The Usage of Controlled Vocabulary in the Union Catalog of TELDAP

An exploratory study

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TELDAP, Taiwan
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http://catalog.ndap.org.tw/dacs5/System/Main.jsp

數位典藏 聯合目錄:主要品名：雙兔 - Mozilla Firefox

檔案(F) 編輯(E) 檢視(V) 歷史(S) 書籤(B) 工具(T) 說明(H)

數位典藏 ... | DSpace at MA... | Gmail - Getty... | 收件匣 (307) -... | UCLA Graduat... | nteplato 的相... | 關於我們: 數... | MAAT -- Proj... | 「數位典藏...

主要品名：雙兔

後設資料　授權與引用資訊　連結到原始資料網站

資料識別：
　識別號碼/總號：2003/3080/64
　識別號碼/分類號：1/1314

資料類型：
　水墨/水墨

著作者：
　作者：歐豪年
　譯名：Ou Hao-nian
　其他識別資料：歐豪年（1935—），名介，生於廣東省茂名縣，1950年隨從父母移居香港，十七歲時在香港從趙少昂大師遊，投入其門下，力學精研，直接繼承了嶺南畫派改革國畫的開拓精神，加上才華出眾，力學有成，早負盛名，享譽海內外，成為嶺南畫派的中堅。歐豪年創作內容遍及山水、人物、花鳥、蟲魚、走獸，兼善詩文與書法，其畫筆勢豪邁，既多古法，又?新意，自然隨心所欲，無所謂意，亦無所謂工。四十年來歐氏作品曾應港、日、星、馬、歐、美各國美術館值應數十度，蜚聲國際。來臺後任教於中國文化大學，作育英才，亦不遺餘力。他也曾講學於美史丹佛大學、華李大學、夏威夷大學及印地安那波里大學。1990年至1991年以英、法、德、義、荷、比、西七國博物館巡迴展，載譽歐陸，並獲臺灣行政院新聞局國際博播獎章。
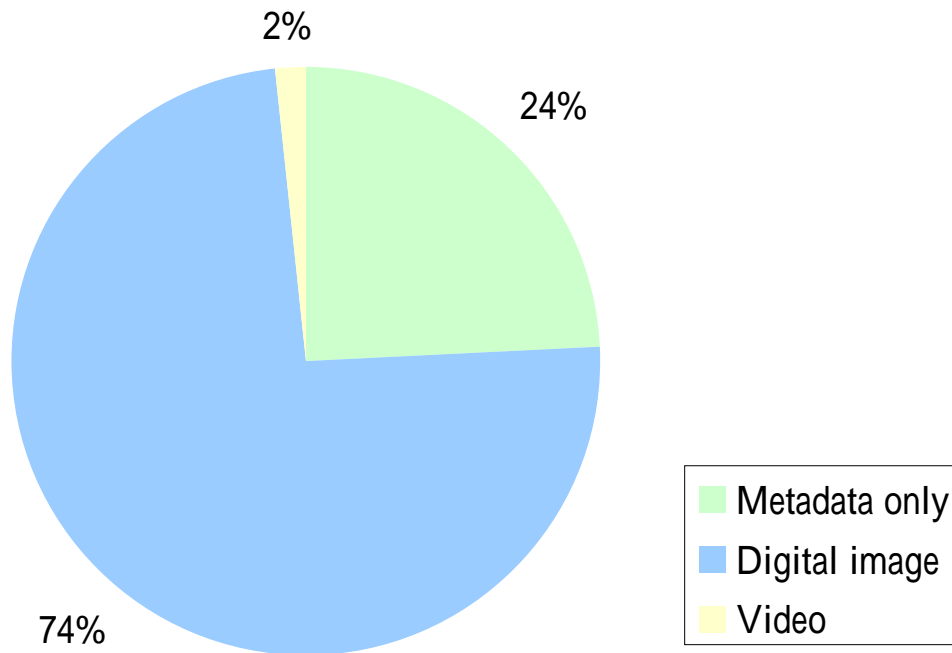
主題與關鍵字：
　基底材：紙
　色彩：設色
　技法：寫意

Background[1]

- Ratio: MD Recs-to-Digital Objects
  - is close to 1.3:1
  - MD Recs:
    - 2,094,147 totally
    - 508,912 MD recs are without digital object.
  - Digital objects: 1,585,235 (July 3, 2008)

Background[2]

- Digital image: 1,551,744
- Video: 33,491

Background[3]

- Collection type

Architecture 3,921(0%)

Geology 6,148(0%)

Digital Value-add 6,185(0%)

Painting/Calligraphy
14,314(1%)

Scripta 19,058(1%)

Rare Books 19,304(1%)

Artifacts 23,077(1%)

Video / Audio 34,601(2%)

Rubbings 39,064(2%)

Map / Remote Sensing Data
71,039(3%)

Anthropology 76,175(3%)

Archaeology 150,669(7%)

Biology 248,511 (11%)

News 415,158 (18%)

