

# Chinese AAT Project *progress updated*

Sophy Shu-Jiun Chen  
Taiwan e-Learning and Digital Archives Program

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Workshop on AAT in Chinese

# Chinese AAT Project Objectives

- Identifying different levels of **terminology equivalence** and adding **new terms** into AAT
- Establish a workable **methodology** of multilingual thesaurus for TELDAP
- Fundamental research on **multilingual information retrieval** of digital libraries

# Feasibility Study and Visiting Getty Research Institute

- A week-long (12-20 July, 2008) visit to the Getty Research Institute for a series of working meetings and presentations organized by the Getty Vocabulary Program.
- Discussion includes: focuses, scope, methodology, agenda of the collaboration project and also its technical and licensing issues

# Feasibility Study and Visiting Getty Research Institute

- The parties reached an agreement in principle on the following:
  - the Getty Research Institute and the Taiwan e-Learning and Digital Archives Program **agree to pursue future collaborative projects, including the development of a Chinese version of the Art & Architecture Thesaurus (AAT);**
  - the Getty Research Institute agreed to provide the latest version of the AAT data to the Taiwan e-Learning and Digital Archives Program for preliminary testing; and
  - the Getty Research Institute agrees to have the Taiwan e-Learning and Digital Archives Program translate several GRI publications relating to standards for digital libraries, including Introduction to Metadata, Introduction to Imaging, and Introduction to Controlled Vocabularies, into Chinese.

# Chinese AAT Project

## *August 2008~February 2009*

- An Inter-division Project
  - Program Office
  - Taiwan Digital Archives Expansion Project (1st Division)
  - Research and Development for Digital Archives and e-Learning Technologies Project (2nd Division)
  - Core Platforms for Digital Contents Project (3rd Division)
  - International Collaboration and Promotion of Taiwan e-Learning and Digital Archives Project (8<sup>th</sup> Division)
- Interdisciplinary scholars and experts
  - Library Science, Museum Studies
  - Information Science (Chinese Language Processing, Lexical Semantics, Lexical Knowledge Representation)
  - Art History
  - Translation studies
  - more to come...

# Chinese AAT Project

## *August 2008~February 2009*

- Setup Task Forces
  - **Equivalence Mapping Task Force**
    - more than 60 terms have been identified
    - Shueh-hua Chen & Sophy Shu-jiun, “Analysis of Multilingual Equivalence Mapping for Knowledge Organization Systems”, February 24 2009.
  - **Translation Task Force**
    - more than 3000 terms has been translated into Chinese language
    - Ching-Ju Cheng & Sophy Shu-jiun Chen, “AAT Translation Assessment Process”
  - **Thesaurus System Task Force**
    - authoring Tool of AAT
    - more than 570 terms in Chinese AAT System
    - Arthur Ya-ning Chen & Feng-chien Chung, “The collaboration in establishing Chinese AAT system for bilingual thesaurus services”
    - Shih Lin, “Authoring Tool of AAT with DADT”

# Equivalence Mapping Task Force

- Identify degrees of equivalence
- Identify similarity of conceptual structure
- Select 60 controlled vocabularies from NPM (Department of Antiquities) - Metadata Specification for AAT equivalence mapping purpose, all facets included, except for Associated Concepts facet.

# Example of Selected Terms

Selected terms of TELDAP	AAT FACET and Hierarchy
全器形制－植物－蔬果式－葫蘆形 全器形制－幾何－平面－三角形 局部形制－頸－長頸	PHYSICAL ATTRIBUTES FACET Attributed and Properties Hierarchy
紋飾－幾何－雷紋－雲雷紋 紋飾－幾何－點狀紋－乳丁紋	PHYSICAL ATTRIBUTES FACET Design Elements Hierarchy motifs
窯系－明代官窯系 窯系－景德鎮窯系 窯系－定窯系	STYLES AND PERIODS FACET Styles and Periods Hierarchy <Chinese ceramics styles>
考古學文化－仰韶文化 考古學文化－良渚文化	STYLES AND PERIODS FACET Styles and Periods Hierarchy <Chinese Neolithic periods>
紋飾－人物－宮廷人物－后妃 紋飾－人物－佛道人物－彌勒佛	AGENTS FACET People Hierarchy religious (people)



# Methodology

## Data Collection

- Three types of data collection
  - Mapping analysis logs from participants & myself (60 terms, 143 logs)
  - Mapping analysis workshops (5 workshops)
  - Email communications with maintainers of the term schemes

# Data Collection

## Recruiting Participants

實作者代碼	TELDAP所屬計畫 (相關工作任務)	實驗者學科背景
A	計畫辦公室	歷史學、博物館學
B	拓展臺灣數位典藏計畫	美術學、藝術學

**A total of 12 people, including 11 participants from related Divisions of TELDAP, contribute in the data collection process**

實作者代碼	TELDAP所屬計畫 (相關工作任務)	實驗者學科背景
C	數位典藏與數位學習橋接計畫	地理學、數位出版
D	計畫辦公室	歷史學、博物館學
E	拓展臺灣數位典藏計畫	中文、文學理論
F	拓展臺灣數位典藏計畫	圖書資訊學
G	數位技術研發與整合計畫－後設資料架構與應用團隊	歷史學、博物館學
H	數位技術研發與整合計畫－後設資料架構與應用團隊	資訊管理
I	計畫辦公室	電影學、電影製作
J	數位典藏與學習之海外推展暨國際合作計畫－典藏目錄與內容多語化計畫	圖書資訊學
K	數位典藏與學習之海外推展暨國際合作計畫－典藏目錄與內容多語化計畫	圖書資訊學
L	計畫辦公室	圖書資訊學

# Data Collection

## Participants Orientation

首先研究者先舉行第一次工作坊，目的是為所有實驗者進行實作前的課程訓練，以讓其了解如何進行此項實作任務。課程訓練的內容包括：

- ◎ AAT架構
- ◎ TELDAP控制詞彙
- ◎ TELDAP聯合目錄
- ◎ TELDAP – AAT詞彙等同關係實作及範例

**The first session of the workshop serves as orientation training to help participants familiarized with the task at hand.**

- ◎ **The infrastructure of AAT**
- ◎ **Controlled vocabularies of TELDAP**
- ◎ **Union Catalog of Digital Archives, Taiwan**
- ◎ **TELDAP – AAT equivalence mapping analysis**

# Data Collection

## Mapping Analysis Logs

實驗者被要求為每個實作的詞彙記載一份實作記錄，內容包括：

- ◎ 詞彙完成指定任務的時間長度
- ◎ 詞彙在TELDAP聯合目錄筆數及分類
- ◎ 詞彙在TELDAP聯合目錄出現的欄位
- ◎ 詞彙的英譯及參考書目
- ◎ 詞彙在AAT的層面
- ◎ 等同關係詞彙對照
- ◎ 詞彙實作的步驟與對照分析歷程

**Participants are required to document details of equivalence mapping procedures , including :**

- ◎ **Duration to completing the task**
- ◎ **Search results and classification in Union Catalog**
- ◎ **English translation and references**
- ◎ **The hierarchical position of the term in AAT**
- ◎ **Equivalence mapping**
- ◎ **Mapping analysis logs**

# Types of Possible Matches

1-1 Exact Equivalence

1-2 Exact Equivalence (Cross Ref.)

