Tuesday, January 25, 2022

Class 3: Thesaurus Principles

LIBR 509: Foundations of Resource Description and Knowledge

- How to *organize* resources

- *Classification* = finding one spot for every resource

- *Thesauri* = assigning as many descriptors to a resource as can apply, with a priority to use consistent and appropriate terms

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- How to *organize* resources

- Flip between the lecture and the readings

- Look at

- **Thesaurus Principles**

- **Controlled Vocabulary**

  • A fixed list of options ; limit choices ; resolving synonyms ; reducing cognitive load fixed list of language

  • The language is generated by a shared ruled / standard, typically

  • Any element of a system where there is a fixes list of terms to use and the management of that list is in the back-end

- **Thesauri**

  • Type of controlled vocabulary that has a hierarchical and networked structure in it ; complex controlled vocals mostly used for library purposes

  • Has to describe many resources to describe conceptual content and increase fundability about resources

- **Journal Databases (records)**

  • Where you might encounter a controlled vocab

  • Thesauri deal with subjects or scriptor set

- **Syndetic Structure**

  - The syntax or grammar of how a thesaurus is put together => mostly through relationships between terms that form a network structure

- **Three Principles for Organization of a Thesaurus**

  - **Equivalence -** synonyms

  - **Hierarchy -** some terms are more specific versions of each other

  - **Other**

- **ERIC Database / Thesaurus**

  - Example of Thesaurus - listed alphabetically

  - Only librarians or expert searchers interact with the "thesaurus" button - shows entries for terms

  - The user does not navigate hierarchical structure of the thesaurus

  - Every type of link between terms is listed at both ends of the relationship. They are reciprocal.

    - Artists => Art History => Intellectual History

- **Relationships used in Thesauri**

  - All terms have relationships between each other

  - **Equivalence** - USE / Used For (UF)

  - **Hierarchical** - Broader Term (BT) / Narrower Term (NT)

  - **Associative -** Related Term (RT)

- **Equivalence Relationships**

  - Most intuitive

  - **Equivalent Phrases** - *Aeroplanes* and *Airplanes*

  - **Inverted Forms** - *Bilingual education* and *Education, bilingual*

  - **Acronyms and Abbreviations** - *WHO* and *World Health Organizations*

- **Antonyms** - *Student Retention* and *Dropouts* (antonyms - concept/phenomenon is the same, but expressed in different ways)

- **Lead-in Terms**

  - Terms that users want to use that you don't want to use in your system = Lead-in Terms => redirects users to words the system use

  - Ppl often search subject heading systems and thesauri using queries

  - Therefore, there are terms that "lead" a person to an authorized heading

  - Exp. "Doggo" re-directs to "Dog" or "Canine"

- **Equivalence Relationships - Example**

  - Aeroplanes USE **Airplanes**

  - **Airplanes**

    - **UF** Aeroplanes

    - **BT** Vehicles

    - **NT** Passenger Planes

- **ERIC Thesaurus**

  - Relationships are depicted with arrows, solid / broken lines

- **Lead-In Terms**

  - Art

    - **UF** Creative Art

- **Equivalence Relationships: Upward Posting**

  - Sometimes, a specific term is "equivalent" to a more general term:

    - Cats USE **Animals**

  - This can happen when users are interested in cats, but there aren't enough documents about cats to make a subject heading called "Cats"

  - Instead, "Cats" becomes a lead-in term that is *upward posted* to "Animals"

- **Hierarchical Relationships**

- What makes thesauri unique

- Relationship between a concept and a more specific concept

  - *Generic* **Relationship:** A link to a more specific type

    - Teachers NT School Teachers

    - Thinking NT Reasoning

  - *Instance* **Relationship:** A link to particular example

    - Seas NT Baltic Sea

    - Wars NT World War II

  - *Partitive* **Relationship:** A link to a part

    - Canada NT British Columbia

    - Cars NT Steering Wheels

  - Other types of Relationships?