Archives 1,171,911 (50%)
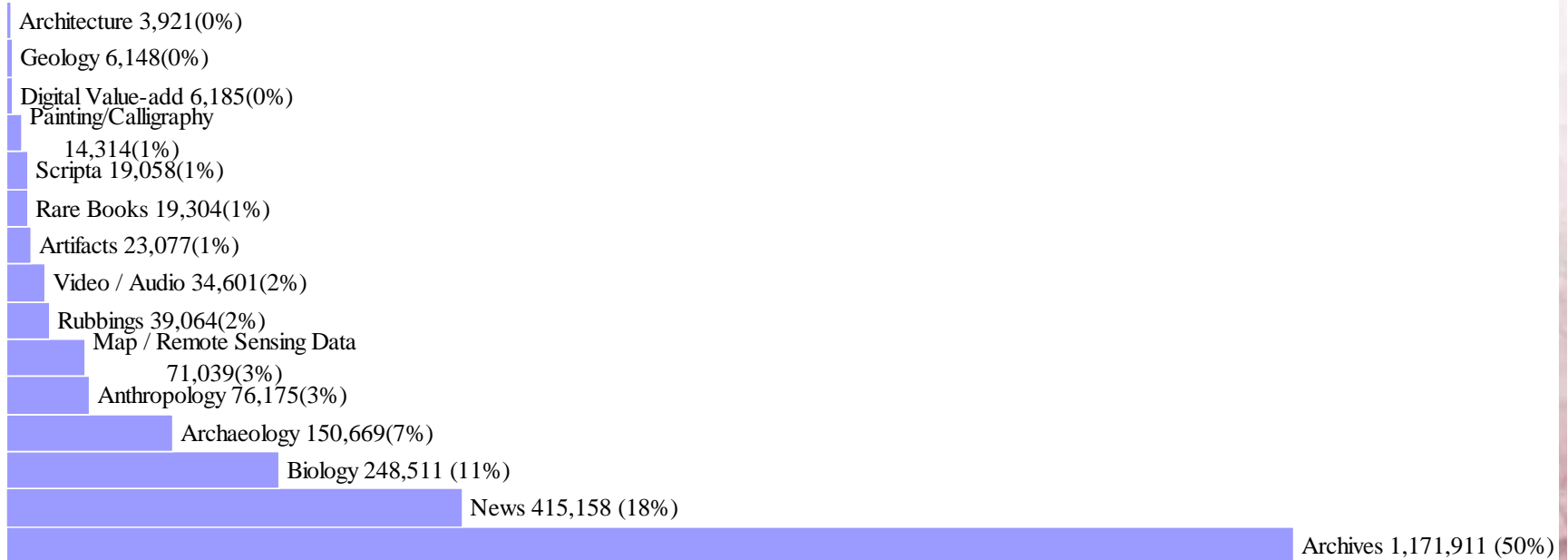
Background[4]

- The Union Catalog aggregates huge amount of metadata records and related digital objects from various projects.
  - A majority of these recs and objects is imported from three divisional projects as below:
    - Institution-based projects: such as the National Palace Museum, Academia Sinica, Museum of Natural Science, Academia Historica, National Central Library, National Taiwan University, Taiwan Historica, and National Museum of History
    - Non-solicited Projects of Content Development Division in TELDAP
    - Non-solicited Projects of Applications and Services Division in TELDAP

Background[5]

- Collection distribution: 121 collections in a total
  - Institution-based project: 55 collections
    - National Palace Museum: 5
    - Academia Sinica: 17
    - Museum of Natural Science: 15
    - Academia Historica: 3
    - National Central Library: 4
    - National Taiwan University: 9
    - Taiwan Historica: 1
    - National Museum of History: 1
  - Non-solicited Projects of Content Development Division in TELDAP: 53 collections
  - Non-solicited Projects of Applications and Services Division in TELDAP: 13 collections

Background[6]

- 21 collections have been supported by MAAT.
  - 17 of them are institution-based projects.
  - 4 are from Non-solicited Projects of Content Development Division.
- The other 100 collections have not been supported by MAAT.
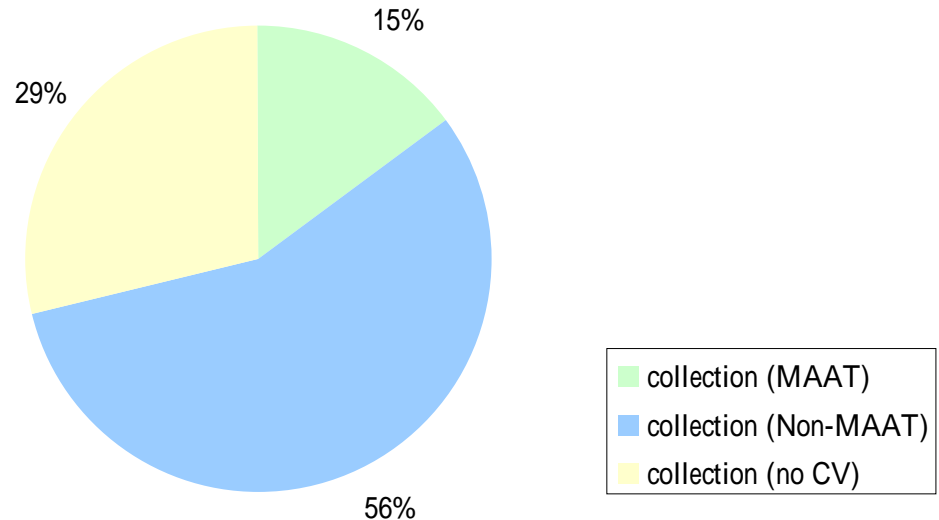
17%