2-1 Inexact Equivalence

3-1 Partial Equivalence

(genus-species relationship...Superordination)

3-2 Partial Equivalence

(species-genus relationship...Subordination)

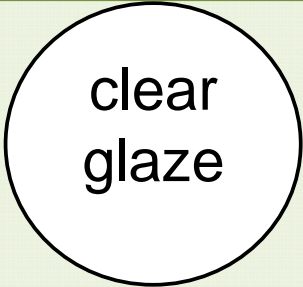

4-1 Single-to-multiple Equivalence

5-1 Non-equivalence (culture-dependent)

5-2 Non-equivalence (beyond scope)

# An Example of Mapping Analysis Log



<b>詞彙1·透明釉</b>			
實作者 : C 實作日期 Date	2009/01/06	完成指定詞彙時間長度 Duration	2hrs
I·詞彙來源 Source	「故宮器物數位典藏子計畫後設資料需求規格書 version 1.2」頁19-20，「類別—釉色-單色釉」		
II·詞彙「透明釉」在聯合目錄筆數/分類			
1·「透明釉」，共127筆符合資料，出現於metadata中的「描述」欄位，見於史博館&故宮藏品			
III·詞彙「透明釉」在聯合目錄出現的欄位			
1·「透明釉」：新聞(1) / 影音(1) / 器物(126)			
IV·詞彙「透明釉」的英譯及參考書目：clear glaze			
1· [clear glaze ; transparent glaze]，《透明釉、乳濁釉、無光釉概論》，姚仁寬副研究員，國立台灣工藝研究所 鶯歌技術輔導中心， <a href="http://www2.ntcri.gov.tw/cb/cb01/upload/upfile/TF0017.pdf">http://www2.ntcri.gov.tw/cb/cb01/upload/upfile/TF0017.pdf</a>			
2· [transparent glaze]，《鄭和下西洋與青花》，〈紀念鄭和下西洋六百週年國際學術研討會〉（2005.7.4-6,南京），前台灣綜合研究院所長龍村倪			
V·詞彙「透明釉」在AAT的層面、層級與等同關係詞彙：完全等同關係			
<b>AAT</b>		<b>TELDAP</b>	
			

**Exact Equivalence**

# Data Collection

## Mapping Analysis Workshops

**All participants have attended 5 workshops to discuss each mapping analysis**

- ◎ **Confirmation/rejection of equivalence mapping types**
- ◎ **Related issues**
- ◎ **Problems encountered in mapping terminologies**

# Data Analysis

在範圍上，本研究的分析工作可分兩個部分

- ◎ 第一部分目的是要識別TELDAP與AAT詞彙之間的等同關係之匹配類型。主要工作包括：
  - 確認TELDAP英譯詞彙
  - 判斷與確認此詞彙在AAT可能的等同概念之詞彙 (concept-based)
  - 賦予等同關係的匹配類型
- ◎ 第二部分，是觀察與判斷二個來源詞彙在TELDAP與AAT概念結構的異同性。

The data analysis can be divided into two parts

- ◎ Part 1, identify types of possible matches of terms between TELDAP and AAT, which includes :
  - Confirm English translation of the term in TELDAP
  - Identify types of possible matches (concept-based)
  - Confirm types of equivalence matches
- ◎ Part 2, identification of similar types of conceptual structures between TELDAP and AAT



# Preliminary Findings

## Frequencies of equivalence mapping types

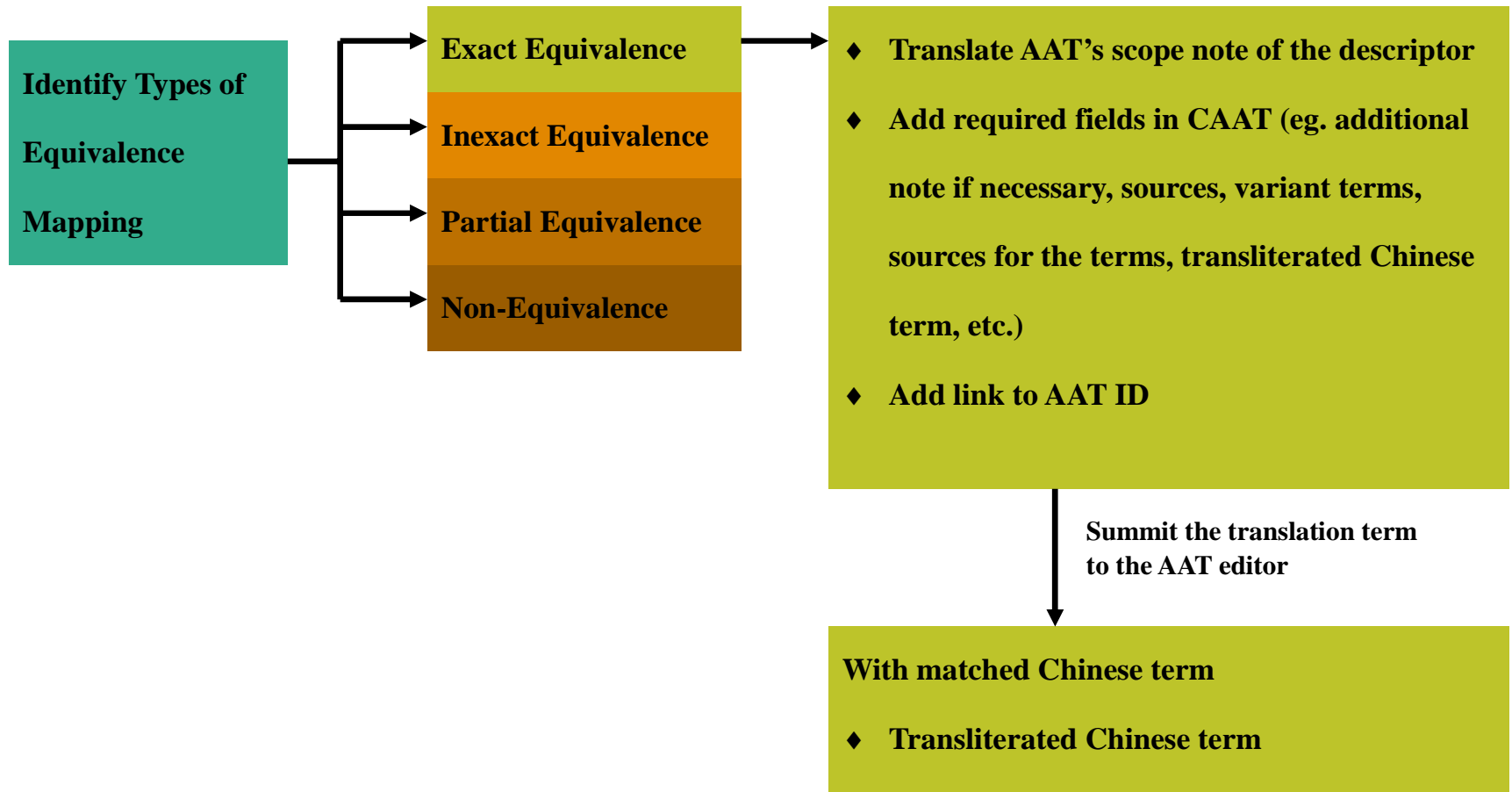
- **Exact Equivalence** (35 terms, 58%) has the highest match ratio
- followed by **Partial Equivalence** (18 terms, 30%) , Non-equivalence (6 terms, 10%), Inexact equivalence (1 term, 2%)

