

# 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



<http://www.gugak.go.kr/site/main/index001?menuid=001&lang=en>

# 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)

# • ISAD (G) TO CIDOC CRM & FRBROO

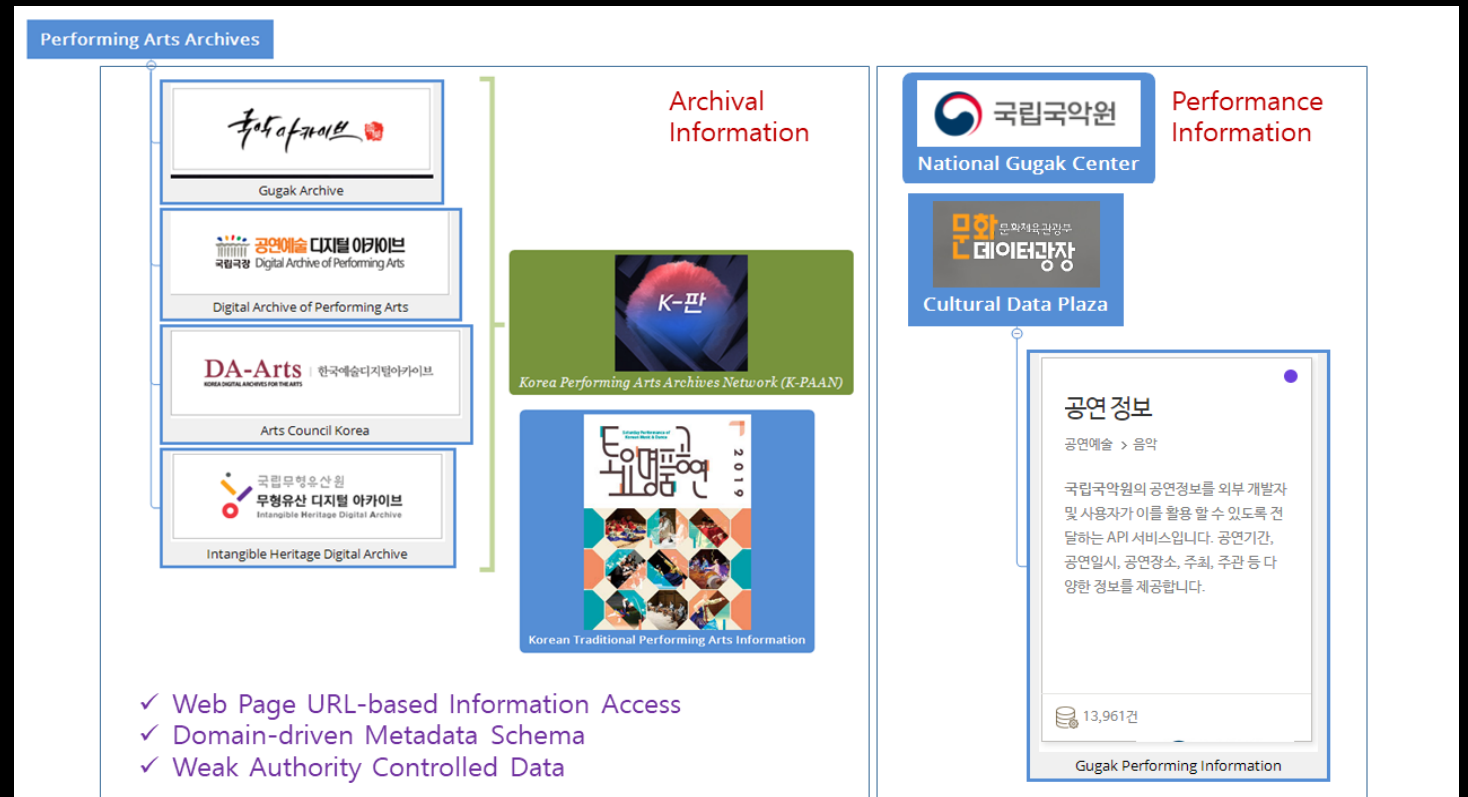
## • Descriptive Elements      Matching to Upper Ontology

- ✓ **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)



# ISSUE (3): AUTHORITY-CONTROLLED INTERLINKING

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.

# REFERENCES

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# Performance Info

← **2019. 09** →

1 Choice

3 Performance Day

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

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

Details



## 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

Details



[http://www.gugak.go.kr/site/program/performance/daily\\_list?menuid=002002001&year=2019&month=9&date=25](http://www.gugak.go.kr/site/program/performance/daily_list?menuid=002002001&year=2019&month=9&date=25)

# GUGAK ARCHIVE



# THANK YOU

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Special thanks to Gugak Archive