83%
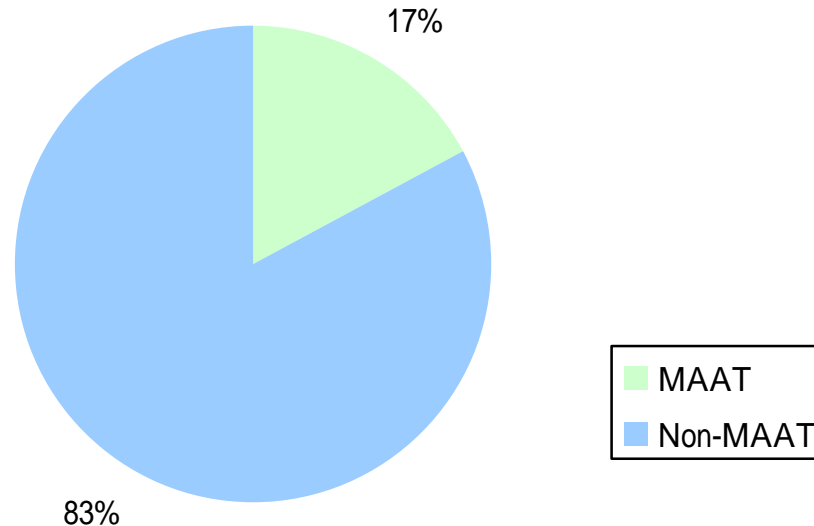
| MAAT |
| Non-MAAT |

An Overview on Use of Controlled Vocabulary in Union Catalog
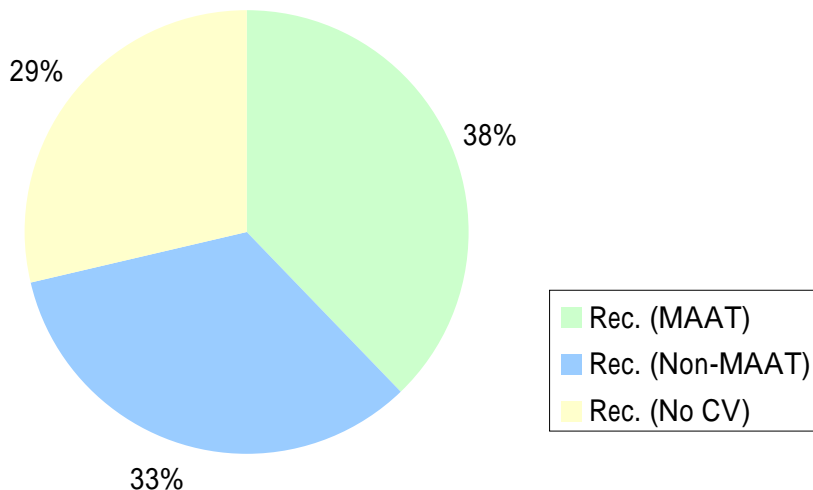
Collection viewpoint

- In 121 collections of Union Catalogs, 86(71%) use controlled vocabulary in metadata recs.
  - 18 supported by MAAT(15%)
  - 68 not supported by MAAT(56%)

15%

29%

56%

collection (MAAT)
collection (Non-MAAT)
collection (no CV)

Record viewpoint

- In 2,094,147 records (3, Jul, 2008) of Union Catalogs, 71% have adopted controlled vocabulary.
  - 791,784(38%): supported by MAAT
  - 700,361(33%): not supported by MAAT

Element viewpoint[1]

- Several elements of Dublin Core element set used in union catalogs have adopted controlled vocabulary.
  - Format: 16 collections (18 different CV/term lists)
  - Type: 42 collections (27 different CV/term lists)
  - Description: 56 collections (92 different CV/term lists)
  - Subject and Keyword: 29 collections (35 different CV/term lists)
  - Creator and contributor: authority file has been developed by the Grand Secretariat Archives Project
  - Coverage: mainly for GIS applications

Element viewpoint^2

Element	18 Collections MAAT Support	68 Collections Non-MAAT Support
Format	4 collections, 5 term lists	12 collections, 13 term lists
Type	8 collections, 10 term lists	34 collections, 17 term lists
Description	8 collections, 8 term lists	48 collections, 84 term lists
Subject	10 collections, 16 term lists	19 collections, 19 term lists

The Usage of Controlled Vocabulary in Union Catalog

Objective[1]

- How is controlled vocabulary used by the collections of union catalog in TELDAP?
  - Approach: term list, authority file, thesaurus, or others is employed?
  - Source: current source or developed by themselves?
  - Elements: subject/keyword, description, type and format?
  - Preference: to what extension and degree controlled vocabulary is used by various communities? Such as Museums, Archives, Libraries, and Herbaria.

Objective^2

- What are the next steps for the use of controlled vocabulary in union catalog of TELDAP?

  – What kind of improvements the union catalog needs to make?

  – What kind of transformation is needed to enrich union catalog? e.g., use controlled vocabulary mechanism to facilitate or achieve seamless integration and knowledge association among various collections?

Methodology

- Targets
  - 18 collections supported by MAAT.
  - Totally, 180 metadata recs are taken to analyze.
- Content analysis
  - 4 elements of DCMI : FORMAT, TYPE, DESCRIPTION and SUBJECT.
  - Along with the specification for metadata functional requirements, if available.

18 collections

- Academia Sinica-Institute of Ethnology-The Digital Archives of Formosan Aborigines (CIDOC)
- Academia Sinica-Digital Archives of Historical and Cultural Relics Collected in the Institute of History and Philology-Rare Books of Fu Ssu-Nien Library (MARC)
- Academia Sinica-Institute of Modern History-The Digital Archives of the Diplomatic and Economic Records in Modern History (EAD)
- Academia Sinica-Digital Archives of Historical and Cultural Relics Collected in the Institute of History and Philology-The Grand Secretariat Archives (EAD)
- Academia Sinica-Digital Archives of Historical and Cultural Relics Collected in the Institute of History and Philology-Rubbings and Archaic Texts Digital Archives Project (CDWA)
- Academia Sinica-Digital Archives of Historical and Cultural Relics Collected in the Institute of History and Philology-Digital Archives for Ethnological Specimen, Photo and Archives (CDWA)
- Academia Sinica-Institute of Botany-Digital Archives of Indigenous Plants of Taiwan (HISPID)
- Academia Sinica-Research Center for Biodiversity-Digital Archive of Malacofauna from Taiwan (Species 2000)
- Academia Sinica-Research Center for Biodiversity-Digital Archive of Fish Fauna from Taiwan (Species 2000)
- The National Palace Museum-Digital Archives Project of Chinese Painting and Calligraphy at the National Palace Museum (CDWA)
- The National Palace Museum-Digital Archives Project of Chinese Antiquities at the National Palace Museum (CDWA)
- National Museum of History-National Historical and Cultural Artifacts Digital Collection Project - National Museum of History (CDWA)
- Academia Historica-Digital Archives of Government Documents and Presidential Records in Academia Historica-Digital Archives of Nationality Government of China (EAD)
- Academia Historica-Digital Archives of Government Documents and Presidential Records in Academia Historica-Digital Archives System of National Resources Commission (EAD)
- Taiwan Historica-Digital Japanese Ruling and Postwar Archives Project (EAD)
- Chinese Culture University-The Development of Digital Archives for Modern Treasure of Art Works (CDWA)
- National Pingtung University of Science and Technology-Cyber Display and Information Searching System for Taiwanese Antique Agricultural Implements (CDWA)
- Taipei National University of the Arts/ Institute of Taiwan History Academia Sinica-Exploration of Taiwan Visual Image (VRA)

Profile of Targets[1]

