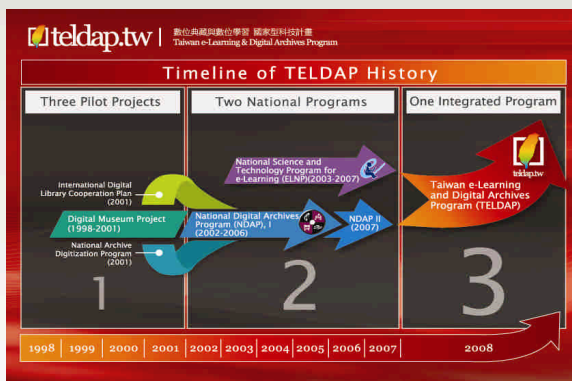# Approaches to Multilingual Access in Digital Libraries: The Case of TELDAP

Hsueh-Hua Chen & Shu-Jiun Chen

Taiwan E-Learning and Digital Archives Program (TELDAP)
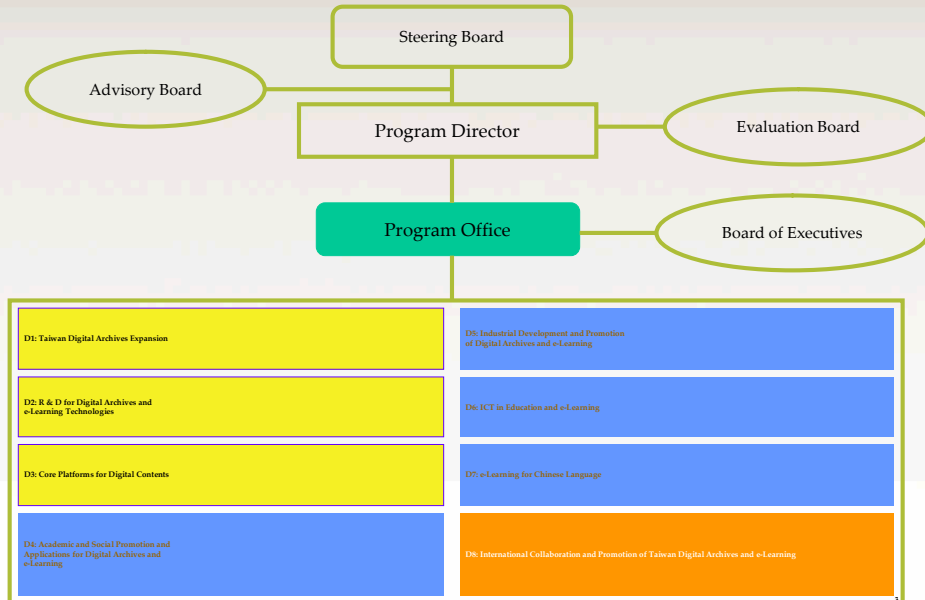
DC 2008 Berlin
2008.09.25

TELDAP

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

Timeline of TELDAP History

Three Pilot Projects | Two National Programs | One Integrated Program

International Digital Library Cooperation Plan (2001)
Digital Museum Project (1998-2001)
National Archive Digitization Program (2001)

National Science and Technology Program for e-Learning (ELNP)(2003-2007)
National Digital Archives Program (NDAP), I (2002-2006)
NDAP II (2007)

Taiwan e-Learning and Digital Archives Program (TELDAP)

1 2 3

1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008

- Develop digital archives and **e-Learning related industries**
- Expand the applications of **e-Learning** to **school and life-long education**
- Establish Taiwan as a **global e-Learning center** for Chinese language
- Promote international cooperative network of Chinese cultural heritage and e-Learning

- **Showcase** Taiwan's biological, cultural and social **diversity**
- Stimulate **cultural**, **academic**, **socio-economic** and **educational** values derived from Taiwan Digital Archives (TDA)

2

Organization Chart

```
                          Steering Board

   Advisory Board

                          Program Director          Evaluation Board

                          Program Office            Board of Executives
```

D1: Taiwan Digital Archives Expansion	D5: Industrial Development and Promotion of Digital Archives and e-Learning
D2: R & D for Digital Archives and e-Learning Technologies	D6: ICT in Education and e-Learning
D3: Core Platforms for Digital Contents	D7: e-Learning for Chinese Language
D4: Academic and Social Promotion and Applications for Digital Archives and e-Learning	D8: International Collaboration and Promotion of Taiwan Digital Archives and e-Learning

---

International Collaboration and Promotion of Taiwan e-Learning and Digital Archives Project

- Aiming to broaden global access to Taiwan digital archives and to enhance international cooperation, working on
  1. **Multilingual Development of Taiwan Digital Archives**
  2. Portal Service, Digital Taiwan – Culture & Nature
  3. International Digital Content Integration and Cooperation

Multilingual Development of Taiwan Digital Archives-- Strategies

- Multilingual Collection Focus
- Multilingual Catalogue Focus
- Multilingual Vocabularies Focus