# Preliminary Findings

## Range of Equivalence

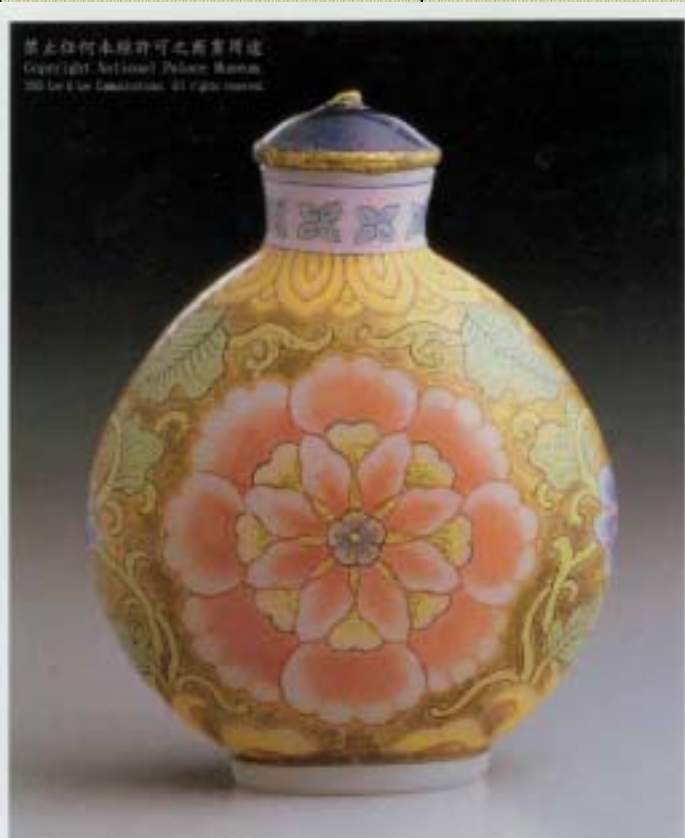
Match Type code	Definition	Sample	
		TELDAP's examples	AAT's examples
1-1	Exact Equivalence	仰韶文化	<b>Yangshao</b>
1-2	Exact Equivalence (cross ref.)	掐絲	<b>filigree enameling</b>
2-1	Inexact Equivalence	刻花	<b>bright cutting</b>
3-2	Partial Equivalence (species-genus relationship ...Subordination)	乳丁紋	<b>dots</b>
5-1	Non-equivalence (culture-dependent)	唐三彩	X
5-3	Non-equivalence (beyond scope)	彌勒佛	X

# From Equivalence Mapping to Translation: **Exact Equivalence**



# 陶瓷器 (chi.) = Ceramics (Eng.)

Mapping Type	example	
	TELDAP terms	AAT terms
Exact Equivalence	陶瓷器 (<類別)	<b>ceramics (objects)</b> (<object genres by material>, <object genres (Guide Term)>, Object Genres (Hierarchy Name))  ID: 300151343



作者不詳 (1736 A.D.-1795 A.D.) 。  
 [清 乾隆 玻璃胎琺瑯彩圖案花卉鼻煙壺] 。  
 《數位典藏聯合目錄》 。

<http://catalog.ndap.org.tw/?URN=835194>  
 (2009/02/20瀏覽) 。

# AAT Browsing


Art & Architecture Thesaurus Full Record Display (Getty Research) - Microsoft Internet Explorer

檔案(F) 編輯(E) 檢視(V) 我的最愛(A) 工具(T) 說明(H)

← 上一頁 · → 搜尋 · 我的最愛 · 15 已擱截 · 拼字檢查 · 傳送到


網址(D) http://www.getty.edu/vow/AATFullDisplay?find=300138008&logic=AND&note=&subjectid=300151343

Google 開始 書籤 15 已擱截 拼字檢查 傳送到

Click the  icon to view the hierarchy.

**ID: 300151343**

**Record Type:** [concept](#)

 **ceramics (objects)** (<object genres by material>, <object genres (Guide Term)>, Object Genres (Hierarchy Name))






**Note:** Refers in general to articles made of ceramic, which is any of various hard, brittle, heat-resistant and corrosion-resistant materials made by shaping and then firing a nonmetallic mineral, such as clay, at a high temperature.