- CDWA: Museum and Arts Community (7 collections)
- VRA: Visual Arts Community (1 collection)
- CIDOC: Museum and Ethnology Community (1 collection)
- EAD: Archives Community (5 collections)
- MARC: Library Community (1 collection)
- HISPID and Species: Biodiversity and Herbarium Community (3 collections)

Profile of Targets^2

- Normalization
  - Elements are misused.
  - DESCRIPTION   SUBJECT

Element	Collection (Metadata Standard)	CV List QTY
Format	National Museum of History-National Historical and Cultural Artifacts Digital Collection Project - National Museum of History (CDWA) (CDWA) Academia Sinica-Digital Archives of Historical and Cultural Relics Collected in the Institute of History and Philology-Rubbings and Archaic Texts Digital Archives Project (CDWA) Academia Sinica-Digital Archives of Historical and Cultural Relics Collected in the Institute of History and Philology-Digital Archives for Ethnological Specimen, Photo and Archives (CDWA) National Pingtung University of Science and Technology-Cyber Display and Information Searching System for Taiwanese Antique Agricultural Implements (CDWA)	CDWA: 4
	Academia Sinica-Digital Archives of Historical and Cultural Relics Collected in the Institute of History and Philology-The Grand Secretariat Archives (EAD) Academia Historica-Digital Archives of Government Documents and Presidential Records in Academia Historica-Digital Archives of Nationality Government of China (EAD) Academia Historica-Digital Archives of Government Documents and Presidential Records in Academia Historica-Digital Archives System of National Resources Commission (EAD) Academia Sinica-Institute of Modern History-The Digital Archives of the Diplomatic and Economic Records in Modern History (EAD)	EAD: 3

Element	Collection (Metadata Standard)	CV List QTY
Type	Academia Sinica-Digital Archives of Historical and Cultural Relics Collected in the Institute of History and Philology-Rubbings and Archaic Texts Digital Archives Project (CDWA) The National Palace Museum-Digital Archives Project of Chinese Painting and Calligraphy at the National Palace Museum (CDWA) The National Palace Museum-Digital Archives Project of Chinese Antiquities at the National Palace Museum (CDWA) National Museum of History-National Historical and Cultural Artifacts Digital Collection Project - National Museum of History (CDWA) (CDWA) National Pingtung University of Science and Technology-Cyber Display and Information Searching System for Taiwanese Antique Agricultural Implements (CDWA) Chinese Culture University-The Development of Digital Archives for Modern Treasure of Art Works / - (CDWA)	CDWA: 6
	Academia Sinica-Institute of Modern History-The Digital Archives of the Diplomatic and Economic Records in Modern History (EAD)	EAD: 2
	Taipei National University of the Arts/ Institute of Taiwan History Academia Sinica-Exploration of Taiwan Visual Image - (VRA)	VRA: 3

Element	Collection (Metadata Standard)	CV List QTY
Description	0	0
Subject	1. National Museum of History-National Historical and Cultural Artifacts Digital Collection Project - National Museum of History (CDWA)　　　　　　　　　　　　　　　(CDWA) 2. Chinese Culture University-The Development of Digital Archives for Modern Treasure of Art Works　　／ 　　-　　　　　　　　　　　(CDWA) 3. The National Palace Museum-Digital Archives Project of Chinese Painting and Calligraphy at the National Palace Museum　　　　(CDWA) 4. National Pingtung University of Science and Technology-Cyber Display and Information Searching System for Taiwanese Antique Agricultural Implements (CDWA)	CDWA: 18
	1. Academia Sinica-Institute of Ethnology-The Digital Archives of Formosan Aborigines (CIDOC)	CIDOC: 1
	1. Academia Sinica-Digital Archives of Historical and Cultural Relics Collected in the Institute of History and Philology-The Grand Secretariat Archives　　　　　　　(EAD) 2. Academia Historica-Digital Archives of Government Documents and Presidential Records in Academia Historica-Digital Archives of Nationality Government of China　　　　　　　(EAD) 3. Academia Historica-Digital Archives of Government Documents and Presidential Records in Academia Historica-Digital Archives System of National Resources Commission　　　　　　　(EAD) 4. Taiwan Historica-Digital Japanese Ruling and Postwar Archives Project 　　　(EAD)	EAD: 4
	1. Academia Sinica-Digital Archives of Historical and Cultural Relics Collected in the Institute of History and Philology-Rare Books of Fu Ssu-Nien Library　　　　　　　(MARC) (MARC)	MARC: 3
	1. Academia Sinica-Institute of Botany-Digital Archives of Indigenous Plants of Taiwan 　　(HISPID) 2. Academia Sinica-Research Center for Biodiversity-Digital Archive of Malacofauna from Taiwan 　　　(Species2000) 3. Academia Sinica-Research Center for Biodiversity-Digital Archive of Fish Fauna from Taiwan 　　　(Species2000)	HISPID: 1 Species2000: 1

Result and Discussion[1]

- Element usage and definition: draw a clear distinction in usage between
  - FORMAT and TYPE
  - DESCRIPTION and SUBJECT
- Term List's view
  - SUBJECT(28), TYPE(11), FORMAT(7)
- Collection's view
  - SUBJECT : 14 collections
  - TYPE: 8 collections
  - FORMAT: 7 collections

Result and Discussion^2

- Community's view
  - Museum and Arts:
    - SUBJECT: 18 term lists
    - TYPE: 6 term lists
    - FORMAT: 4 term lists
  - Museum and Visual Arts
    - TYPE : 3 term lists
  - Museum and Ethnology
    - SUBJECT: 1 term list
  - Archives
    - SUBJECT: 4 term lists
    - FORMAT: 3 term lists
    - TYPE: 2 term lists
  - Library
    - SUBJECT: 3 term lists
  - HISPID/SPEICES2000
    - SUBJECT: 2 term lists

Result and Discussion[3]

FORMAT is mainly used by Museum and Arts as well as Archives Communities.

- Museum: focused on characteristics of artifact, including dimension and materials.

- Museum and Archives: both are inclined to draw a distinction between original object and reproduction.