5

Multilingual Development of Taiwan Digital Archives-- **Tasks**

1. Translate the archives
   - Inventorying the collections, items and resources in the TELDAP (more than 200 collections, 2 million items and 400 websites)
   - Translating selected contents into different languages for TELDAP (English, Japanese, and Spanish)
2. Implementation of the Multilingual Catalogue for TELDAP
   - Identifying collection level description and item level metadata schema (2007-2008)
   - Piloting prototype of multilingual catalogue (2008-2009)
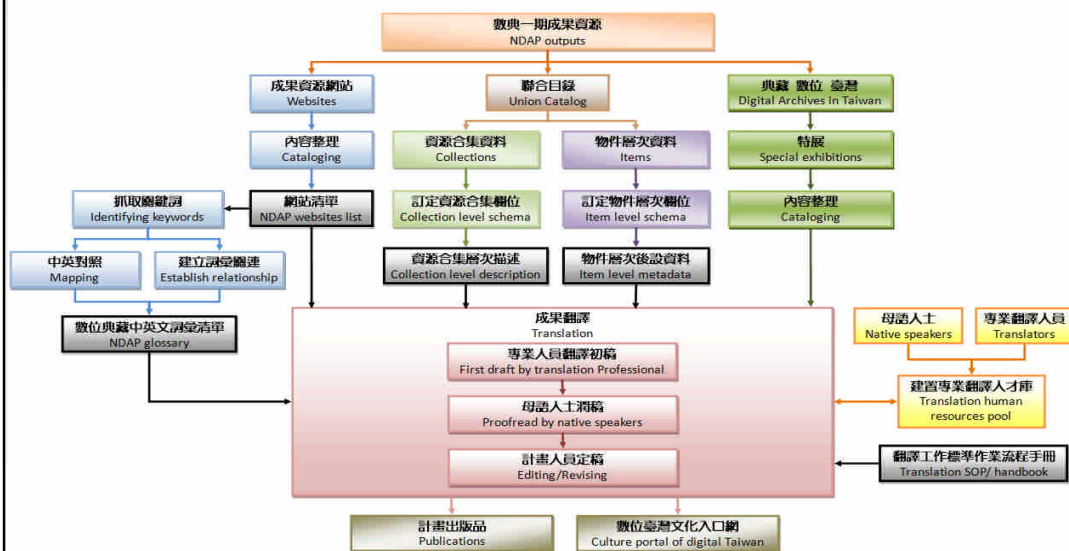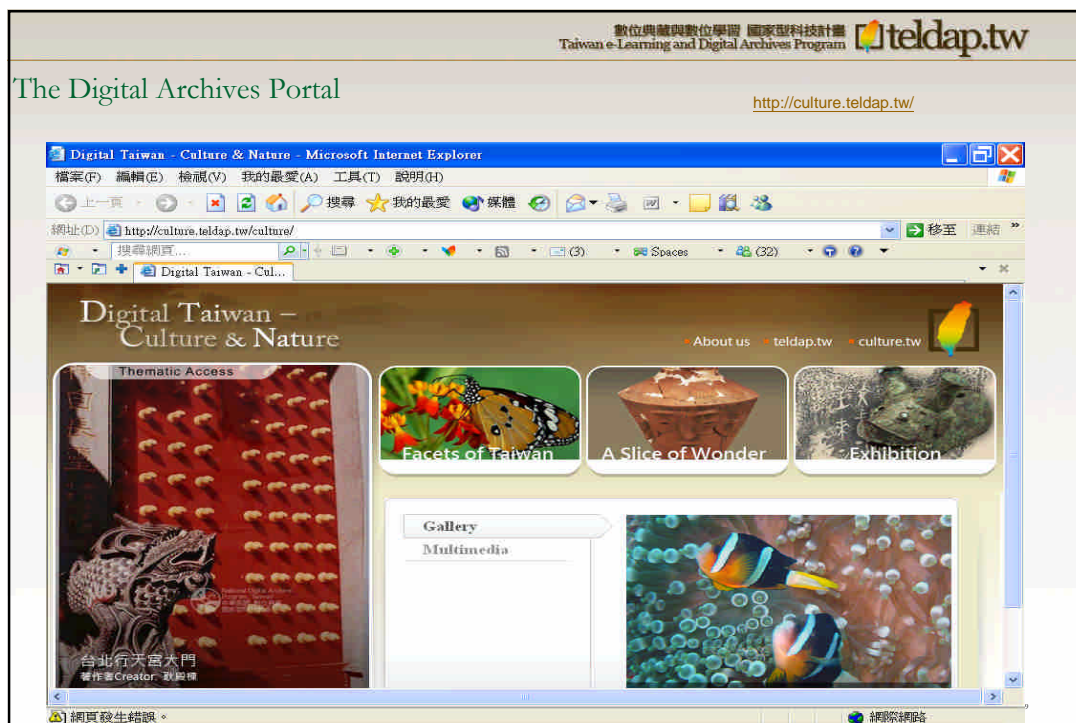   - Creating user-friendly multilingual catalogue applications (2010-2012)

6

3

Multilingual Development of Taiwan Digital Archives-- **Tasks**

3. Develop Multilingual Vocabularies for TELDAP
- Building TELDAP Chinese-English Term List (2008)
- Developing the Multilingual Thesaurus
  - Feasibility study for a Chinese-language Art and Architecture Thesaurus (AAT) (2008)
  - AAT in Chinese Project (2009~2012)

4. Identifying and developing multilingual content development related frameworks, methodologies, SOPs and Good Practices
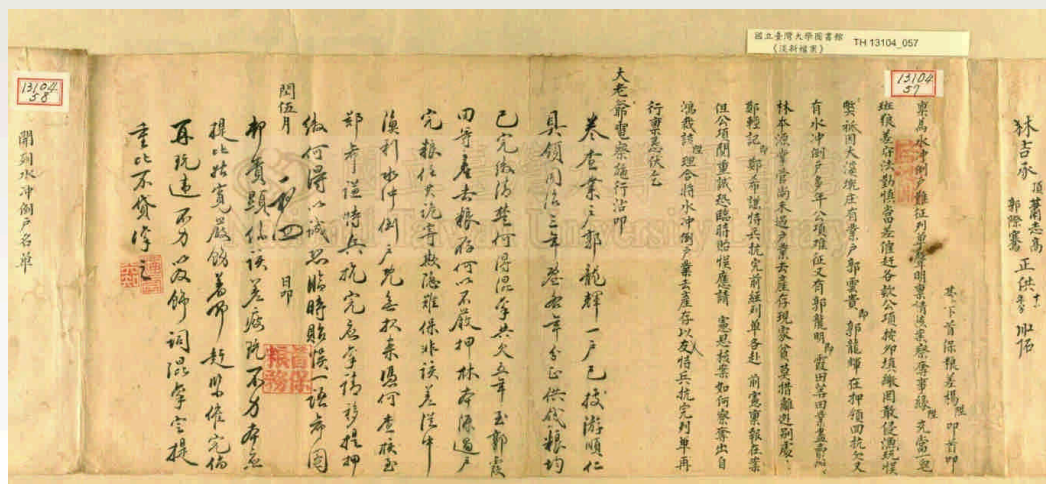
7

The Framework

4

The Digital Archives Portal

http://culture.teldap.tw/

Nature		Literature	
Zoology		Rare Books	
Geology		Archives	
Botany		Stone & Bronze Rubbings	
Media		Chinese Manuscripts	
Multimedia		Buildings & Maps	
Journalism		Architecture	

TELDAP Collection Description Element Set

TELDAP Collection Description Element Set

- Based on the following:
  - *Dublin Core Collections Application Profile* of Dublin Core Metadata Initiative（DCCAP）
  - *Collection Description Schema* of the Research Support Libraries Programme（RSLP）
  - *Simple Collection Description* of eLib Collection Description Working Group
- The Guidelines
  - The Manuals of TELDAP Collection Description Element Set

TELDAP Collection Description Element Set (20 Elements)

- Title
- Subject
- Description
- Owner
- Publisher
- Date—Digital,
  —Physical
- Language
- Coverage—Temporal,
  —Spatial

- Sub-Collection
- Super-Collection
- Associated Collection
- Type
- Identifier
- Access Times
- Location
- Admin
- Rights
- Access Policy
- Notes
- Sponsor

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Tan-Hsin Archive (National Taiwan University)

