



索引典與Metadata的關係

- Metadata

- 資料結構：Metadata格式

- 如：Dublin Core, EAD, MARC, LOM…等

- 資料內容

- 資料值：資料結構內每個元素或欄位的值

- 如：free text, 關鍵字, 自然語言, 控制詞彙

或稱vocabulary control詞彙控制
索引典，是詞彙控制的一種方式



索引典的功能：以數位典藏環境為例

- 支援學習與吸收理解資訊
- 協助研究者與實務者的問題釐清
- 支援資訊檢索
 - 提供知識為本的使用者檢索支援
 - 支援資訊展現
 - 提供索引的工具
 - 促進多個資料庫的結合，或統一查詢多個資料庫
 - 支援檢索後的文件處理



索引典的基本原理

- 通則(概念的類型)
 - 具體實體(concrete entities)
 - Things and their physical parts
 - Materials
 - 抽象實體(abstract entities)
 - Actions and events
 - Abstract entities, and properties of things, materials or actions
 - Disciplines or sciences
 - Units of measurement
 - 個別實體(individual entities)



索引典的基本原理

- 詞的形式
 - 名詞或名詞片語
 - Adjectival phrases
 - Prepositional phrases
 - 形容詞
 - 副詞
 - 動詞
 - 縮寫



索引典的基本原理

- 同形異義字(homographs)或一詞多義(polysemes)
- 詞的選擇
 - Spelling
 - Loan words and translations of loan words
 - Transliteration
 - Slang terms and jargon
 - Common names and trade names
 - Popular names and scientific names
 - Place names
 - Proper names of institutions and persons
- 範圍註與定義



索引典的基本原理

- 複合詞(compound terms)基本概念
 - 定義
 - 原則
 - 考慮因素
 - 特質
 - 列入複合詞的要件
 - 不列入複合詞的要件



索引典的基本原理

- 複合詞(compound terms)的定義
 - 是一種多字詞(multiwords)
 - 將2個以上的字予以結合在一起, 來表達一個語意(lexical unit)



索引典的基本原理

- 複合詞(compound terms)的原則
 - 必須能夠在一個階層式或樹狀式的結構中, 來表達一個概念(a single concept)或思想(a unit of thought)
 - 範例
 - children and television
 - adopted children
 - educational television



索引典的基本原理

- 複合詞(compound terms)的考慮因素
 - 作品保證(literary warrant)
 - 索引典詞彙數量的管理
 - 紙本式與電腦系統式
 - Precoordinated
 - Postcoordinated
 - 避免檢索上的錯誤(false drops in retrieval)
 - library science
 - library science
 - science library



索引典的基本原理

- 複合詞(compound terms)的特質
 - 集中焦點(focus, head noun)
 - 用以標引與識別較大範圍的層次(broader class)
 - 辨別差異(difference, modifier)
 - 用以標引與縮小較小範圍的層次(subclass)
 - 範例
 - concrete reinforced concrete
 - glass stained glass



索引典的基本原理

- 列入複合詞的要件
 - 分開會導致語意上的模糊或遺漏
 - plant food, rose windows
 - 單獨存在時, 會有語意模糊的現象
 - composite drawings, first aid
 - 修飾詞(modifier)已非原來的意涵
 - trade winds
 - 修飾詞已引導至另外一種意義
 - butterfly valves, tree structure
 - 修飾詞並不是對原有的層級概念(subclass)加以修飾
 - rubber ducks
 - 已是正式名的一部份
 - United Nations



索引典的基本原理

- 不列入複合詞的要件
 - 焦點(focus)屬於某一屬性或物件的一部份; 如果必須依存它時, 仍使用複合詞
 - office management = offices[object] + management[action]
 - printed textiles (printed[action] + textiles[object])
 - 修飾物件的一項動作, 如果這項動作與物件有依存關係時, 仍使用複合詞
 - birds migration = birds[agent] + migration[action]
 - dancing shoes (dancing[action] + shoes[object])

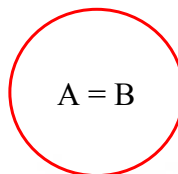
索引典的基本原理

- 索引典的基本關聯屬性
 - 等同關係(The equivalence relationship)
 - 層級關係(The hierarchical relationship)
 - 聯想關係(The associative relationship)

