IMPROVING ARCHIVAL RECORDS OF TRADITIONAL KOREAN PERFORMING ARTS IN A SEMANTIC WEB ENVIRONMENT

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OVERVIEW

• Organizing the archival information of traditional Korean performing arts in a semantic web environment

• Analyzing the characteristics of Korean traditional music archives in the Gugak Archive of the National Gugak Center

• Recommending suggestions for improving the organization of the archival information in terms of stable identifiers, ontology-based data schema, and authority controlled data link
INTRO: NATIONAL GUGAK CENTER

• GUGAK : Traditional Korean music
• NATIONAL GUGAK CENTER (NGC) : Established in 1951 for the preservation and distribution of traditional Korean performing arts

INTRO: GUGAK ARCHIVE

• Gugak Archive: Traditional Music Archive of Korea

- NGC started its archiving project in 2007
- Began collecting and cataloging materials related to Korean classical performance
- Develop a metadata and classification scheme for traditional arts archive
- Analyzes, collects, provides, and preserves Korean musical performances, ranging from traditional music, dance, plays, and contemporary Korean music
- Produced and collected over 380,000 records, including videos, sounds, images, and textual materials

(Kweon 2016; NGC 2019)
ISSUE (1): RESOURCE IDENTIFICATION

- Sharing of Information on traditional Korean performing arts and related performing arts based on URLs

- Websites of Gugak Archive
- APIs of Cultural Data Plaza
- Meta Search Service: K-PAAN
• Create a link using a webpage URL, not permanent URIs

− Difficult to clearly identify and link the performing arts record on the web
− In case of website renewal, the URL link could be broken

※ External connection via direct URL can be blocked and provide encrypted URIs (.do include)

✔ **Permanent URIs** to identify and link archival information among various web services is needed
ISSUE (2): DATA SCHEMA BASED ON ONTOLOGY

• Own classification and metadata scheme of Gugak Archive (In-house schema)

  "Traditional Arts Archive Classification Scheme"
  • to categorize and organize archival records
  • linked to the Korean Decimal Classification (KDC)

  "Traditional Arts Archive Metadata"
  • based on International Standard Archival Description (ISAD [G]) and Dublin Core Metadata

(Noh 2017)
• **Descriptive Elements**  
  **Matching to Upper Ontology**

- **Title**  
  → E19 Physical Object (P102 has title) **E35 Title**  
  *(The name of an archival resource)*

- **Time**  
  → E19 Physical Object (P4 has time-span) **E2 Time-Span**  
  *(The time when an archival resource is created)*

- **Place**  
  → E19 Physical Object (P55 has current location) **E53 Place**  
  *(The name of a place where an archival resource is created)*

- **Type of Records**  
  → E19 Physical Object **E55 Type** {Fonds, Series, Files, Items}  
  *(The name of a type of material)*
Integrated Search are implemented based on ‘keywords’ not controlled access point (or identifier)
ISSUE (3): AUTHORITY-CONTROLLED INTERLINKING

• Link between resources with URIs, or those that interlink, increases data scalability and quality

• Vocabulary and meaning of Korean traditional music can be controlled using a Gugak dictionary and thesaurus

• At present, mainly uncontrolled keywords are listed in the archival description of the Gugak Archive

✓ Interlinking based on Authority-controlled identifier is essential
CONCLUSION

Suggestions for Improving Archival Information Service in a Semantic Web Environment

- Identify traditional Korean performing arts and related archival records with URIs permanently and consistently.

- Design data schema for archival records based on the formal ontological point of view for data linking and sharing among various institutions.

- Refine name and subject authority data to strengthen the linkages between archival data, as well as interlinking with external web data.


Performance Info

2019. 09

Search by Name

DADAM

- Dates  2019-09-25 ~ 2019-09-25
- Duration  11:00 ~ 12:30
- Venues  Umyeon-dang
- Price  A Seat 20000 won B Seat 10000 won

Korean Traditional Dance of Every Wednesday

- Dates  2019-09-25 ~ 2019-09-25
- Duration  20:00 ~ 21:30
- Venues  Pungnyu Sarangbang
- Price  A Seat 20000 won

THANK YOU

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Special thanks to Gugak Archive