14

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Title	Tan-Hsin Archive (National Taiwan University)
Subject	Archives
Description	The Tan-Hsin Archive is a collection of administrative and judicial documents from Hsin-chu Hsien, Tamsui Ting, and Taipei Fu dating from 1776 to 1895. This archive contains nearly 20,000 documents. The largest section is administrative and most of the documents are dated between 1875 and 1895. During the Japanese occupation of Taiwan, this collection was preserved by the Hsin-chu district court and later by the faculty of Literature and Politics at Taihoku Imperial University (now National Taiwan University). After World War II, the collection was transferred to the College of Law, National Taiwan University, where Professor Yen-hui Dai of the Department of Law took charge of them. Professor Dai reclassified the archive according to a special classification scheme with three major sections: administrative, civil, and criminal. In 1986 Professor Dai transferred the original documents and 33 microfilms to the Department of Special Collections in the University Library. The Tan-hsin Archive is the most sizable and complete collection of government documents from Taiwan dating from the Qing Dynasty and it is also covers the longest time span. The archive is invaluable for the study of Taiwan history because of its plethora of materials related to government, economics, society, and agriculture during the Qing Dynasty. For the study of Chinese history it is also a world-renowned archive that provides important information about the Chinese judicial system.
Owner	National Taiwan University Library
Publisher	National Taiwan University Library
Date—Digital	2002
Date—Physical	1953
Language	Chinese
Coverage—Temporal	1895
Coverage—Spatial	Tanshui Ting; Taipei Prefecture; Hsinchu County

Sub-Collection	
Super-Collection	Taiwan's archives and cultural relics; documents; files of Taiwan
Associated Collection	Historical Records of Taiwan（Institute of Taiwan History, Academia Sinica）； Book Collections on Taiwan under Japanese Rule, 1895-1945（Institute of Taiwan History, Academia Sinica）； Archives of the Taiwanese Government under Japanese Rule（Taiwan Historica）； Archives of the Taiwanese Administrative Offices at the Beginning of the Postwar（Taiwan Historica）
Type	Text
Identifier	http://140.112.113.4/project/database1/index.htm
AccessTimes	Mon-Fri　08:20-21:00 Sat　08:20-17:00 Sun　08:20-12:00
Location	Special Collections Division, National Taiwan University
Admin	National Taiwan University Library
	http://www.lib.ntu.edu.tw/
Rights	http://140.112.113.4/project/copyright.asp
AccessPolicy	All the digitized products in National Taiwan University Digital Archives Database can be categorized into three levels： 1. Archival Level：Delicate and high-definition digitized product. To protect the interests of the nation, these files are not to be accessed by the general public. 2. Commerce Level：These files are sold at reasonable prices to the public to create value-added industries for all circles. 3. Public Information Level：Free and accessible to the general public. Regulations concerning the digital right management and price charge are being drafted.
Notes	Only microfiche and microfilm are accessible.
Sponsor	NDAP

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Taiwan e-Learning and Digital Archives Program, TELDAP

Heritage Nature Buildings & Maps Media Literature Arts

Thematic Access

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- Nature
- Heritage
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- Media

Calendar
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27 28 29 30 1 2 3
4 5 6 7 8 9 10

The Culinary Ware Art of Taiwanese Aborigines – Ceramic Containers and Cooking Utensils

Ceramics are used for different functions in Aboriginal lives. Among these, the most common and significant functions of all are as tools for food preservation and production. Examples of such containers include ceramic water jars and ceramic bowls for rice or soup, commonly seen in the "Amis and Tao (Yami) Tribe, and ceramic steamers and ceramic pots used to steam rice in "Amis and northern Pingpu Tribes...

Read more

When Historical Heritage Meets Advanced Digital Technology...

Facets of Taiwan

Item-Level feature

The Culinary Ware Art of Taiwanese Aborigines – Ceramic Containers and Cooking Utensils

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Read more...

NEWS
- The annual meeting of the Museum Computer Network (MCN) Taiwan
- The new Taiwan e-Learning and Digital Archives Program
- NDAP International Conference

Translated from the 'Selected Collections' in the Union Catalog

台灣原住民的食器藝術——陶製容器及飲食調理工具

陶器在原住民生活中有著不同的功能，其中最普遍且最重要的，就是當作貯存食物的容器以及用來調理各種食物的飲食調理用品，譬如阿美族及達美（達悟）族常見的收水貯器、盛飯就就的瓶碗，或是阿美族等北中地飪群用來炊煮...

culture.ndap.org.tw

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Taiwan e-Learning and Digital Archives Program, TELDAP

Nature Buildings & Maps Media Literature Arts Heritage

Selected Collections…
Item level Metadata

Thematic Access

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- Nature
- Heritage
- Literature
- Arts
- Buildings & Maps
- Media

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Endemic Plants
NDAP
National Flag

home_new » SHOWCASES » Facets of Taiwan
The Clothing of Taiwan Aborigines – Men and Women's Clothes

The clothing of Taiwan's aborigines represents the prominent features... ideas and beliefs with vivid colors and diverse styles. Every aborigina... and characteristics. Creatively, Paiwan, Rukai and Bunun peoples us... their lively and varied designs. Amis, Tsou, Saisiya, and Atayal peop... to express their reverence and love for nature and the Yami (Tao) p... aboriginal tribe to weave cloth using palm fiber. For textile producti... cloth system. This means they used a horizontal loom with a strap... and then sewed pieces of cloth together to make an integrated garm... pendants are used by all the indigenous peoples in Taiwan to make... lazurite beads and so forth are added not only for decoration, but a... The clothing carries a traditional aesthetic meaning. All the colors, p... property and social significance. Trade with the Han had an overwhe... indigenous peoples. The materials and styles have gradually change... most clothing was made of linen. Later, imported cotton cloth and p...

Recently, chemical fibers have been replacing the original textile. Clo... pieces have changed into light and convenient suits. All these chang... time and environmental constrictions. However, the clothing of Taiw... the influences of Han culture and modernization. Thanks to excellen... customs, traditional clothing can be passed on to the next generati... certain festivities or ceremonies, aboriginal people fully express thei... their traditional clothing.

Former name : Men's top
English name : Male sleeve Jacket
Rukai name : IBIBOGO
- Theme and keyword : Tribe : Rukai Tribe
- Description : Application : Daily menswear. Content Description: Rukai menswear is similar to female garments. All the patterns and weaves are alike. Only the sewing style alters between the sexes. Men's trousers can be categorized into open-seat pants and culottes, which usually were worn with long-sleeved tops.
- Information identification : Inventory Number : 3561

Former name : Women's top
- Theme and keyword : Tribe : Rukai Tribe
- Description : Application : Daily female garment
- Information identification : Inventory Number : 3569

Former name : Women's top
English name : Female Garment
Rukai name : DALABU
- Theme and keyword : Tribe : Rukai Tribe
- Description : Application : Daily female garment. Content Description: Rukai female garments are more exquisite than menswear. Those wearing a whole suit were considered elegant and graceful. Figures, lilies, Hundred-pace Snakes, and pottery pots are the themes of tokens woven on clothes. Tokens are woven according to owner's status and position. Garments of married, single, and elderly women are slightly different. Generally speaking, single women's clothing is more colorful and intricate. The color of middle-aged women's clothing is comparatively plain, and elderly women wore mostly black or blue.