Result and Discussion[4]

TYPE

- Museum and Arts Community uses a lot of CV/term lists to indicate the work or object type of artifact for their collections.
- Archives Community similar to Museums uses the CV/term list to categorize archives into various types.**??????**
- Archives Community further divides archives into levels, such as fonds, series, files and items.
- Both Museum and Archives Communities have a preference to draw a clear line between original object and their manifestations.
- In Visual Arts Community, they use TYPE to indicate deeper features of image, such as color.

Result and Discussion[5-1]

SUBJECT

- Museum Community
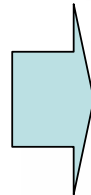 Several categories are generalized in the use of SUBJECT element as below:
    - Object: people, animal, plant, etc.
    - Seal and inscription
    - Pattern and Motif(?): geometric, square, triangle, circle, people, animal, plant, artifact, constellation, symbol, etc.
    - Mounting pattern and style
    - Material for paintings: paper, cloth, canvas, bamboo, etc.
    - Technique for paintings, including calligraphy(   ), ink and wash painting(   ), oil painting, watercolor painting(   ), woodcut painting(   ), etc.
    - Color and related skill for paintings
    - Content type
    - Iconography: interpretative annotation.

  A semantic relation exists between two CV/term lists. Therefore a two-level hierarchical structure needs to reorganize for these two CV/term lists and their values.

An Example of The Reorganization

Term List	Term
-	(Art) (record actually) (news) (history) (business) (air) (water bottom) (other)
Content type	
Topic	(person) (portrait) (scenery) (implied meaning) (living creature) (ecosystem) (natural phenomena) (sport) (building) (still life) (tour) (social appearance) (event) (multi-topic(series)) (other)

Term List	Term
Content type - Topic	(Art) - (person) - (portrait) - (scenery) -…etc. (record actually) - (person) - (portrait) - (scenery) -…etc. (news) - (person) - (portrait) - (scenery) -…etc. (history) - (person) - (portrait) - (scenery) -…etc. …etc.

Result and Discussion[5-2]

- Archives Community

  Due to the responsibility for collecting, organizing and preserving the historical archives from government, Archives Community uses SUBJECT to reflect the features of archives as follows:

  – The activities and events of government, including economy, politics, culture, military, education, and so on.

  – The preservation condition of archives.

    - The same term (i.e. condition) used by different collections has different meanings. One is defined for archival integrity and the other is for conservation of archives.

Result and Discussion[5-3]

- Library Community
  According to the research requirements on Chinese rare books, libraries use CV/term lists to reflect:
  - Research topic: such as Dunghuang literatures , Poetry of Ming Dynasty and so forth.
  - Chinese traditional binding style: such as butterfly-fold binding, sewed binding, and so forth.
  - Granularity: such as books, texts and plates and illustrations.
- Biodiversity and Herbarium Community shares the same term list in order to indicate the species name for animals and plants.

Conclusion and Suggestions[1]

Objective 1 – Usage: approach, source, element and preference

- Two approaches are employed by 18 collections for controlled vocabulary.
  - CV/Term list(98%, 43/46)
  - Category scheme with simple hierarchical structure.(2%, 1/46)
- A collection uses more than 1 term list.
- A term list can be shared by more than 1 collection.
- Only TYPE, FORMAT, and SUBJECT elements in Dublin Core adopt controlled vocabularies at our study.
- The most commonly used element and CV/term list by collections is SUBJECT.
- Various communities have different preferences to using controlled vocabulary.

Conclusion and Suggestions[2]

Objective 2-1 - Improvements
- Documentation Registry or Repository: to facilitate integrated development and application of controlled vocabulary.

Objective 2-2 – Transformation and enrichment
- CV/Term list is usable for TYPE and FORMAT elements.
- The SUBJECT element
  - is needed to develop the rich semantic relationship.
  - The feasibility & benefits of thesauri and ontologies deserve to be examined for union catalog.

ALL
- Metadata Quality improvements and related metrics are needed to enhance the accuracy, consistency and interoperability at both metadata element and value levels.

A Matrix of CV Usage[1]

/	Type	Format	Description	Subject
CDWA	1. Institute of History and Philology-Rubbings and Archaic Texts Digital Archives Project (CDWA) 2. The National Palace Museum-Digital Archives Project of Chinese Painting and Calligraphy at the National Palace Museum (CDWA) 3. The National Palace Museum-Digital Archives Project of Chinese Antiquities at the National Palace Museum (CDWA) 4. National Museum of History-National Historical and Cultural Artifacts Digital Collection Project - National Museum of History (CDWA) 5. National Pingtung University of Science and Technology-Cyber Display and Information Searching System for Taiwanese Antique Agricultural Implements (CDWA) 6. Chinese Culture University-The Development of Digital Archives for Modern Treasure of Art Works / - (CDWA)	1. Academia Sinica-Digital Archives of Historical and Cultural Relics Collected in the Institute of History and Philology-Digital Archives for Ethnological Specimen, Photo and Archives (CDWA) 2. National Museum of History-National Historical and Cultural Artifacts Digital Collection Project - National Museum of History (CDWA) 3. Academia Sinica-Digital Archives of Historical and Cultural Relics Collected in the Institute of History and Philology-Rubbings and Archaic Texts Digital Archives Project (CDWA) 4. National Pingtung University of Science and Technology-Cyber Display and Information Searching System for Taiwanese Antique Agricultural Implements (CDWA)		1. National Museum of History-National Historical and Cultural Artifacts Digital Collection Project - National Museum of History (CDWA) 2. Chinese Culture University-The Development of Digital Archives for Modern Treasure of Art Works / - (CDWA) 3. The National Palace Museum-Digital Archives Project of Chinese Painting and Calligraphy at the National Palace Museum (CDWA) 4. National Pingtung University of Science and Technology-Cyber Display and Information Searching System for Taiwanese Antique Agricultural Implements (CDWA)
CIDOC				1. Academia Sinica-Institute of Ethnology-The Digital Archives of Formosan Aborigines (CIDOC)
VRA	1. Taipei National University of the Arts/ Institute of Taiwan History Academia Sinica-Exploration of Taiwan Visual Image - (VRA)			

A Matrix of CV Usage[2]

