EXPLORING THE PAST OF SHANGHAI THROUGH THE LENS OF DATA

Keven Liu and Cuijuan Xia
Shanghai Library and Institute of Scientific and Technological Information of Shanghai (SL&ISTIS)
kevenlw@gmail.com
AGENDA

- Awakening the pre-modern history in a new Shanghai Library
- Make data tell stories: to build cyber-infrastructure for DH research
- Some case studies
- The vision and challenges
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THE NEW SHANGHAI LIBRARY EAST

- Located in center Pudong
- 115000m²
- ¥2bn investment
- Completion: June 30, 2020
- 3i: Intelligence, Inclusiveness, Interconnection
- DH Data Center for History and Literature

Architectural rendering
THE RISE OF SHANGHAI
THE SLEEPING COLLECTIONS IN SL

**Manuscript**
- 70,000 items
- 20,000 people

**Genealogy**
- 60,000 titles
- 30,000 has text images

**Sheng Xuanhuai Archive**
- 170,000 items

**Rubbing**
- 150,000 pieces

**RoC Books**
- 213,000 titles
- 850,000 items

**RoC Periodicals**
- 25,000 titles
- 10 million articles

**Late Qing Periodicals**
- 300 titles
- 280,000 articles

**Shun Pao the newspaper**
- 78 years
- Hundred thousand pages

**North China Herald**
- 101 years
- 500,000 pages

**Local gazetteer**
- 5,400 titles
- 90,000 items

**Maps**
- 14,000 pieces

**Other special collections**
- Old photos
- New year pictures
- Cigar-boxes
- Calendars
- …

**Sheng Xuanhuai Archive**
- 170,000 items

**Manuscript and transcript**
- More than 6,000 titles

**RoC Books**
- 213,000 titles
- 850,000 items

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- 25,000 titles
- 10 million articles

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FROM DIGITAL TO DATA: THE MODEL SHIFT

Material
Occupation
Digitization
Structured
Description
Vectorization
Textualization
Machine
Learning
Datalization
Visualization
Modeling
Tools
Development
Relational DB
Full Text Mining
DH Platform
Collecting
Analyzing
Comparing
Induction
Conclusion
Publishing

Sorrogate
Text
Images
Tangible Obj.
Intangible Thing
Material
Occupation

Research
Behavior
Discovering
Annotation
Checking
Referring
Sampling
Description
Represent

Research
Precedure
THE CYBER-INFRASTRUCTURE FOR DH RESEARCH

DH Research
- Discovery
- Collect
- Company
- Publish
- Collaborate

DH Platform
- Ontology
- Terminology
- Mapping
- Knowledge Retrieval
- Text Mining
- Spatial-Temporal Analysis
- Content Analytics
- Social Network Analysis
- Visualization
- AR
- VR

Digital Library
- OAIS Preservation
- Supplementary Resources
- Subscribed Resources
- Discovery System
- Metadata Generating and Digitizing
- Acquisition

Outside

Supplementary Resources

Metadata Generating and Digitizing

OAIS Preservation

Subscribed Resources

Discovery System

Digital Library

DH Platform

DH Research

Knowledge Retrieval

Text Mining

Spatial-Temporal Analysis

Content Analytics

Social Network Analysis

Visualization

AR

VR
TOOLS AND METHODOLOGY SUPPORT

DH Methodology

- Computational Linguistics
- Digital History
- Digital Literature
- Digital Art
- Digital Archaeology
- Case Studies

Bibliographic Control

- Evidence-based study

- text mining
- content analysis
- spatial temporal analytics
- social network analysis
- Machine Learning

DH Cyber-infrastructure
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- The vision and challenges
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AGENDA

- Awakening the pre-modern history in a new Shanghai Library
- Make data tell stories: to build cyber-infrastructure for DH research in China
- Some case studies
- The vision and challenges
THE VISION/MISSION AND CHALLENGES

- Model(Ontology) as a Structure. Data as a Service
- Support the whole research life cycle with tools and platform
- Recruit born-digital DH researchers to settle down in the environment
- UGC and upgrade
THANK YOU FOR YOUR ATTENTION!