相關藏品
Related collections

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La indumentaria de los aborígenes de Taiwán – Vestimenta de hombres y mujeres

La vestimenta de los aborígenes de Taiwán representa los rasgos prominentes de cada tribu. Simboliza ideas culturales y creencias con colores vivos y diversos estilos. Cada tribu aborigen tiene su estilo indumentario característico. Los Paiwan, Rukai y Bunun usan ropas de tela azul oscuro o negro, para resaltar sus diseños vivos y variados. Los Amis, Tsou, Saisiya y Atayal prefieren los colores rojo fuerte y azul celeste para expresar su reverencia y amor hacia la naturaleza. Los Yami (Tao) que viven en la isla Lanyu son la única tribu aborigen que teje ropa usando fibra de palmera. Para la producción textil, todos los grupos aborígenes usaban un sistema de ropa rectangular. Esto significa que usaban un telar horizontal con tirantes para tejer exquisitas y hermosas telas, y luego las cosían uniendo piezas de tela hasta confeccionar la prenda entera. Todos los aborígenes de Taiwán usan una cantidad considerable de colgantes para confeccionar ropas atractivas. Conchas de mar, botones, abalorios de lazulita, etc., son añadidos no sólo para decorar, sino también como símbolo de posición social y riqueza. La vestimenta lleva un significado estético tradicional. Todos los colores, estampados y diseños expresan propiedades artísticas y poseen un significado social. La transacción con los de Han tuvo un efecto arrollador en la indumentaria de los indígenas taiwaneses. Las telas y los estilos han cambiado gradualmente. Antes del perío[...]eran de lino. Más tarde, fueron usadas de forma muy exter[...]impreso. Recientemente, fibras sintéticas han ido reemplazando[...]tradicionalmente piezas separadas se han cambiado por trajes[...]cambios surgieron a raíz de la adaptación a la época y al medi[...]los aborígenes de Taiwán no perdió por las influencias de la [...]excelente preservación de las festividades y costumbres, la ves[...]a la generación siguiente, manifestando un nuevo significado c[...]los aborígenes siguen usando su vestimenta tradicional, expresa[...]

Colecciones relacionadas con la indumentaria de los aborígenes[...]

西文版相關藏品
Related collections—Spanish version(this version is currently under construction)

數位典藏與數位學習 國家型科技計畫
Digital Archives Program **teldap.tw**

Selected Collections…
Item level Metadata

西文版簡介
Introduction—Spanish version
(this version is currently under construction)

Nombre primigenio: Chaqueta de hombre
Nombre en chino：男子長袖短上衣
Nombre en inglés: Male sleeve Jacket
Nombre Rukai: IBIBOGO
- Tema y palabra clave: Tribu: Rukai
- Descripción: Aplicación: Ropa diaria para hombre. Descripción de contenido: La ropa para hombre de los Rukai es similar a la prenda de vestir de la mujer. Los estampados y tejidos son parecidos. Solamente varía el tipo de costura entre ambos sexos. Los pantalones de hombres pueden clasificarse en pantalones de fondillos abiertos y culottes, los cuales eran combinados generalmente con chaquetas de manga larga.
- Data ID: Número de catálogo: 3561

1/99

Nombre primigenio: Blusa de mujer
- Tema y palabra clave: Tribu: Rukai
- Descripción: Aplicación: Prenda de vestir diaria para mujeres.
- Data ID: Número de catálogo: 3569

7/99

Nombre primigenio: Blusa de mujer
Nombre en chino：女子長衣
Nombre en inglés: Female Garment
Nombre Rukai : DALABU
- Tema y palabra clave : Tribu : Rukai

---

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

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Landscapes at Home and Abroad

Like a kaleidoscope containing beautiful images, the world, abundant in attractive landscapes, has inspired numerous paintings of natural and artificial scenery throughout history. As time changes, so does the scene in artistic masterpieces. In this collection, the kaleidoscopic world depicted

內容發展分項計畫 書畫主題小組
Collection of Landscapes at Home and Abroad

The Bank of the Danshui River, 1950
This painting, with gold as the dominant hue, is characterized by the chan and the reflection on the water. Rusty leves and red fishing boats set off the center of the picture a long bridge stretches across the river, painted the scenery is the subject of this work, the overall effect is quite different they seldom use white paint and the foreground coloration differs from im seen when Claude Monet's "Impression, Sunrise" is compared with this pa instant atmosphere and light, is image, whereas the latter, painted by Lee British artist Joseph Turner.

西文版特展介紹與相關藏品
Introduction and Related collections—Spanish version version(this version is currently under construction)

Selected Collections…
Item level Metadata

Paisajes nacionales y del exterior

El mundo, semejante a un caleidoscopio, que abunda en paisajes atractivos, ha inspirado a lo largo de la historia numerosas pinturas de paisajes naturales y artificiales. Las escenas artísticas en las obras maestras cambian con el paso del tiempo. En esta ocasión se exhibe el mundo caleidoscópico representado por pintores.

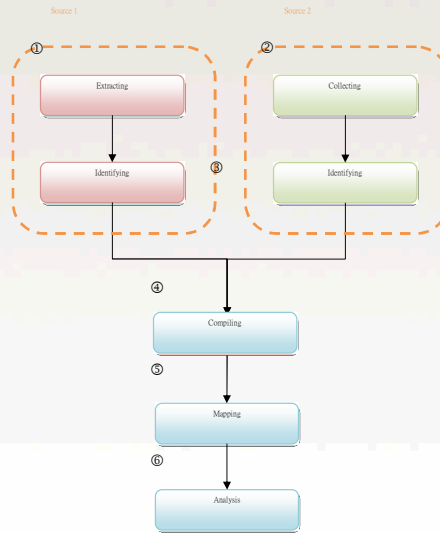Colección de paisajes dentro y fuera del país

La orilla del Río Danshui, 1950
- Tema y palabras claves: Paisaje, barca, Río Danshui
- Explicación descriptiva: Esta pintura que toma el dorado como el color dominante, se caracteriza por el cambio de los matices de color en las nubes y en el reflejo sobre el agua. Muelles rojizos y botes rojos realzan el resplandor del color dorado. En el centro de la pintura, un puente largo se extiende de un lado al otro del río, pintado con pincelada estable. Si bien el paisaje es el tema de este cuadro, el efecto total es diferente a las pinturas impresionistas, porque éstas raramente usan pintura blanca y la coloración del primer plano difiere de la figura. La diferencia puede notarse cuando se compara "Impresión, Amanecer" de Claude Monet con esta pintura. En la primera, la figura captura el medio ambiente y la luz del instante, mientras que la última, pintada por Lee, se parece a las obras del artista británico Joseph Turner.
- Número de catálogo:

1/95

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

Procedures of building TELDAP Chinese-English Term List

1. Extracting terms form NDAP existed term list (8038 terms)
2. Collecting terms from TELDAP Digital Resources (49000 terms)
3. Identify Chinese term list
4. Mapping English terms with authority references (25000 terms)
5. Compiling TELDAP Chinese-English term list
6. Analysis of Term List