#### Terms:


**ceramics (objects)** ([preferred](#), C,D,U,American English-P)  
**ceramic ware** (C,UF,U,American English)  
**keramics** (C,UF,U,American English)  
**cerámica** (C,D,U,Spanish-P)  
**Keramik** (C,D,U,German-P)

**Facet/Hierarchy Code:** [V.PE](#)

#### Hierarchical Position:

 [Objects Facet](#)  
 .... [Object Genres \(Hierarchy Name\)](#)  
 ..... [<object genres \(Guide Term\)>](#)  
 ..... [<object genres by material>](#)  
 ..... [ceramics \(objects\)](#)

#### Additional Parents:

 [Materials Facet](#)  
 .... [Materials](#)  
 ..... [materials](#)  
 ..... [<materials by composition>](#)  
 ..... [inorganic material](#)  
 ..... [<clay and clay products>](#)  
 ..... [<clay products>](#)

# CAAT-Management System

https://db1x.sinica.edu.tw/caat/main.php?\_session=GKnYjq3P7W94wy0 - Microsoft Internet Explorer

檔案(F) 編輯(E) 檢視(V) 我的最愛(A) 工具(T) 說明(H)

← 上一頁 · → · × · ↻ · 🏠 · 🔍 搜尋 · ⭐ 我的最愛 · 🌐 · 📧 · 🖨 · 📄 · 📁 · 👤

網址(1) https://db1x.sinica.edu.tw/caat/main.php?\_session=GKnYjq3P7W94wy0 移至

Google G · 開始 · 📁 書籤 · 📄 15 已開啟 · 🔄 拆字檢查 · 📧 傳送到 · ⚙ 設定

teldap.tw | 數位典藏與數位學習 國家型科技計畫  
Taiwan e-Learning & Digital Archives Program



藝術與建築索引典


- Subject management
- Associative relationships Type
- Source management
- Chinese Terms Management
  - 目前共有：582 筆Subject 資料，最後修改時間：2009-02-18 11:50:37
  - 目前共有：587 筆Term 資料
- Contributor management
- logout

# Ceramics in CAAT



網址(D) [https://db1x.sinica.edu.tw/caat/m\\_caat.php](https://db1x.sinica.edu.tw/caat/m_caat.php)

Google  開始  15 已擱載  拼字檢查  傳送到

 數位典藏與數位學習 國家型科技計畫  
Taiwan e-Learning & Digital Archives Program

## 藝術與建築索引典

[指引](#)

Subject ID:	<input type="text" value="300151343"/>	Parent Key:	<input type="text"/>	Merged:	<input type="text" value="v"/>
Facet Code:	<input type="text"/>	Record Type:	<input type="text" value="v"/>		
Image:	<input type="text"/>				
Legacy ID:	<input type="text"/>	Sort Order:	<input type="text"/>	Special Project:	<input type="text"/>
Note:	<input type="text"/>				

Terms Names

# Ceramics in CAAT

Subject ID:	300151343	Parent Key:	300190712	Merged:	Not Merged
Facet Code:	V,PE	Record Type:	Concept		
Image:					
Legacy ID:	151343	Sort Order:	1	Special Project:	CON,GCI

**Note:** Refers in general to articles made of ceramic, which is any of various hard, brittle, heat-resistant and corrosion-resistant materials made by shaping and then firing a nonmetallic mineral, such as clay, at a high temperature.

## Terms Names

P	H	T	V	Terms	Start Dt	End Dt
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
AAcr2 Flag	Display Date	Display Name	Historic flag	Qualifier	Dis Order	TermID

新增 重設 隱藏

Term	Contrib(s)	Preferred	Language	Preferred	Term Source ID	Page	Preferred
<input type="radio"/>	preferred	Current	Descriptor	Undetermined	ceramics	0 NA	NA
<input type="radio"/>	variant	Current	Used For Term	Undetermined	ceramic ware	0 NA	NA
<input type="radio"/>	variant	Current	Used For Term	Undetermined	keramics	0 NA	NA
<input type="radio"/>	variant	Current	Used For Term	Undetermined	ware, ceramic	0 NA	NA
<input type="radio"/>	variant	Current	Used For Term	Undetermined	cer\$00amica	0 NA	NA
<input type="radio"/>	variant	Current	Used For Term	Undetermined	Keramik	0 NA	NA

## Subject Contributors

Subject Contributor	Host Type									
<table border="1"> <thead> <tr> <th>序號</th> <th>Contributor</th> <th>Host Type</th> </tr> </thead> <tbody> <tr> <td><input type="radio"/> 1.</td> <td>Getty Vocabulary Program</td> <td>Descriptive note</td> </tr> <tr> <td><input type="radio"/> 2.</td> <td>Getty Vocabulary Program</td> <td>Subject</td> </tr> </tbody> </table>	序號	Contributor	Host Type	<input type="radio"/> 1.	Getty Vocabulary Program	Descriptive note	<input type="radio"/> 2.	Getty Vocabulary Program	Subject	
序號	Contributor	Host Type								
<input type="radio"/> 1.	Getty Vocabulary Program	Descriptive note								
<input type="radio"/> 2.	Getty Vocabulary Program	Subject								

新增 重設 隱藏

## Subject Source(s)

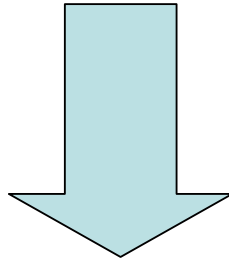
Subject Source(s)	Page	Host Type								
<table border="1"> <thead> <tr> <th>序號</th> <th>Source</th> <th>Page</th> <th>Host Type</th> </tr> </thead> <tbody> <tr> <td><input type="radio"/> 1.</td> <td>RILA, Subject Headings (1975-1990)</td> <td></td> <td>Porcelain; Pottery</td> </tr> </tbody> </table>	序號	Source	Page	Host Type	<input type="radio"/> 1.	RILA, Subject Headings (1975-1990)		Porcelain; Pottery		
序號	Source	Page	Host Type							
<input type="radio"/> 1.	RILA, Subject Headings (1975-1990)		Porcelain; Pottery							

新增 重設 隱藏

## Relationship



**Translation (English to Chinese)**



**Cataloging ceramics**



網址(D) [https://db1x.sinica.edu.tw/caat/m\\_caatc.php](https://db1x.sinica.edu.tw/caat/m_caatc.php)

Google  開始     15 已擱載  拼字檢查  傳送到

## 藝術與建築索引典

登入人員：菁汝

[指引](#)

cSubject ID:	<input type="text"/>	Parent Key:	<input type="text"/>	Merged:	<input type="text"/>
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Image:	<input type="text"/>				
Legacy ID:	<input type="text"/>	Sort Order:	<input type="text"/>	Special Project:	<input type="text"/>
Note:	<input type="text"/>				

### Terms Names

P	H	T	V	Terms	Start Dt	End Dt
<input type="text" value="preferred"/>	<input type="text" value="Current"/>	<input type="text" value="Descriptor"/>	<input type="text" value="Undetermined"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

# CAAT- Required Element

cSubject ID:	585	Parent Key:	181	Merged:	<input type="checkbox"/>
eSubject ID:	300151343	Facet Code:		Record Type:	Concept
Image:					
Legacy ID:		Sort Order:	0	Special Project:	
Note:	一般指由陶瓷製成之物件，陶質是指各種硬質、易碎、耐熱、耐腐蝕的材料，由非金屬礦物（如：黏土）經塑形、高溫焙燒而成。				

