

# A Case Study for Multilingual Support: Applying the AAT-Thesaurus to TELDAP's Multilingual Project

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**Abstract.** The translation of cultural-laden words has been a formidable project. This paper discusses how AAT-Thesaurus, with its classification of semantic equivalence and carefully structured terms, helps the Taiwan e-Learning and Digital Archives Program (TELDAP) conquer the difficulty of untranslatability.

**Keywords:** multilingual support, thesaurus, digital archives.

## 1 Introduction

The Taiwan e-Learning and Digital Archives Program (TELDAP) aims to sustainably maintain Taiwan's valuable cultural assets and has been working on the multilingual translation of approximately 3 million Chinese digitized items with the aid of the Art & Architecture Thesaurus Taiwan (AAT-Taiwan), a project that builds a structured English-Chinese thesaurus to facilitate access to information on art, architecture, and material culture. This study looks into the basic methodological framework upon which the AAT-Taiwan is created, and how it has helped TELDAP's multilingual development.

## 2 The Methodological Framework of AAT-Taiwan

The framework for AAT-Taiwan includes a process of four modules: *translation*, *mapping*, *localization*, and *creation*. In *translation*, each term went through editing, proofreading, and sometimes fervent debate to reach its final corresponding term. Next, the fruits of translation entered the *mapping* process in which relationships between Chinese and English terms are identified and the pair of terms classified into the following: "exact equivalence," "inexact equivalence," "partial equivalence," "single to multiple equivalence," and "no equivalence." To further comply with the principle of literary warrant, *localization* came in as a necessary step. This was the stage when synonyms were collected, then a descriptor was chosen from them, and visualization aids were added. Finally, for terms of "non-equivalence" or "little-equivalence" to be qualified to convey meanings, hierarchical relationships and conceptual structures [see Figure 1] were generated so that the translated terms are not merely arbitrary combinations of words but systematic and reasonable creations that bear scrutiny and exploration.

## Example : Chinese Scripts

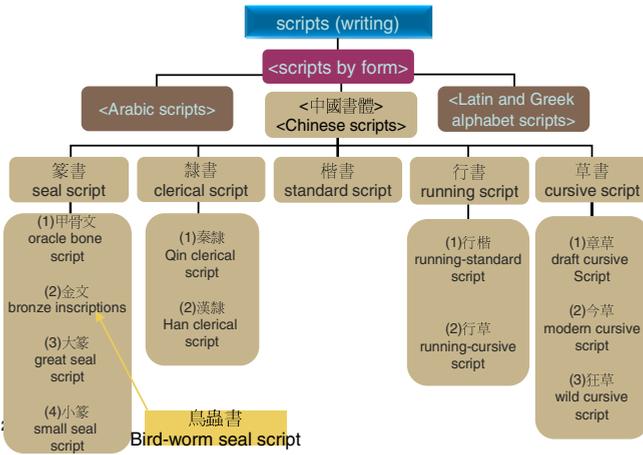


Fig. 1. An example of Hierarchical Relationship of Terms

### 3 Features of AAT-Taiwan

The application of AAT-Taiwan has been a wonderful experience for TELDAP translators. AAT is useful particularly due to its classification of semantic equivalence that assists translators in figuring out what is lost in translation and how the readability of translations can be improved. Furthermore, AAT's structural and pictorial references have been proved beneficial in helping TELDAP translators cross the limitation of untranslatability, in particular when the source language is itself culture-laden and difficult to absorb even to modern speakers of Chinese. The AAT's sources are reliable because it contains at least three authoritative sources, making further inquiry into the information time-saving. In Taiwan the issue over which system of transliteration should be made official has not been settled, and AAT suits a wide range of needs as it has at least Hanyu Pinyin, Pinyin without Tones, and Wade-Giles transliteration available. It is hoped that TELDAP's experiences may contribute to future implementations of multilingual support in creating better digital resources for a wide range of international users.

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