Source 1

Source 2

① Extracting

② Collecting

③ Identifying

Identifying

④ Compiling

⑤ Mapping

⑥ Analysis

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

Building TELDAP Chinese-English Term List

Step1：Extract

中英文常用詞彙
查詢系統

請輸入詞彙查詢(中英文皆可)： [　　　　　] 查詢
請選取主題分類進行瀏覽： [　　　] 查詢

建議新詞彙 ｜ 友站連結

說明：本詞彙查詢系統收集許多與數位典藏領域相關中英文詞彙。
並以網路資料庫的方式提供使用者簡易、快捷、而實用之詞彙查詢服務。
《目前已經收集到詞彙共有一萬多筆》

- Total 10,251 te

NDAP Chinese-English Vocabulary Searching System
http://www.ndap.org.tw/~online_dic/index.php

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Building TELDAP Chinese-English Term List

Step2：Collecting terms from TELDAP Digital Resources

- Inventory all digital resources TELDAP has produced
- including project websites, databases and other resources
- 415 websites in total to be checked
- Manually collecting terms by two working groups
  - One finished 209 websites, the other finished 206 websites
  - Cross-checking each group's findings

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Building TELDAP Chinese-English Term List

Step3：Identify Chinese term list

- Choice of terms：
  - Single concept單一概念詞
  - Nouns名詞(language difference)
  - Neutral中性詞
  - Subjectivity自稱詞
  - Warrant 優選詞
- 49,176 terms were identified

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Building TELDAP Chinese-English Term List

Step4：Mapping terms with authority references
- 57,211 terms (composed of two sources) for mapping into English
- Manually found those terms in English from authority resources:
  - Printed reference books from libraries
  - Web-based resources such as Britannica Concise Encyclopedia、中國大百科全書、學術名詞資訊網、臺灣文學辭典、辭書資訊網、台灣簡明百科、台灣大百科全書、佛門辭典、榮陽數位化醫學辭典、內政部線上地名譯寫系統、行政院研考會雙語詞彙資料庫、陸委會中英譯詞彙對照手冊、國家圖書館拼音查詢系統等。
- Worked and cross-checked by two groups
- 25,750 terms return with Chinese-English
- Less than 50% entries (address later)

Building TELDAP Chinese-English Term List

Step5 ：Compiling TELDAP Chinese-English term list
- Worked and cross-checked by two groups
- 25,750 Chinese-English terms returned

Step6：Analysis of Term List
- Organizing terms to decide
  - Preferred terms , and
  - Synonyms
- English and Chinese both
- Used in most sources as preferred term

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

TELDAP－Getty AAT Multilingual Research Projects (2008-2012)

- Getty Vocabulary Program, Getty Research Institute
  - producing and maintaining different vocabulary sets
    The Art & Architecture Thesaurus (AAT)R

    The Union List of Artist Names (ULAN)R

    The Getty Thesaurus of Geographic Names

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

TELDAP－Getty AAT Multilingual Research Projects (2008-2012)

- The Art & Architecture Thesaurus R (AAT) is structured vocabularies that can be used to improve access to information about art, architecture, and material culture.
- The primary users of the Getty vocabularies include museums, art libraries, archives, visual resource collection catalogers, bibliographic projects concerned with art, researchers in art and art history, and the information specialists who are dealing with the needs of these users.
- The AAT is a thesaurus in compliance with ISO and NISO standards.
- The focus of each AAT record is a concept. Currently here are around 34,000 concepts in the AAT.

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The Structure of AAT: *Facets and Hierarchies*

Each facet contains a homogeneous group of concepts, the members of which share characteristics that distinguish them from members of other classes. The hierarchies in the AAT are homogeneous groupings of terminology, which fall under one of the seven facets.

- **ASSOCIATED CONCEPTS FACET**
  - Associated Concepts

- **PHYSICAL ATTRIBUTES FACET**
  - Attributed and Properties
  - Conditions and Effects
  - Design Elements
  - Color

- **STYLES AND PERIODS FACET**
  - Styles and Periods

- **AGENTS FACET**
  - People
  - Organizations
  - Living Organisms

- **ACTIVITIES FACET**
  - Disciplines
  - Functions
  - Events
  - Physical and Mental Activities
  - Processes and Techniques

- **MATERIALS FACET**
  - Materials

- **OBJECTS FACET**
  - Object Groupings and Systems
  - Object Genres
  - Components
  - Built Environment
  - Furnishings and Equipment
  - Visual and Verbal Communication

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TELDAP－Getty AAT Multilingual Research Projects (2008-2012)

- Getty-AAT (Art & Architecture Thesaurus)
  - Seek AAT Chinese Translation Collaboration
  - Different languages of AAT have been established: French, Spanish, Dutch. German translation project is coming late of 2008
- The TELDAP
  - By creating bilingual versions of data standards tools like the AAT, TELDAP seeks to enhance online access to its digital collections for both English-language and Chinese-language users.
  - Although there are some challenges from the TELDAP side, for instance, multi-schema and vocabulary sets, different metadata qualities, different view points of documentation…etc.
- The Collaboration Project will focus:
  - 1/10 of TELDAP Collection (200,000 Records) are about art, architecture and material culture

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Visiting
the Getty Research Institute, 12~20 July 2008

- A week-long visit to the Getty Research Institute in Los Angeles 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
  - The Getty Vocabularies: programmatic, structural, and content overview（by GETTY / Patricia Harpring）
  - AAT Overview and Design Principles （by GETTY/ Patricia Harpring, Joan Cobb）
  - Issues and challenges in multilingual equivalency work; lessons learned on the Spanish AAT translation project（by GETTY / Murtha Baca）
  - Overview of TELDAP Programs and Aactivities（by TELDAP / D.T. Lee）
  - The NDAP Union Catalogue and the use of controlled vocabularies (by TELDAP / Arthur Chen & Feng-Chien Chung)
  - Toward a Multilingual Thesaurus: Strategies and Approaches (by TELDAP / Shu-Jiun Chen)
  - Applying Getty AAT for the multilingual development of NTU Anthropology collection controlled vocabulary (by TELDAP / C.M. Tsai)
  - All possible words: creating controlled vocabulary to enhance the multilingual development of TELDAP (by TELDAP / Hsueh-Hua Chen & C.M. Tsai)
  - Personal Name Authority: Ming Qing Biographical Database (by TELDAP / Huei-jing Lin) The Getty's Vocabulary Coordination Sytem (VCS) （by GETTY/ by Joan Cobb and Gregg Garcia）
  - Discussion of technical issues for building a Chinese-language AAT（by GETTY & TELDAP）
  - Discussion of editorial and workflow issues for Chinese AAT translation（by GETTY, TELDAP）
  - Wrap-up and next steps（by GETTY, TELDAP）

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The TELDAP feasibility study for a Chinese-language AAT

- Feasibility Analysis (1): Applying Getty AAT for the multilingual development of NTU Anthropology collection controlled vocabulary (by C.M. Tsai)
- Feasibility Analysis (2): All possible words: creating controlled vocabulary to enhance the multilingual development of TELDAP (by Hsueh-Hua Chen & C.M. Tsai)
  - Learning from AAT
    - Fundamental, high-level categories
    - Synthesized, multi-concept heading
    - Guidelines and workflows
    - Sophisticated system for data management
  - Future work: Getty AAT may help us
    - Applying Chinese-English controlled vocabulary to enhance multilingual development of TELDAP
    - Improving the data quality
    - Integration of multilingual thesaurus into search process / interface (ultimately)