## Terms Names

P	H	T	V	Terms	Start Dt	End Dt
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
preferred	Current	Descriptor	Undetermined			
AACR2 Flag	Display Date	Display Name	Historic flag	Qualifier	Dis Order	eTermID
<input type="button" value="新增"/> <input type="button" value="重設"/> <input type="button" value="隱藏"/>						

序號	P	H	V	T	Terms	eTermID
1.	preferred	Current	Descriptor	Undetermined	陶瓷器 (物件)	

## 藝術與建築索引典

閱覽  修改  
共計 1 筆

Serial	cSubject ID	eSubject ID	Prefer Term	MerGed Stat	Parent Key	Record Type
1	585	300151343	陶瓷器 (物件)		181	C

再查詢



## 藝術與建築索引典

ID: 585

Record Type: Concept

### 陶瓷器 (物件)

**Note:**一般指由陶瓷製成之物件，陶質是指各種硬質、易碎、耐熱、耐腐蝕的材料，由非金屬礦物（如：黏土）經塑形、高溫焙燒而成。

#### Terms:

陶瓷器 (物件) (preferred, C,U,D,Traditional Chinese-P)

#### Facet/Hierarchy Code:

#### Hierarchical Position:

物件層面  
.....物件類別  
.....物件類別 (先導詞)  
.....依物質區分之物件類別  
.....陶瓷器 (物件)

#### Sources and Contributors:

**AAT Links: 300151343**

再查詢

條列



ID: 585  
**陶瓷器 (物件)**

**Note:**一般指由陶瓷製成之物件，  
由非金屬礦物（如：黏土）經整形

**Terms:**  
**陶瓷器 (物件)** (preferred, C,U,D,T)

**Facet/Hierarchy Code:**

- Hierarchical Position:**
- 物件層面
  - ....物件類別
  - .....物件類別 (先導詞)
  - .....依物質區分之物件類別
  - .....陶瓷器 (物件)

**Sources and Contributors:**

**AAT Links:** 300151343

Click the icon to view the hierarchy.

**ID: 300151343** Record Type

**ceramics (objects)** (<object genres by material>, <object genres (Guide Term)>, Object Genres (Name))

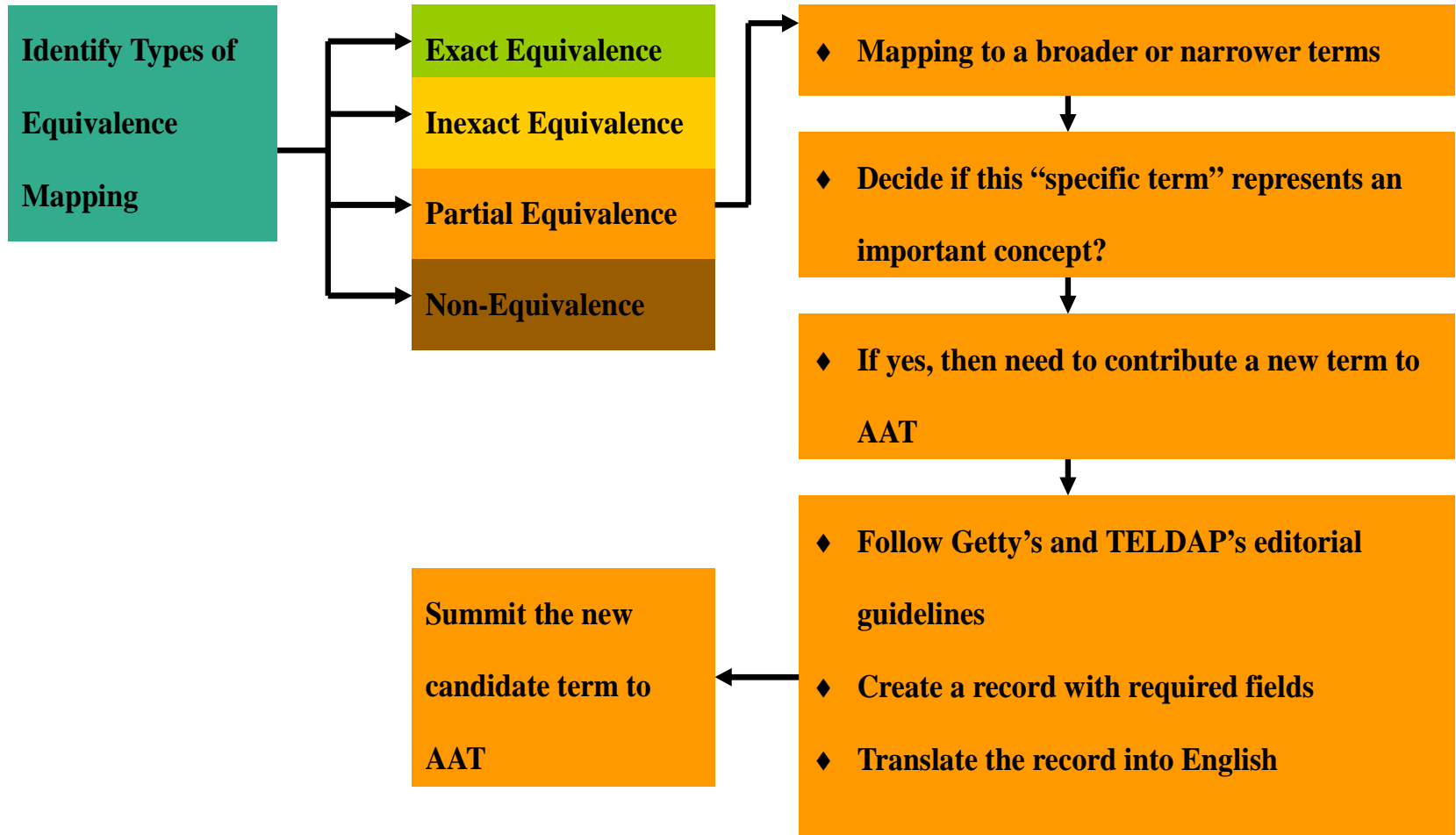
**Note:** Refers in general to articles made of ceramic, which is any of various hard, brittle, heat-resistant ; corrosion-resistant materials made by shaping and then firing a nonmetallic mineral, such as clay, at a high temperature.