關係類型	關係指標	縮寫符號
等同關係 (同義詞)	USE	None or U
層級關係	USED FOR	UF
	BROADER TERM	BT
	NARROWER TERM	NT
聯想關係	RELATED TERM	RT

等同關係

- 參照符號
 - USE
 - UF
- 包括二類型的詞
 - 同義字
 - Terms of different linguistic origin
 - Popular names and scientific names
 - Common nouns and trade names
 - Variant names for emergent concepts
 - Current or favoured terms vs. outdated or deprecated terms
 - Variant spellings, including stem variants and irregular plurals
 - Terms originating from different cultures sharing a common language
 - Abbreviations and full names
 - The factored and unfactored form of a compound term
 - 半同義字





等同關係

- USE
- UF
 - Aves USE **birds** ; **birds** UF Aves
 - Outline USE **shape** ; **shape** UF outline
- 等同關係的類型(同義字)
 - a) terms of different linguistic origin

Examples:

cats / felines
freedom / liberty
sodium / natrium
sweat / perspiration



等同關係

- 等同關係的類型(同義字)
 - b) popular terms and scientific names

Examples:

aspirin / acetylsalicylic acid
gulls / Laridae
salt / sodium chloride

- c) generic nouns and trade names

Examples:

petroleum jelly / Vaseline
photocopies / Xeroxes
refrigerators / Frigidaires
tissues / Kleenex

- d) variant names for emergent concepts

Example:

hovercraft / air cushion vehicles



等同關係

- 等同關係的類型(同義字)

e) current or favored terms versus outdated or deprecated terms

Examples:

poliomyelitis / infantile paralysis
developing countries / underdeveloped countries

f) common nouns and slang or jargon terms

Examples:

helicopters / whirlybirds
psychiatrists / shrinks

g) dialectal variants

Examples:

elevators / lifts
subways / undergrounds



等同關係

- 等同關係的類型(半同義字)

Examples:

Wetness / dryness
Smoothness / roughness

– Generic Posting

Examples:

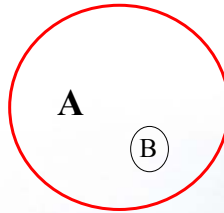
waxes plant waxes
UF plant waxes USE **waxes**

furniture

UF beds	beds	USE furniture
UF chairs	chairs	USE furniture
UF desks	desks	USE furniture
UF tables	tables	USE furniture

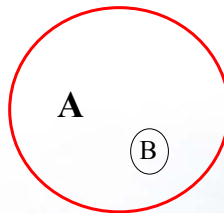
層級關係

- 參照符號
 - BT
 - NT
- 包括四類型
 - 屬種關係
 - Systems and organs of the body
 - Geographical locations
 - Disciplines or fields of discourse
 - Hierarchical social structures
 - 整部關係
 - 實例關係
 - 多層級關係



層級關係

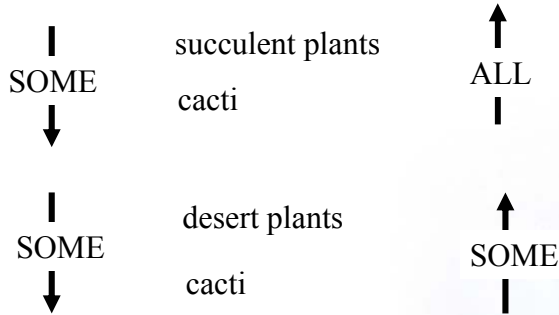
- 參照符號
 - BT (Broader Term)
 - NT (Narrower Term)
- 例子1
 - mammals** **vertebrates**
 - BT **vertebrate** NT **mammals**
- 例子2
 - anatomy **vs.** central nervous system
 - Central nervous system **vs.** brain





層級關係

- 屬種關係



- 代碼符號

BTG = Broader term (generic)

NTG = Narrower term (generic)

例子

rats

BTG rodents

rodents

NTG rats



層級關係

- 整部關係

- systems and organs of the body

Example:

nervous system

central nervous system

brain

spinal cord

- Geographic locations

Example:

Canada

Ontario

Ottawa

Toronto



層級關係

- 整部關係
 - Disciplines or fields of discourse
 - Example:*
 - science
 - biology
 - botany
 - zoology
 - Hierarchical organizational, corporate, social, or political structures
 - Example:*
 - countries
 - states/provinces
 - cities



層級關係

- 整部關係的代碼符號
 - BTP = Broader term (partitive)
 - NTP = Narrower term (partitive)