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臺灣大學典藏數位化計畫
Digital Archives Project of National Taiwan University

典藏檢索　關於DARC　DARC成果　消息與活動　相關資源　交流園地

首頁｜常見問題｜聯絡我們｜網站地圖
DARC導覽

｜DARC簡介｜組織架構｜參與成員｜聯絡我們｜

分類檢索

【台灣文獻文物】
‧伊能嘉矩手稿(2539)
‧淡新檔案(13312)
‧田代文庫(50)
‧狄寶賽文庫(50)
‧歌仔冊(100)
‧拓碑(189)

【植物標本】
‧一般植物標本(74490)
‧植物模式標本(1055)

【昆蟲標本】
‧常見昆蟲(725)
‧昆蟲模式標本(1239)
‧生態圖鑑(196)
‧研究標本(131)

【地質科學】
‧化石(313)
‧礦物(584)
‧岩石產狀(313)
‧岩石(560)

【人類考古】

在臺灣大學人類學系／民族學標本　　　　　　　　返回上一頁

馘首成功標幟　　　Ritual Object for Successful Headhunting

檔案資訊　　　　　　　　　　　　　圖檔資訊

標本名稱　　馘首成功標幟
原名
標本編號　　251
功能分類　　宗教祭儀用品
細部件數　　1
採集者　　　伊能嘉矩
取得方式　　購買
捐贈出售者　伊能嘉矩
取得時間　　1928年
入藏時間　　1929年 3月
參考文獻　　何廷瑞 1954 有關泰雅族獵頭禮儀標本,考古人類學刊
　　　　　　4：39-41 何廷瑞 1953 本系所藏泰雅族獵頭衣飾標本,
　　　　　　考古人類學刊 2：22-29 何廷瑞 1956 泰雅族獵頭習俗之研
　　　　　　究,台大文史哲學報 7：151-208
出版記錄　　何廷瑞 1954 有關泰雅族獵頭禮儀標本,考古人類學刊
　　　　　　4:39-41, 胡家瑜,崔伊蘭, 1999,臺大人類學系伊能藏品研

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

Fields of metadata

標本名稱 title	
原名 original title	
標本編號 code	
族群分類 ethnic group	
功能分類 function	
材質分類 material	
技術分類 technique	
尺寸測量 measurement	
標本說明 description	

Matching Game?

NTU Title Term	AAT Term	Mapping
笛Flutes	Flutes	Exactly
禮刀Ceremonial Knives	Ceremonial Knives	Exactly
巫珠Glass Bead for Divination	Divination objects	Not exactly
珠衣 Beaded Clothing	Clothing	Not Exactly
鋤刀Hoes	Hoes	Exactly
陶壺Pottery	Pottery (object genre)	Exactly

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Title: Wood Statue

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Title: Wood Statue(木雕人像)

材質分類 Material	技術分類 Technique	尺寸測量 Measurement Han style	標本說明 Description	原始描述 Original record
			figurine	
wood	carving	ancestor		

Field: Title

- Hierarchical Position:
  Objects Facet
  .... Visual and Verbal Communication
  .... Visual Works (Hierarchy Name)
  .... <visual works (Guide Term)>
  .... <visual works by medium or technique>
  .... sculpture (visual work)

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Field: Material

Hierarchical Position:

Materials Facet
.... Materials
.... materials
.... <materials by origin>
.... <biological material>
.... plant material
.... <wood and wood products>
.... wood (plant material)

Field: Technique

Hierarchical Position:

Activities Facet
.... Processes and Techniques
.... <processes and techniques>
.... <processes and techniques by specific type>
.... <subtractive processes and techniques>
.... <carving and carving techniques>
.... carving (processes)

Field: Description

Hierarchical Position:
Objects Facet
.... Visual and Verbal Communication
.... Visual Works (Hierarchy Name)
.... <visual works (Guide Term)>
.... <visual works by medium or technique>
.... sculpture (visual work)
.... <sculpture by subject type>
.... statues
.... figurines

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Field: Description

- Hierarchical Position:

Styles and Periods Facet
.... Styles and Periods
.... <styles and periods by region>
.... Asian
.... East Asian
.... Chinese
.... <Chinese styles and periods>
.... <Chinese dynastic styles and periods>
.... Han (Chinese)

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Field: Description

- Hierarchical Position:

Agents Facet
.... People
.... people (agents)
.... <people by family relationship>
.... ancestors

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The TELDAP feasibility study for a Chinese-language AAT

- Feasibility Analysis (3): Toward a Multilingual Thesaurus: Strategies and Approaches (by Sophy Chen…etc.)
  - A Preliminary Study of Linking existing CVs to the AAT
    - The Controlled vocabularies from selected TELDAP projects (including National Palace Museum and Chinese Culture University) have been extracted as basis to carry out the equivalent relationship of terms between TELDAP and AAT.
    - Design Elements (PHYSICAL ATTRIBUTES FACET), Styles and Periods (STYLES AND PERIODS FACET), Object Genres (OBJECTS FACET)
  - Propose a framework of the Chinese AAT Translation in the Context of Semantic Digital Libraries
  - The Approaches of developing multilingual thesaurus
  - Propose the Procedures of developing multilingual thesaurus & raise some questions/issues

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The TELDAP feasibility study for a Chinese-language AAT

- Object Genres Hierarchy
  - Controlled vocabularies from the TELDAP can be too in depth, so when mapping in the AAT, it may not match the equivalent terms. For example, relationship between Broader term (AAT) and Narrower term (TELDAP).
    - Partial equivalence
- Design Elements Hierarchy
  - Under TELDAP one Motifs/Patterns database has been established. There will be about 7000 terms before Chin Dynasty (先秦銅器紋飾資料) collections made from bronze ware.
  - In TELDAP there are many terms used to present iconography, for example, 年年有餘，壽山福海，太平有象等吉祥圖. However, the AAT doesn't collect such terms.
  - In conclusion, how can we continue to keep a complete list of Chinese culture and decorations in the AAT?
- Styles and Periods Hierarchy
  - In Chinese painting style, AAT lacks some important concepts since it focuses more on western painting style.