- Terms:**
- ceramics (objects)** (preferred, C,D,U,American English-P)
  - ceramic ware** (C,UF,U,American English)
  - keramics** (C,UF,U,American English)
  - cerámica** (C,D,U,Spanish-P)
  - Keramik** (C,D,U,German-P)

**Facet/Hierarchy Code:** V.PE

- Hierarchical Position:**
- Objects Facet
  - .... Object Genres (Hierarchy Name)
  - ..... <object genres (Guide Term)>
  - ..... <object genres by material>
  - ..... ceramics (objects)

# From Equivalence Mapping to Translation: **Partial Equivalence**



# 雲雷紋(cloud-and-thunder pattern) < Chinese frets

Mapping Type	Example	
	TELDAP's term	AAT's term
Partial Equivalence (species-genus relationship ...Subordination)	雲雷紋(<雷紋<幾何 <紋飾)	Chinese frets (frets (patterns), geometric patterns, ... Design Elements)  <b>ID: 300010162</b>



作者不詳（青銅時代）。[遺物：白陶豆]。  
《數位典藏聯合目錄》。  
<http://catalog.ndap.org.tw/?URN=1844607>  
(2009/02/20瀏覽)。



作者不詳（清）  
[中文品名：雕漆桃形盤]  
《數位典藏聯合目錄》



National Digital Archive  
Program, Taiwan  
中華民國 數位典藏  
國家型科技計畫

作者不詳（1146 A.D.-）。[南宋紹興豆]。  
《數位典藏聯合目錄》



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Please Not Use Without Permission

作者不詳（1199 B.C.-900 B.C.）  
[商後期至西周早期 鉤連雲雷紋簋]。  
《數位典藏聯合目錄》



作者不詳（1644 A.D.-1911 A.D.）  
[清 白玉三足杯]。《數位典藏聯合目錄》



# Cloud-and-Thunder Pattern

## 雲雷紋

### CHINESE

Parent ID: C300010162

Record Type: 概念

雲雷紋 (中國式回紋, 回紋飾(圖案), ...設計原素)

**範圍註：**基本特征是以連續的「回」字形線條所構成。有的作圓形的連續構圖，單稱為「雲紋」；有的作方形的連續構圖，單稱為「雷紋」。雲雷紋常作為青銅器上紋飾的地紋，用以烘托主題紋飾。也有單獨出現在器物頸部或足部的。

**詞彙：**

雲雷紋 (**preferred**,C,D,U,繁體中文-P)

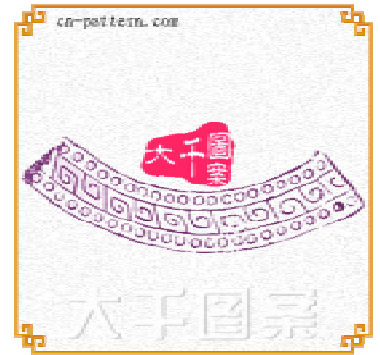
云雷纹 (**簡體中文**)

cloud-and-thunder pattern (**preferred**,C,D,U,American English-P)

yun lei wen (cloud-and-thunder pattern) (C,UF,U,**Chinese (transliterated Hanyu Pinyin)**-P)

yun lei wen (cloud-and-thunder pattern) (C,UF,U,**Chinese (transliterated Wade-Giles)**)

**Facet/Hierarchy Code:**



作者不詳 (1351 A.D.-1700 A.D.)。[明至清初 錯金銀雲紋犧尊]。《數位典藏聯合目錄》。  
<http://catalog.ndap.org.tw/?URN=1094540> (2009/02/20瀏覽)。

<b>Sources and Contributors:</b>	
雲雷紋(cloud-and-thunder pattern).....	[ <a href="#">TELDAP</a> ]
.....	故宮後設資料需求規格書 (2004) 22
.....	中國工藝美術辭典 (1995) 338
云雷纹 (cloud-and thunder pattern).....	[ <a href="#">TELDAP</a> ]
.....	大千傳統圖案網 (2000 - 2006) accessed 21 January 2009
cloud-and-thunder pattern.....	[ <a href="#">TELDAP</a> ]
.....	故宮雙語詞彙 (last update 2009-02-18) accessed 21 January 2009
yun lei wen (cloud-and-thunder pattern).....	[ <a href="#">TELDAP</a> ]
.....	漢語拼音
yun lei wen (cloud-and-thunder pattern).....	[ <a href="#">TELDAP</a> ]
.....	韋式拼音



作者不詳 (青銅時代) 。 [遺物：白陶豆] 。

《數位典藏聯合目錄》 。

<http://catalog.ndap.org.tw/?URN=1844607>

(2009/02/20瀏覽) 。

**Parent ID: 300010162**

**Record Type: Concept**

**cloud-and-thunder pattern** (Chinese frets, frets (patterns), ... Design Elements)

**Note:** Frets consisting of continuous, linear, geometrical patterns, mostly seen on Chinese ancient artifacts. Typically seen on bronze ware as decorative element to a theme, sometimes appeared solely on the neck or foot of an utensil.

**Terms:**

**cloud-and-thunder pattern** (preferred,C,D,U,American English-P)

**yun lei wen (cloud-and thunder pattern)** (C,UF,U,[Chinese \(transliterated Hanyu Pinyin\)-P](#))

**yun lei wen (cloud-and thunder pattern)** (C,UF,U,[Chinese \(transliterated Wade-Giles\)](#))

**雲雷紋 (cloud-and thunder pattern)** ([Chinese \(traditional\)](#))

**云雷纹 (cloud-and thunder pattern)** ([Chinese \(simplified\)](#))

**Facet/Hierarchy Code: D.DG**




<b>Sources and Contributors:</b>	
cloud-and-thunder pattern.....	[VP]
.....	National Palace Museum Bilingual Glossary
yun lei wen (cloud-and-thunder pattern).....	[VP]
.....	Hanyu Pinyin System
yun lei wen (cloud-and-thunder pattern).....	[VP]
.....	Wade-Giles System
雲雷紋(cloud-and-thunder pattern).....	[VP]
.....	故宮後設資料需求規格書 (2004) 22
.....	Dictionary of Chinese Craft Arts (1995) 338
云雷纹 (cloud-and thunder pattern).....	[VP]
.....	DaQian Chinese Pattern (2000 - 2006) accessed 21 January 2009



ID: 300010155

Record Type: [concept](#)

 **frets (patterns)** (geometric patterns, <patterns by specific type>, ... Design Elements)

**Note:** Patterns consisting of repeated, linear, geometrical shapes, usually angular, in a continuous band. For similar patterns not confined to a band, especially openwork, use "fretwork."