/	Type	Format	Description	Subject
EAD	1. Academia Sinica-Institute of Modern History-The Digital Archives of the Diplomatic and Economic Records in Modern History (EAD)	1. Academia Sinica-Digital Archives of Historical and Cultural Relics Collected in the Institute of History and Philology-The Grand Secretariat Archives (EAD) 2. Academia Historica-Digital Archives of Government Documents and Presidential Records in Academia Historica-Digital Archives of Nationality Government of China (EAD) 3. Academia Historica-Digital Archives of Government Documents and Presidential Records in Academia Historica-Digital Archives System of National Resources Commission (EAD) 4. Academia Sinica-Institute of Modern History-The Digital Archives of the Diplomatic and Economic Records in Modern History (EAD)		1. Academia Sinica-Digital Archives of Historical and Cultural Relics Collected in the Institute of History and Philology-The Grand Secretariat Archives (EAD) 2. Academia Historica-Digital Archives of Government Documents and Presidential Records in Academia Historica-Digital Archives of Nationality Government of China (EAD) 3. Academia Historica-Digital Archives of Government Documents and Presidential Records in Academia Historica-Digital Archives System of National Resources Commission (EAD) 4. Taiwan Historica-Digital Japanese Ruling and Postwar Archives Project (EAD)

A Matrix of CV Usage[3]

/	Type	Format	Description	Subject
MARC				1. Academia Sinica-Digital Archives of Historical and Cultural Relics Collected in the Institute of History and Philology-Rare Books of Fu Ssu-Nien Library (MARC)
HISPID / Species2000				1. Academia Sinica-Institute of Botany-Digital Archives of Indigenous Plants of Taiwan (HISPID) 2. Academia Sinica-Research Center for Biodiversity Digital Archive of Malacofauna from Taiwan (Species2000) 3. Academia Sinica-Research Center for Biodiversity-Digital Archive of Fish Fauna from Taiwan (Species2000)

Format-CDWA[1]

Category	Collection name- Term List Name	Term List Value
Measurement	1. National Museum of History-National Historical and Cultural Artifacts Digital Collection Project - National Museum of History (CDWA) - - - 2. Academia Sinica-Digital Archives of Historical and Cultural Relics Collected in the Institute of History and Philology-Digital Archives for Ethnological Specimen, Photo and Archives (CDWA) - - /	1. (Vertical Length) (Horizontal Length) (width) (Thickness) (Diameter) (Depth) 2. (Length) (Wifth) (Thickness) (Height) (Diameter) (weight) (capacity) (density) (proportion) (hardness) (time)
Material	Academia Sinica-Digital Archives of Historical and Cultural Relics Collected in the Institute of History and Philology-Rubbings and Archaic Texts Digital Archives Project	(bone) - (turtle stomach bone) (turtle carry bone) (cattle bone) (deer bone) (person's bone) (tiger bone) (elephant bone) (Horse bone) (Goat bone) (Pig bone) (rhinoceros bone) (other bone) (metals) - (bronze) (copper) (iron) (gold) (silver) (lead) (tin) (jade) (stone) (brick) (tile) (pottery) (mire) (wood) (bamboo)

Format-CDWA^2

Category	Collection name- Term List Name	Term List Value
Replica	1. National Pingtung University of Science and Technology-Cyber Display and Information Searching System for Taiwanese Antique Agricultural Implements	1. (original) (replica)

Format-EAD

Category	Collection name- Term List Name	Term List Value

Reproduction	1. Academia Sinica-Digital Archives of Historical and Cultural Relics Collected in the Institute of History and Philology-The Grand Secretariat Archives
	
	2. Academia Historica-Digital Archives of Government Documents and Presidential Records in Academia Historica-Digital Archives of Nationality Government of China
	      (EAD)
	
	3. Academia Historica-Digital Archives of Government Documents and Presidential Records in Academia Historica-Digital Archives System of National Resources Commission
	      (EAD)
	
	4. Academia Sinica-Institute of Modern History-The Digital Archives of the Diplomatic and Economic Records in Modern History
	      (EAD)
		1. (original)
		(replica)
		2. (original)
		(replica)
		(original and replica)
		3. (original)
		(replica)
		(original and replica)
		4. (original file)
		(copy file)
		(original file and copy file)

Type-CDWA

Category	Collection name- Term List Name	Term List Value
Object type Genre	1. Academia Sinica-Digital Archives of Historical and Cultural Relics Collected in the Institute of History and Philology-Rubbings and Archaic Texts Digital Archives Project ( ) 2. The National Palace Museum-Digital Archives Project of Chinese Antiquities at the National Palace Museum 3. The National Palace Museum-Digital Archives Project of Chinese Painting and Calligraphy at the National Palace Museum 4. National Museum of History-National Historical and Cultural Artifacts Digital Collection Project - National Museum of History - 5. Chinese Culture University-The Development of Digital Archives for Modern Treasure of Art Works / - 6. National Pingtung University of Science and Technology-Cyber Display and Information Searching System for Taiwanese Antique Agricultural Implements	1. ⎯⎯⎯ 2. (Bronzes. Metalwork) (Ceramics) (Jade and stone work) (wood, bamboo and lacquer work) (tooth, bone, horn, clam, leather work) (enamel and glassware) (others) 3. (Calligraphy) (painting) (embroidery) ( ) (other) 4. (Chinese painting) () (Western painting) () () (photograph) (engrave) () (jade, stone) (pottery) (ceramic) (bronze) (enamel) (bamboo, wood) (lacquer ware) (tooth, bone) (weave) (urrency) (miscellaneous) 5. - (calligraphy)- (calligraphy) (Western painting) - (oil painting) (water color) (sketch) (wac dyes) (other) 6. (Real object) /

Type-EAD

Category	Collection name- Term List Name	Term List Value
Record type	Academia Sinica-Institute of Modern History-The Digital Archives of the Diplomatic and Economic Records in Modern History ( )	(Present) (note) (letter) (order) (Summary) (Q&A) (memorial) (pronouncement) (certificate) (memo) (contract) (newspaper) (resolution) (other)
Level	Academia Sinica-Institute of Modern History-The Digital Archives of the Diplomatic and Economic Records in Modern History	(fond) / (series/sub series) (file) (item)