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Chinese Painting Styles (AAT)

- …. Styles and Periods Facet
- ……. Styles and Periods
- ……….. <styles and periods by region>
- …………… Asian 亞洲
- ………………… East Asian 東亞
- …………………… Chinese 中國
- ……………………………… <Chinese styles and periods> 中國風格和時期
- …………………………… <Chinese styles (guide term)> 中國風格
- ………………………………… <Chinese painting styles> 中國繪畫風格
- ……………………………… Bai miao 白描
- ……………………………… blue-and-green (Chinese painting style) 青綠山水
- ……………………………… Canton (Chinese painting style) 廣東畫派
- ……………………………… Dong-Ju 董巨風格
- ……………………………… Individualist 獨創主義者
- ……………………………… Loudong 婁東畫派
- ……………………………… Ma-Xia 馬夏風格
- ……………………………… Northern School 北宗畫(北畫)
- ……………………………… Shanghai school 上海畫派
- ……………………………… Southern School (Chinese style) 南宗畫(南畫)
- ……………………………… Su-Song 蘇松畫派
- ……………………………… Wen ren 文人畫
- ……………………………… Ink-bamboo 墨竹
- ……………………………… Wu (painting style) 吳派
- ……………………………… Zhe 浙派

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Chinese painting styles **by technique** ：Lotus / Dai-chien Chang

◎沒骨荷/張大千

◎ Techniques : Boneless
(技法: 沒骨)

◎ Subject: Bird and Flower Paintings
(主題: 花鳥畫)

◎ Styles: Sketching-ideas
(風格: 寫意)

◎ Color: Color Paintngs
(色彩: 設色)

◎ Repository: National Museum of History
(典藏單位:國立歷史博物館)

Source: http://catalog.ndap.org.tw/?URN=1368010

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Lotus in Monochrome Ink /
Chang Dai-chien

◎墨荷(1911~) /張大千

◎ Techniques : Boneless
(技法: 沒骨)

◎ Styles: Sketching-ideas
(風格: 寫意)

◎ Repository: National Museum of History
(典藏單位:國立歷史博物館)

Source: http://catalog.ndap.org.tw/?URN=1367883

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Chinese painting styles **by technique**
Album of Flower and Bird Paintings by celebrities in Song and Yuan Dynasties

◎宋元名人花鳥合璧　冊　宋黃居寀芍樂

◎ Processes or Techniques Name: Gonbi
(技法: 工筆)

◎ Subject: Bird and Flower Paintings
(主題: 花鳥畫)

◎ Repository: National Palace Museum
(典藏單位:國立故宮博物院)

Source: http://catalog.ndap.org.tw/?URN=2200991
http://ndweb.iis.sinica.edu.tw/pes/Include/GetImage.jsp?file_id=447621&type=2&width=800&height=600

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Chinese painting styles **by technique**
潑墨 (splashed ink)
夏山雲瀑(1970) /張大千
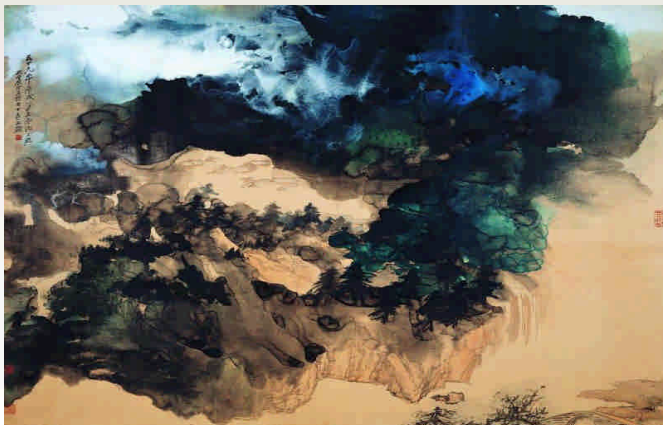
◎ Techniques: Splashed Ink, Sketching-ideas
(技法: 潑墨、寫意)

◎ Subject: Landscapes
(主題: 山水畫)

◎ Repository: National Museum of History
(典藏單位:國立歷史博物館)

http://catalog.digitalarchives.tw/dacs5/System/Exhibition/Detail.jsp
http://ndweb.iis.sinica.edu.tw/pes/System/galleryC.jsp?id=539453&searchkeyword=&ShowPage=28&p=2&dir=implement#

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Zhong Kui (1994) /Syue-Yuan Chen

◎ 鍾馗(1994) /陳學元

◎ Techniques: Sketching-ideas(技法: 寫意)

◎ Subject: Figure Paintings
(主題: 人物畫)

◎ Color: Color Paintngs
(色彩: 設色)

◎ Repository: Hwa Kang Museum
(典藏單位:華岡博物館)

Source: http://catalog.ndap.org.tw/?URN=1159467

51

On the Lake (1971) / Duo-Cih Swun

◎湖上(1971) /孫多慈

◎ Style: Mi Style
(風格: 米家山水)

◎ Repository: Hwa Kang Museum
(典藏單位:華岡博物館)

Source: http://catalog.ndap.org.tw/?URN=431123

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Two Macaques (1986) / Au Ho

◎雙猿(1986) /歐豪年

◎ Techniques: Sketching-ideas(技法: 寫意)

◎ Style: Lingnan School
(風格: 嶺南畫派)

◎ Color: Color Paintngs
(色彩: 設色)

◎ Repository: Hwa Kang Museum
(典藏單位:華岡博物館)

Source: http://catalog.ndap.org.tw/?URN=1159610

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Two Rabbits(1994) /Au Ho

◎ 雙兔(1994) /歐豪年

◎ Techniques: Sketching-ideas(技法: 寫意)

◎ Style: Lingnan School
(風格: 嶺南畫派)

◎ Color: Color Paintngs
(色彩: 設色)

◎ Repository: Hwa Kang Museum
(典藏單位:華岡博物館)

Source: http://catalog.ndap.org.tw/?URN=1159629

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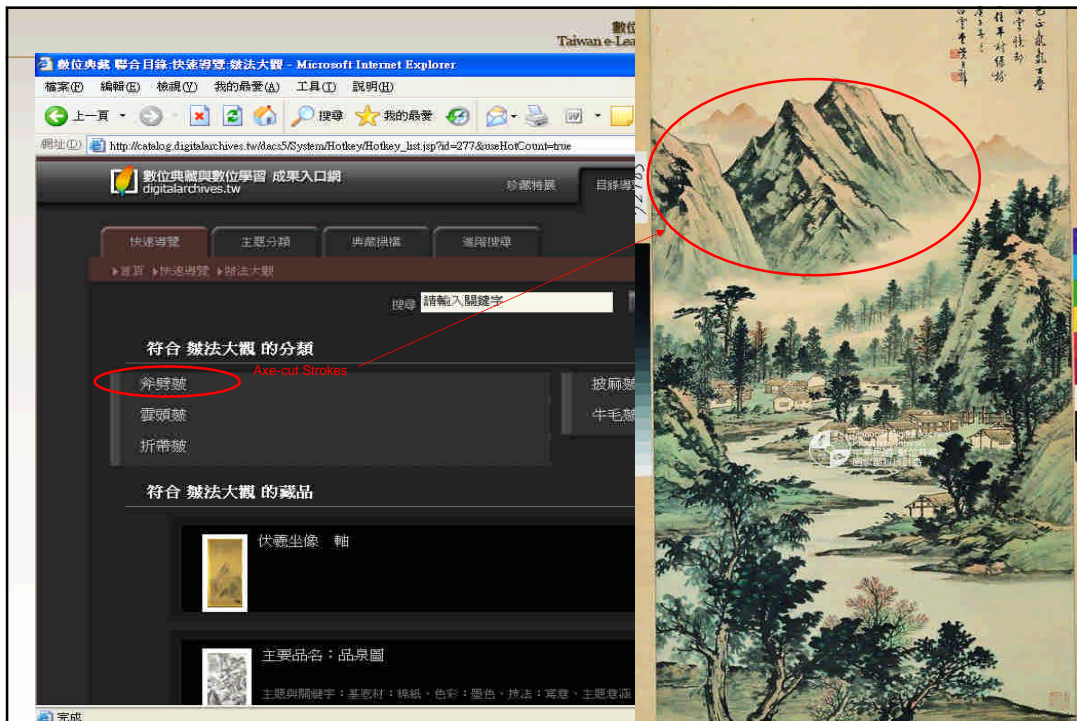
Along the River During the Qingming Festival (Qing Academy version (1936)

