital research environment?

• It should not be just a warehouse of digital content

1. It should provide tools to help researchers investigate and explore

2. Retrieval Tools
   • Help users find what they want

3. Mining Tools
   • Help users observe and analyze what they have found
   • Help users explore and discover what they might not know

4. Creating new context among documents
Example: Post-Query Classifications

- Provide multi-faceted classification (such as year, source, author, nature of document) of query results
- Used for observing the collective properties of query
Post-Query Classifications

- By observing **distribution pattern of the query result**, one can explore further and discover questions such as “why so-and-so happens so often during a certain period?”

The class (source/type) that contains most documents

The chronicled distribution of “year” facet
Relations and Collective meanings

- There are more than 30,000 land deeds in full-text from 72 sources. It is virtually impossible to find relationships among them by hand.
- **Land transitivity graph**: An automated method to discover relations such as successive transaction pairs, allotment agreements, etc. LTG describes the evolution of a particular piece of land.
Land Transitivity Graphs

- Each graph leads to an intriguing story of a particular land

- A surprising outcome: there are some relationships that have never been studied, or even noticed, by historians
Ongoing Work

- Build and refine systems to incorporate more collections for more disciplines in humanities and social sciences
- Work closely with humanity researchers to provide more useful IT tools
- Incorporate GIS information into our content
- Work closely with faculty in humanities and natural sciences to incorporate content into classes
Land deed distribution in THDL

- The spatial distribution of the land deeds from the Japanese Taiwan Governor-Generals Office
- How to interpret the picture?
- Why do certain areas contain so many deeds?
- What is the CONTEXT?
Cultural perspective GIS?

An Ordinary World Map
Cultural perspective GIS? – Cell phone subscribers in 2002

from http://www.worldmapper.org/
Other Digital Humanities in Taiwan

• Huang, Yi-long (黃一農)
  - e-Evidential Research: Based on large quantities of digitalized materials, the aim of e-Evidential Research is to find a specific document as an evidence for a particular historical problem that cannot be solved without databases

• Lo, Feng-ju (羅鳳珠)
  - Put Chinese classical literatures (e.g. the works of Su Shi 蘇軾) on the Web.
  - With assistance from specialists in IT and GIS, she made new ways of presenting the classics to both scholars and non-experts. (multimedia, spatial perspective, etc.)
Concluding Remarks

- Can we develop a **new methodology** for historical studies? What kind of questions can we ask or answer? Will there be a *conceptual leap*, instead of just small changes, in the studies of Taiwanese history?
- We hope to enhance interactions between historians and IT researchers, open new doors to the research of history and other disciplines, and build models for digital humanities in Taiwan
Concluding Remarks

- With more and more digital resources created in past a few years, we expect the studies of digital humanities will emerge as an exciting and bustling field in Taiwan and make impacts on contemporary scholarship.
- All these can’t be done without international collaboration!
Thank you

Research Center for Digital Humanities
http://www.digital.ntu.edu.tw