**Terms:**

**frets (patterns)** ([preferred](#),C,D,U,American English-P)

**fret (pattern)** (C,AD,U,American English)

**bands, fret** (C,UF,U,American English)

**fret bands** (C,UF,U,American English)

**labyrinth pattern (geometric pattern)** (C,UF,U,American English)

**pattern, labyrinth (geometric pattern)** (C,UF,U,American English)


**Facet/Hierarchy Code:** [D.DG](#)

**Hierarchical Position:**

 Physical Attributes Facet  
 .... Design Elements  
 ..... <design elements>  
 ..... [patterns \(design elements\)](#)  
 ..... [<patterns by specific type>](#)  
 ..... [geometric patterns](#)  
 ..... [frets \(patterns\)](#)

ID: 300010162

Record Type: [concept](#)

 **Chinese frets** (frets (patterns), geometric patterns, ... Design Elements)

**Note:** Frets characterized by elongated, right-angled meanderlike elements, originating in Chinese art and adapted to Chinoiserie in Europe in the 18th century.

**Terms:**

**Chinese frets** ([preferred](#),C,D,U,American English-P)

**Chinese fret** (C,AD,U,American English)

**frets, Chinese** (C,UF,U,American English)

**Facet/Hierarchy Code:** [D.DG](#)

**Hierarchical Position:**

 Physical Attributes Facet  
 .... Design Elements  
 ..... <design elements>  
 ..... patterns (design elements)  
 ..... <patterns by specific type>  
 ..... geometric patterns  
 ..... [frets \(patterns\)](#)  
 ..... Chinese frets

# Preliminary Findings

## Type 1 架構相似 Similar Structure

**Similar Structure, meaning the hierarchical logic of the KOS (TELDAP) is the same as the target KOS (AAT), with no structural Conflict. The conceptual structure of AAT is usually more defined Than TELDAP. By utilizing the method of modeling, partial AAT Conceptual structure can be transferred to TELDAP.**



# Preliminary Findings

## Type 1 架構相似 Similar Structure



◎ 以「人物」概念結構為例，本研究樣本TELDAP的兩個詞彙「后妃」及「彌勒佛」，分別屬於：

「人物 > 宮廷人物 > 后妃」及「人物 > 佛道人物 > 彌勒佛」層級結構

**Take the conceptual structure of “People” for example, “empresses” And “monks” can be categorized as follows :**

people (agents) > monarchs > empresses, and people (agents) > religious (people) > monks

◎ 在對照AAT概念結構，可以觀察到二者具有相似的結構，但在AAT的結構設計可以容納具更大的脈絡

**compared with AAT conceptual Structure, there is similarity between the two structures, but the structural design of AAT can include wider concepts**

# Preliminary Findings

## Type 1 架構相似 Similar Structure

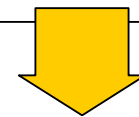


◎因此在「人物」到「宮廷人物 > 后妃」之間，存在更多層級的先導詞或詞彙，如： <人物，依據職務區分>、 <公部門的人物>，及「統治者」。

**between “people(agent)” and “monarchs > empresses”, there exists various guide terms or terms, Such as : <people by occupation>, <people in government and administration>, and rulers (people)**

◎因此可以發現，若以模仿方法（**modeling**）將AAT此部份架構移植到**TELDAP**，則需再為**TELDAP**補充相關層級的詞彙，如下所示：

**Therefore, modeling requires transference of partial AAT structure To TELDAP. More terms need to be added in TELDAP**



# Preliminary Findings

Type 1 架構相似  
Similar Structure



代理者層面 > 人物(層級) > 人物 > (人物，依據職務區分) > (公部門的人物) > 統治者 > 宮廷人物 > 后妃

Agents Facet > people > people (agents) > <people by occupation> > <people in government and administration> > rulers (people) > **monarchs** > **empresses**

**Agents Facet**代理者層面

.... **People**人物層級

..... **people (agents)** 人物

..... <**people by occupation**> <人物，依據職務區分>

..... <**people in government and administration**> <政府與管理的人物>

..... **rulers (people)** 統治者

..... **monarchs** 宮廷人物

..... **empresses** 后妃



# Preliminary Findings

## Type 1 架構相似 Similar Structure

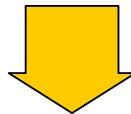
1

以「類別」概念架構為例，本研究樣本TELDAP的「類別」包括5種詞彙：

- ◎ 「銅器、金屬器」
- ◎ 「陶瓷器」
- ◎ 「玉石器」
- ◎ 「木竹漆器」
- ◎ 「琺瑯
- ◎ 「器與玻璃器」

**The conceptual structure of Classification in TELDAP includes 5 terms:**

- (1) copper and metal (object)
- (2) ceramics (object)
- (3) jade and stone (object)
- (4) wood, bamboo and lacquer (object)
- (5) enamel and glass (object)



# Preliminary Findings

## Type 1 架構相似 Similar Structure

2

對照至AAT概念結構，可以觀察到「物件層面」項下的「物件類型(層級)」具有相同的結構

**In AAT, it shares the same structure as Object Genre (hierarchy) under Object Facet**

3

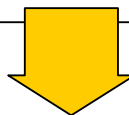
因此可以模仿方法（modeling）將AAT此部份架構移植到TELDAP。

**Based on the method of modeling, we transfer partial AAT structure to TELDAP**

但為建立兩個知識組織系統的等同關係，需分別再為TELDAP及AAT進行下述詞彙或結構方面的修訂：

**To establish mapping equivalence relationship between two KOSs, terms and structure revisions are required:**

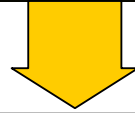
4



# Preliminary Findings

Type 1 架構相似  
Similar Structure

TELDAP方面的修訂  
TELDAP Adjustment



◎ **TELDAP**詞彙在此常以並列的名詞方式，出現複合詞(**compound term**)的情況，如：「銅器、金屬器」、「玉石器」、「木竹漆器」、「琺瑯器與玻璃器」。

**Terms in TELDAP usually appear as compound term, such as copper and metal; jade and stone (object); wood, bamboo and lacquer (object); enamel and glass (object)**

◎ 經過與**AAT**概念結構的對照分析，可以觀察到「銅器、金屬器」是彼此之間，是層級關係中的種－屬關係。換言之，「銅器」是「金屬器」的一種類型，其它如「銀器」、「鐵器」也是「金屬器」的類型；

**Through comparison and analysis with AAT conceptual structure, we conclude that copper and metal (object) is in fact a 種－屬關係 (?). Copper (object) is a type of metal (object), silver (object) and iron (object) are also types of metal.**