◎清院本清明上河圖 卷)

◎ Subject: Genre paintings
(主題: 風俗畫)

◎ Repository: National Palace Museum
(典藏單位:國立故宮博物院)

Source: http://catalog.ndap.org.tw/?URN=1085299 http://woixv.com/index/photos/2006/09/desktop/cex1.jpg

The Discussion: Styles and Periods

- TELDAP Element: technique
- In Chinese painting style, AAT lacks some important concepts since it focuses more on western painting style.
- Suggest <Chinese painting styles> under AAT can add the following guide terms：
  - <Chinese painting styles by technique>
  - <Chinese painting styles by color>
  - <Chinese painting styles by artists>
  - <Chinese painting styles by location>
  - <Chinese painting styles by subject>
- In the next 2 slides, it shows the exact terms under each category.

Chinese Painting Styles (AAT-based)
Suggestions

- .... <Chinese painting styles>
- .... Individualist 獨創主義者
- .... Wen ren 文人畫
- .... Ch'an Paintings 禪畫
- .... Academy of Paintings 院派(院體畫/院畫)[1]
- .... **<Chinese painting styles by technique>**
- .... Bai miao 白描
- .... Boneless Ink Wash 沒骨[2]
- .... Gonbi 工筆[3]
- .... Sketching-ideas 寫意[4]
- .... Splashed Ink 潑墨[5]
- .... **<Chinese painting styles by color>**
- .... blue-and-green (Chinese painting style) 青綠山水
- .... Color Paintings 設色
- .... **<Chinese painting styles by artists>**
- .... Ma-Xia 馬夏派
- .... Mi Style 米派[7]
- .... Dong-Ju 董巨風格
- .... Su-Song 蘇松畫派
- .... Zhe 浙派

Chinese Painting Styles (AAT-based)
Suggestions

- .... **<Chinese painting styles by location>**
- .... Northern School 北宗畫(北畫)
- .... Southern School (Chinese style) 南宗畫(南畫)
- .... Shanghai school 海上畫派(海派)
- .... Canton (Chinese painting style) 廣東畫壇
- .... Loudong 婁東派
- .... Wu (painting style) 吳派
- .... Lingnan School 嶺南畫派[1]
- .... **<Chinese painting styles by subject>**
- .... Ink-bamboo 墨竹
- .... Bird and Flower Paintings 花鳥畫
- .... Genre Paintings 風俗畫[2]
- .... Ruled-line Paintings 界畫[3]

TELDAP－Getty/AAT Collaboration Project

- Phase I: August 2008~December 2009
- Scope：
  - AAT: 3 Facets (Object, Materials, Style)
  - TELDAP: Domains of Fine Art and Anthropology
- Developing Methodology, Workflow, Platform and Tools/Systems
- Coordinating different TELDAP Divisions
  - Program Office
  - Specific Domain Experts (D1)
  - Metadata Team (D2)
  - System Development Team (D2)
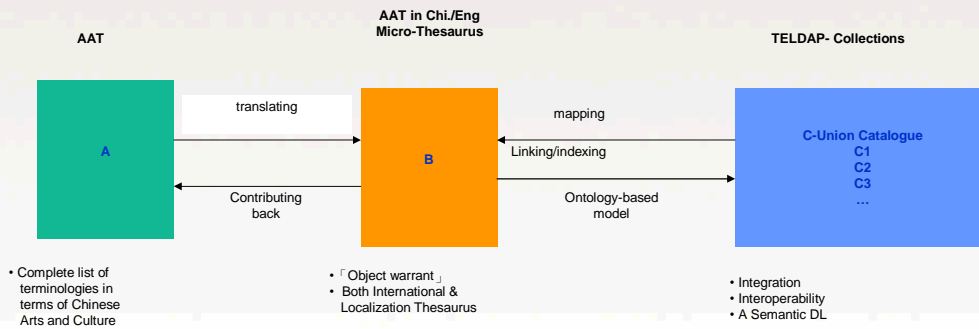 - Union Catalogue Team (D3)
  - Multilingual Development Team (D8)

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The Approaches of developing multilingual thesaurus

- **Combining existing KOSs**
  - Linking existing CVs to the AAT
- **Building a new sub-hierarchies under the facets**
- **Translating some terms from the AAT or TELDAP into another language**

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The Framework of the
Chinese AAT Translation
in the Context of Semantic Digital Libraries

AAT

AAT in Chi./Eng
Micro-Thesaurus

TELDAP- Collections

A

translating

B

mapping

C-Union Catalogue
C1
C2
C3
…

Linking/indexing

Contributing
back

Ontology-based
model

• Complete list of
  terminologies in
  terms of Chinese
  Arts and Culture

• 「Object warrant」
• Both International &
  Localization Thesaurus

• Integration
• Interoperability
• A Semantic DL

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The Procedures of developing multilingual thesaurus

- Developing the Thesaurus System
- Producing the Editorial Guidance
- Translating AAT descriptors (A) into Chinese language (B)
  - translate only the descriptors ordered by Facet/Hierarchies which are more important or used more often
  - Use Intellectual method
- Translating vocabularies from the TELDAP in to English language (C)
- Mapping/Linking terms from the TELDAP (C) to AAT descriptors (A) or AAT Chinese language (B)
- Dealing with missing mapping/linking terms (non-equivalence) : (D) & (E)
  - (D)- Only AAT has descriptors (A), but TELDAP doesn't have any terms to map (C)
  - (E)- Only TELDAP has terms (C)，but AAT doesn't have any terms to map (A).
- Linking/Indexing these terms to the TELDAP Collection

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Summary

- WWW, as platform for cultural heritage information and knowledge dissemination, is a multilingual environment
- Providing access to information without language barriers has been a critical issue and strong demand
- Toward the semantic digital library at global level
  - When users visit the TELDAP system, they can⋯
    - *Browse* collections' knowledge structures
    - Search both information retrieval (individual objects) and *knowledge retrieval (associative objects)*
    - Use as a *Research tool* and *Knowledge-management tool*
    - Have *multilingual* access
    - *Integrate* TELDAP collections

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