Type-VRA

Category	Collection name- Term List Name	Term List Value
Rec type	Taipei National University of the Arts/ Institute of Taiwan History Academia Sinica-Exploration of Taiwan Visual Image -	(Text file) (image file)
- Image color	Taipei National University of the Arts/ Institute of Taiwan History Academia Sinica-Exploration of Taiwan Visual Image - -	(Black and white) (color)
Image Format	Taipei National University of the Arts/ Institute of Taiwan History Academia Sinica-Exploration of Taiwan Visual Image - -	(Negative) (film) (positive) (protrait) JPG 150dpi JPG 72dpi GIF TIF (postcard) <<< Format>>>

Category	Collection name- Term List Name	Term List Value
Subject	1. Chinese Culture University-The Development of Digital Archives for Modern Treasure of Art Works / - 2. The National Palace Museum-Digital Archives Project of Chinese Painting and Calligraphy at the National Palace Museum 3. National Museum of History-National Historical and Cultural Artifacts Digital Collection Project - National Museum of History (CDWA) ( ) -	1. (Customs) (event) (history story) (religious story) (sentiment) (literature) (critics) (irony) (social phenomena) (life record) (joyous) (other) 2. _____ 3. (Figure) (animal) (plant) (still life) (landscape) (scenery) (geometry) (abstract) (other)
Topic	1. Chinese Culture University-The Development of Digital Archives for Modern Treasure of Art Works / - 2. National Museum of History-National Historical and Cultural Artifacts Digital Collection Project - National Museum of History (CDWA) ( )	1. (Landsacpes) (Figure) (forest) (Bird and Flower) (fruit, vegitable) (grain) (animals) (feather) (flower) (grass, insect) (livings in water) (building) (transportation) (utility) (scenery) (still life) (abstract) (other) 2. (person) (portrait) (scenery) (implied meaning) (living creature) (ecosystem) (natural phenomena) (sport) (building) (still life) (tour) (social appearance) (event) (multi-topic(series)) (other)

Subject-CDWA/CIDOC[2]

Category	Collection name- Term List Name	Term List Value
Color	Chinese Culture University-The Development of Digital Archives for Modern Treasure of Art Works / -	( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )
Technique	Chinese Culture University-The Development of Digital Archives for Modern Treasure of Art Works / -	(ink and wash painting) (Bai miao) (Gonbi) (Sketching-ideas) (Ruled-line Paintings) (Boneless) ( ) ( ) ( ) ( ) (other) (water color) (other) (oil painting) (other) (woodcut) (cave printing plate) (relief printing plate) (flat plate) (half-tone screen) (other)
Support	Chinese Culture University-The Development of Digital Archives for Modern Treasure of Art Works / -	(paper) (bamboo wood) (cloth) (linen) (canvas) (fabric) (compound medium) (other)

Subject-CDWA/CIDOC[3]

Category	Collection name- Term List Name	Term List Value
Decoration	1. National Museum of History-National Historical and Cultural Artifacts Digital Collection Project - National Museum of History ( ) 2. National Museum of History-National Historical and Cultural Artifacts Digital Collection Project - National Museum of History ( )	1.　　(animal line)　　　(plant line)　　　(person line)　　　(artifacts line)　　　(scenery line)　　　(weather line)　　　(geometric line)　(symbolic line)　　　　(other) 2.　　　- (Snake) - - - 　　　　　　　　　　　　- -　　　　　(cloud) 　　　　　　　　　　　　- (wave) X - -
- Content type (Category?)	National Museum of History-National Historical and Cultural Artifacts Digital Collection Project - National Museum of History ( )	(Art)　　(record actually)　　(news) (history)　　(business)　　(air)　　(water bottom) 　(other)

Subject-CDWA/CIDOC[4]

Category	Collection name- Term List Name	Term List Value
Purpose Function	National Pingtung University of Science and Technology-Cyber Display and Information Searching System for Taiwanese Antique Agricultural Implements	A / B / C / D / E / F / G / H / I / J / K / L
/ Seal type Inscription Type	Chinese Culture University-The Development of Digital Archives for Modern Treasure of Art Works / -	( )
/ Scrip Inscription Letterforms	Chinese Culture University-The Development of Digital Archives for Modern Treasure of Art Works / -	( ) ( ) ( ) ( )
/ Relief Inscription Method	Chinese Culture University-The Development of Digital Archives for Modern Treasure of Art Works / -	( ) ( ) ( )

Subject-CDWA/CIDOC[5]

Category	Collection name- Term List Name	Term List Value
Mounting style	Chinese Culture University-The Development of Digital Archives for Modern Treasure of Art Works / -	( )
Mounting format	Academia Sinica-Digital Archives of Historical and Cultural Relics Collected in the Institute of History and Philology-Rubbings and Archaic Texts Digital Archives Project	
Groups Ethic Groups	Academia Sinica-Institute of Ethnology-The Digital Archives of Formosan Aborigines	(Paiwan) (Ami) (Atayal) (Puyuma) (Rukai) (Saisiyat) (Bunun) (Tsou) (Tao) (Thao) (Ketagalan) (Kavalan) (Taokas) (Papora) (Pazeh) (Babuza) (Hoanya) (Siray) (other)

Subject-EAD/MARC[1]

Category	Collection name- Term List Name	Term List Value
Subject	Academia Historica-Digital Archives of Government Documents and Presidential Records in Academia Historica-Digital Archives of Nationality Government of China (EAD) Academia Historica-Digital Archives of Government Documents and Presidential Records in Academia Historica-Digital Archives System of National Resources Commission (EAD)	_____
Special Topics	Academia Sinica-Digital Archives of Historical and Cultural Relics Collected in the Institute of History and Philology-Rare Books of Fu Ssu-Nien Library	(Poetry of Ming Dynasty) (Dunghuang literatures) (the history of the life medical treatment)
Level	Academia Sinica-Digital Archives of Historical and Cultural Relics Collected in the Institute of History and Philology-Rare Books of Fu Ssu-Nien Library	(book)