Example:

Central nervous system	nervous system
BTP nervous system	NTP central nervous system



層級關係

- 實例關係

Example:

mountain regions — class —	state capitals
Alps — instances —	Albany
Himalayas	Trenton

- 實例關係的代碼符號

- BTI = Broader term (instance)
- NTP = Narrower term (instance)

Example:

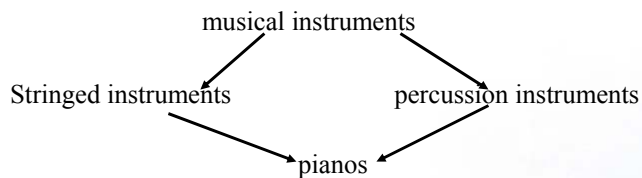
Fairy tales
 NTI Cinderella



層級關係

- 多層級關係

Example:



- 多層級關係的節點標示(**node labels**)

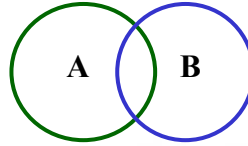
Example:

cars
 by purpose
 racing cars
 sports cars



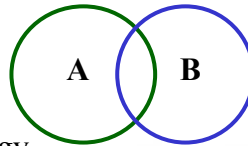
聯想關係

- 參照符號
 - RT
- 包括二 類型
 - 相同範疇
 - 不同範疇
 - A discipline or field of study and the objects or phenomena studied
 - An operation or process and its agent or instrument
 - An action and the product of the action
 - An action and its patient
 - Concepts related to their properties
 - Concepts related to their origins
 - Concepts linked by causal dependence
 - A thing and its counter agent
 - A concept and its unit of measurement
 - Syncategorematic phrases and their embedded nouns



聯想關係

- 參照符號
 - RT (related term)
- Example:*
- | | |
|----------|-------------|
| cells | cytology |
| RT cells | RT cytology |



Example:(相同範疇)

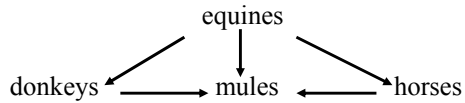
boats	ships
BT vehicles	BT vehicles
RT ships	RT boats



聯想關係

- 相同範疇的聯想關係(衍生關係)

Example:(圖形展現)



Example:(字順展現)

donkeys	horses
BT equines	BT equines
RT mules	RT mules
equines	mules
NT donkeys	BT equines
NT houses	RT donkeys
NT mules	RT houses



聯想關係

- 不同範疇的聯想關係
 - Disciplines or fields of study and the objects or phenomena studied, or the discipline' s practitioners

Example:

mathematics	mathematicians
RT mathematicians	RT mathematics
neurology	nervous system
RT nervous system	RT neurology
botany	plants
RT plants	RT botany



聯想關係

- 不同範疇的聯想關係
 - Operations or processes and their agents or instruments

Example:

temperature control	thermostats
RT thermostats	RT temperature
hunters	hunting
RT hunting	RT hunters

- An action and their products

Example:

scientific research
RT scientific inventions
publishing
RT music scores



聯想關係

- 不同範疇的聯想關係
 - An action and its patient

Example:

data analysis
RT data
teaching
RT students

- Concepts related to their properties

Example:

liquids
RT surface tension
women
RT femininity



聯想關係

- 不同範疇的聯想關係
 - Concepts related to their origins

Example:
water
RT water wells
information
RT information sources
 - Concepts linked by causal dependence

Example:
injury
RT accidents
infections
RT pathogens



聯想關係

- 不同範疇的聯想關係
 - A thing or action and its counter agent

Example:
害蟲
RT 殺蟲劑
腐蝕
RT 腐蝕抗化劑
 - A raw material and its product

Example:
(拌水泥用的)粒料
RT 混凝土
獸皮
RT 皮革製品



聯想關係

- 不同範疇的聯想關係
 - An action and a property associated with it
Example:
精確測量
RT 準確性
 - A concept and its opposite
Example:
單身
RT 已婚者
寬容
RT 偏見
- 多層級關係的節點標示(**node labels**)
Example: Books
RT
<operations>
binding
printing



索引典的結構

- 概念與用語間的關係 (Concept-term relationships)
- 概念性結構(conceptual structure)的二十大原則
 - 語意與層面分析(Semantic and facet analysis)
 - 層級 (Hierarchy)