# Preliminary Findings

**Type 1 架構相似**  
Similar Structure

**TELDAP 方面的修訂**  
TELDAP Adjustment



◎ 基此，本研究建議可以為「銅器、金屬器」的複合概念，調整為「銅器」及「金屬器」兩個具有層級關係的概念；「玉石器」也是相同情況，可以調整為「玉器」、「石器」的層級關係（種—屬關係類型）。相同的原則；「木竹漆器」可以區分「木器」、「竹器」、「漆器」三個詞彙；「琺瑯器與玻璃器」則分為「琺瑯器」、「玻璃器」。

**Compound term, copper and metal (object), should be divided into copperwork and metalwork. The same rule also applied to jade and stone (object). Based on the same principles, wood, bamboo and lacquer (object) should be divided into 3 terms, woodwork, bamboo (object), and lacquerware. Enamel and glass (object) should be enamel (object) and glassware instead.**

# Preliminary Findings

Type 1 架構相似  
Similar Structure

AAT方面的修訂  
AAT Adjustment



◎部分TELDAP「類別」相關的詞彙尚未收錄在AAT此層面層級項下，如：「竹器」、「琺瑯器」。

**Some related terms in the Classification category of TELDAP are not included in AAT, such as bamboo (object), and enamel (object).**

◎「玉器」、「石器」則是另一種狀況，AAT在「物件類別」層級項下，雖然列出「石材」，但卻是被標示此處並非偏好父節點（**non-preferred parent**）。該子節點（**stone (rock) [N]**）的偏好父節點（**preferred parent**）是隸屬於「質材層面」。

**As for jade (object) and stone (object), the term stone (rock) is placed Under Object Facet in AAT, and marked as non-preferred parent. It's preferred parent is Material Facet.**



# Preliminary Findings

**Type 1 架構相似**  
Similar Structure

**AAT方面的修訂**  
AAT Adjustment



◎由於「玉器」在TELDAP藏品數量眾多，也是重要的典藏特色。因此研究者建議AAT可以在「物件類別」層級項下新增「玉器」詞彙。

**Due to the distinctness and a vast amount of archives of jade (object) in TELDAP, it is recommended that a new term, jade (object), be added under Object Facet in AAT.**

◎除此，「琺瑯器」及「竹器」也是應該納入AAT的新增詞彙範圍。如此，將可以讓AAT的「物件類別」層級納入東亞地區重要器物的類別。

**Enamel (object) and bamboo (object) should also be added. These terms will allow AAT to include important artifacts from the East Asia region into its database.**

# Preliminary Findings

## Type 1 架構相似 Similar Structure

物件層面 > 物件類型(層級) > (物件類型(先導詞)) > (物件類型依質材區分)

> 金屬器 > 銅器

**Objects Facet > Object Genres (Hierarchy Name) > <object genres (Guide Term)>**

**> <object genres by material> > metalwork > copperwork**

.... Objects Facet 物件層面

..... Object Genres (Hierarchy Name) 物件類型(層級)

..... <object genres (Guide Term)> <物件類型(先導詞)>

..... <object genres by material> <物件類型依質材區分>

..... ceramics (objects) 陶瓷器

..... glassware 玻璃器

..... lacquerware 漆器

..... metalwork 金屬器

..... copperwork 銅器

..... stone (rock) [N] 石材

..... <stone by quality> <石材依質地區分>.....玉

..... woodwork 木器

# Preliminary Findings

## Type 2 架構相似 Similar Structure

架構相似—但需再擴充或修訂目標詞彙的架構

**Similar Structure, but required further expansion or correction of the structure.**

**TELDAP**詞彙代表的概念常出現中國文化的獨特性，因此需在**AAT**現有的概念結構中，再更深入往下層延伸細部結構、或往寬廣的層級新增整套概念結構。

**The concepts of the terms in TELDAP usually convey a uniqueness only known in Chinese culture, therefore we need to develop a more intricate structure.**

具中國文化獨特性或表達性概念的詞彙，包括：「窯系」、「考古文化」、「全器形制」、「書體」及「紋飾」等概念結構。

**These unique concepts include : 窯系(Chinese ceramics styles), 考古文化, 全器形制, 書體(script), 紋飾**

# Preliminary Findings

Type 2 架構相似  
Similar Structure



clerical script (隸書, lishu)



seal script (篆書)



semi-cursive script (行草書)



regular script (楷書, Kaishu)



bird-and-insect script (鳥蟲書)

# Preliminary Findings

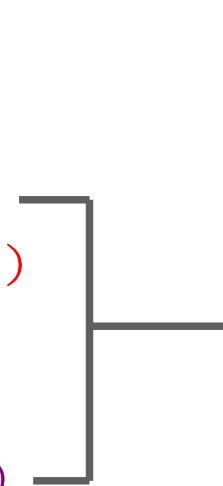
## Type 2 架構相似 Similar Structure

### .... Objects Facet

- ..... Components (Hierarchy Name)
- ..... components (objects)
- ..... <components by specific context>
- ..... <information form components>
- ..... <script and type forms>
- ..... **scripts (writing)**
- ..... <scripts by form>
- ..... **<Arabic scripts>** 阿拉伯書體
- ..... **<Chinese scripts>** (中文書體)
- ..... **bird-and-insect script** (鳥蟲書)
- ..... **clerical script** (隸書, **lishu**)
- ..... **regular script** (楷書, **kaishu**)
- ..... **seal script** (篆書)
- ..... **semi-cursive script** (行草書)

### **Suggest:**

Create a set of new  
guide term and  
candidate terms



# Preliminary Findings

## Type 3 架構不相似 Dissimilar Structure

所謂「架構不相似」，在本研究是則表示TELDAP詞彙呈現的概念結構與AAT表現的概念結構之分類邏輯不相同，但TELDAP詞彙可以完全等同或部分等同地對照到AAT詞彙。如：釉色

**Dissimilar Structure, the conceptual structure of the term in TELDAP is different from AAT, but the term can either be exactly matched or partially matched to the term in AAT, for example: glaze**

## Type 4 架構缺乏 Lack of Structure

「架構缺乏」，則是指TELDAP詞彙呈現的概念結構無法在AAT發現相似結構，相關詞彙也無法於AAT對照到任何等同關係的詞彙。如：局部形制

**Lack of Structure (no structure), neither similar conceptual structure nor related term can be found in AAT**

# Lesson Learned

- Team building
- Training
- Coordination
- Methodology
- Follow AAT's guidance and establish close communication with AAT's editor team
- Set milestone
- sustainable development

**Sophy Shu-Jiun Chen**  
**[sophy@sinica.edu.tw](mailto:sophy@sinica.edu.tw)**

**Special Thanks to the following people  
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鍾豐謙 · 曾偉綾 · 龔裕晴 · 周永怡  
吳岱晏 · 林慧菁 · 王怡心 · 劉靜頻  
Patricia Harpring