Subject-EAD/MARC²

Category	Collection name- Term List Name	Term List Value
Condition	1. Academia Sinica-Digital Archives of Historical and Cultural Relics Collected in the Institute of History and Philology-The Grand Secretariat Archives 2. Academia Historica-Digital Archives of Government Documents and Presidential Records in Academia Historica-Digital Archives of Nationality Government of China (EAD) 3. Academia Historica-Digital Archives of Government Documents and Presidential Records in Academia Historica-Digital Archives System of National Resources Commission (EAD) 4. Taiwan Historica-Digital Japanese Ruling and Postwar Archives Project (EAD)	1. (complete) (incomplete) 2. (good) (lightly damaged) (severely damaged) 3. (good) (lightly damaged) (severely damaged) 4. (good) (lightly damaged) (mid-degree damaged) (severely damaged) (other)
Binding	Academia Sinica-Digital Archives of Historical and Cultural Relics Collected in the Institute of History and Philology-Rare Books of Fu Ssu-Nien Library	(sewed binding) (butterfly-fold binding)	(other)

Subject-HISPID/SPEICES2000

Category	Collection name- Term List Name	Term List Value
Species taxonomy	1. Academia Sinica-Institute of Botany-Digital Archives of Indigenous Plants of Taiwan 2. Academia Sinica-Research Center for Biodiversity-Digital Archive of Malacofauna from Taiwan 3. Academia Sinica-Research Center for Biodiversity-Digital Archive of Fish Fauna from Taiwan	

Subject Term List By Collection[1]

Collection	Term List	Term
Academia Historica-Digital Archives of Government Documents and Presidential Records in Academia Historica-Digital Archives of Nationality Government of China (EAD)	Subject	
	Condition	(good)　　　　(lightly damaged)　(severely damaged)
Academia Historica-Digital Archives of Government Documents and Presidential Records in Academia Historica-Digital Archives System of National Resources Commission (EAD)	Subject	
	Condition	(good)　　　　(lightly damaged)　(severely damaged)
Academia Sinica-Digital Archives of Historical and Cultural Relics Collected in the Institute of History and Philology-The Grand Secretariat Archives	Condition	(complete)　　(incomplete)
Taiwan Historica-Digital Japanese Ruling and Postwar Archives Project (EAD)	Condition	(good)　　　　(lightly damaged)　(mid-degree damaged)　　　(severely damaged)　(other)

Subject Term List By Collection[2]

Collection	Term List	Term
National Museum of History-National Historical and Cultural Artifacts Digital Collection Project - National Museum of History	- Content type ( )	(Art) (record actually) (news) (history) (business) (air) (water bottom) (other)
	( )	(person) (portrait) (scenery) (implied meaning) (living creature) (ecosystem) (natural phenomena) (sport) (building) (still life) (tour) (social appearance) (event) (multi-topic(series)) (other)
	- ( )	(Figure) (animal) (plant) (still life) (landscape) (scenery) (geometry) (abstract) (other)
		- (Snake) - - - - (cloud) - (wave) X - -
		(animal line) (plant line) (person line) (artifacts line) (scenery line) (weather line) (geometric line) (symbolic line) (other)

Collection	Term List	Term
Chinese Culture University-The Development of Digital Archives for Modern Treasure of Art Works / -		(Customs)　　　　(event)　　　　　(history story)　　　　(religious story) (sentiment)　　　(literature)　　　(critics)　　　(irony)　　　(social phenomena) (life record)　　(joyous)　　　　(other)
		(Landsacpes)　　　(Figure)　　　(forest)　　　(Bird and Flower)　　(fruit, vegitable)　　　(grain)　　　(animals)　　　(feather)　　(flower)　　(grass, insect)　　　　(livings in water)　　(building)　　(transportation) (utility)　　(scenery)　　(still life)　　(abstract)　　(other)
	Color	(　　)　　(　　)　　(　　)　　(　　)　　(　　)　　(　　)　　(　　)　　(　　)　　(　　)
	Technique	(ink and wash painting)　　(Bai miao)　　(Gonbi)　　(Sketching-ideas) (Ruled-line Paintings)　　(Boneless)　　　　　　　　　(　　) (　　)　　(　　)　　(　　) (other)　　(water color) (other)　　(oil painting) (other)　　(woodcut)　　(cave printing plate)　　(relief printing plate) (flat plate)　　(half-tone screen)　　　　　　(other)
	Support	(paper)　　　　　(bamboo wood)　　(cloth)　　(linen) (canvas)　　(fabric)　　　(compound medium)　　(other)
	/ Seal type Inscription Type	(　　)
	/ Scrip Inscription Letterforms	(　　)　　(　　)　　(　　) (　　)
	/ Relief Inscription Method	(　　)　　(　　)　　(　　)
	Mounting style	(　　)

Collection	Term List	Term
Academia Sinica-Digital Archives of Historical and Cultural Relics Collected in the Institute of History and Philology-Rare Books of Fu Ssu-Nien Library	Level	(book)
	Special Topics	(Poetry of Ming Dynasty) (Dunghuang literatures) (the history of the life medical treatment)
	Binding	(sewed binding) (butterfly-fold binding)	(other)
National Pingtung University of Science and Technology-Cyber Display and Information Searching System for Taiwanese Antique Agricultural Implements	Purpose Function	A / B / C / D / E / F / G / H / I / J / K / L
The National Palace Museum-Digital Archives Project of Chinese Painting and Calligraphy at the National Palace Museum	Subject	——
Academia Sinica-Digital Archives of Historical and Cultural Relics Collected in the Institute of History and Philology-Rubbings and Archaic Texts Digital Archives Project	Mounting format	
Academia Sinica-Institute of Ethnology-The Digital Archives of Formosan Aborigines	Groups Ethic Groups	(Paiwan) (Ami) (Atayal) (Puyuma) (Rukai) (Saisiyat) (Bunun) (Tsou) (Tao) (Thao) (Ketagalan) (Kavalan) (Taokas) (Papora) (Pazeh) (Babuza) (Hoanya) (Siray) (other)

Collection	Term List	Term
Academia Sinica-Institute of Botany-Digital Archives of Indigenous Plants of Taiwan		
Academia Sinica-Research Center for Biodiversity-Digital Archive of Malacofauna from Taiwan		
Academia Sinica-Research Center for Biodiversity-Digital Archive of Fish Fauna from Taiwan		