- **Hierarchical Breadth vs Depth**

  - Very general to very specific

  - The longer the steps go, it will likely fall apart eventually

  - Depth diagram

  - Breadth diagram

- **Associative Relationships (Related Terms)**

  - Hierarchical Relationships

    - Insects NT Bees

    - Bees NT Bumblebees

      - Hierarchical relationships are *transitive* (hopefully)

      - Bumblebees are types of insects

  - Association Relationships

    - Bees RT Honey

    - Honey RT Toast

- Association relationships are *non-transitive* (like family relationships)

- Toast has no relationship to bees

  - Don't commit to family relationships that are transitive

- **Associative Relationships (Related Terms) Cont'd**

  - Brings together concepts that are related but which do not have another formal relationship type (such as BT/NT)

    - **Operations and Instruments**

      - Hairdressing RT Hair Driers

    - **Actions and Products**

      - Roadmaking RT Roads

    - **Causal Relationships**

      - Accidents RT Injury

    - **Field of Study and Objects Studied**

      - Xenobiology RT Alien lifeforms

- **Associative Relationships (Related Terms) Cont'd**

  - Insects

    - NT Bees

    - NT Flies

      - Flies and bees do not need an RT relationship with each other - they share a hierarchical relationship (both refer back to "Insects")

      - How to cut down on gloat in thesaurus

- **Explanations, Clarifications, and Definitions in Thesauri**

  - Usually done as a scope note under the term itself - A brief note that describes how the heading is to be used

  - Many headings have no scope notes

- **Create Thesaurus - Assignment #2**

  • Choose what to describe (set of resources)

  • What are the things? Information-bearing objects work best for this exercise. Exp. iction / non-fiction books

  • Who is searching / browsing through them?

  • How many are there? Scope = 12 preferred terms (min) / At least one of every relationship type BT/NT, RT/RT, USE/UF)

  • What terms are already present in the resources? What language do the potential users expect to find? Starting points - words authors use, users and their language

  • Then, create terms!

    - Make a list of concepts you think are relevant to the resources and are of interest to your users

      • For each concept, lay out a list of possible terms

      • Pick which term among synonyms should be the preferred term and which the lead-in terms (UF / USE relationships)

    - Create relationships among the preferred terms

      • Which terms are more specific or more general versions of each other? (BT / NT relationships)

      • Which terms have intrinsic relationships that aren't hierarchical? (RT / RT relationships)

    - Represent:

    - Abstract Concepts

      • Exploration

      • Time

      • Sentience

      • Themes in books

    - Tangible Concepts

      • Space ship

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- Clocks

- Humans

- For Preferred Terms (PF)

  - Use scope notes (optional)

  - Clarifies how preferred terms is used in the system

  - Exp. Flashback

- Try these!

  - Equivalent Phrase

    - Expedition USE Exploration

  - Inverted Phrase

    - Ship, space USE Space ship

  - Antonym lead-in (try one!)

    - Truancy USE Attendance

    - A phenomenon described from the positive and negative angle

- Relationships

  - Broader Terms, Narrower Terms, and Related Terms

    - Time

      - NT Past

      - NT Present

      - NT Future

    - Spend more time on your BT / NT relationships than RT / RT relationships

- Indexing

  - Try indexing your resources by adding the preferred terms most applicable

  - Some systems have a limit on how many terms can be on any one item; you want to consider the precision and recall of the search system this supports

User group: Non-corporeal entities who have recently made first contact with humans. They wish to learn more about us through our fiction

Attendance
  UF Truancy
Birth
  BT Life
  Middlesex, p. 3
  Slaughterhouse-five, p. 114
Clock
  RT Time
  Watchmen, p. 26, p.7
Death
  Slaughterhouse-five, p. 121-123
Expedition USE Exploration
Exploration
  UF Expedition
  NT Time Travel
  NT Space Travel
  NT Earth Travel

Future
  BT Time
  The Windup Girl
Humans
Life
  NT Birth
  NT Death
Past
  BT Time
  Watchmen, p.27-32
Present
  BT Time
Non-Linear Time
  BT Time
  Slaughterhouse-five, p.26-27
Sentience
Ship, space USE Space ship

Space Ship
  UF Ship, Space
  BT Space Travel
Space Travel
  BT Exploration
  NT Space Ship
  The Left Hand of Darkness, p. 38-39
Time
  NT Past
  NT Present
  NT Future
  NT Non-Linear Time
  RT Time Travel
Time Travel
  BT Exploration
  RT Time
  Slaughterhouse-five
Truancy USE Attendance

RT Clock

If you need something to describe, you can use iSchool courses!

The collection

Create a thesaurus for your current iSchool courses. The "resources" would be modules, assignments, or readings.

Terms could refer to what the resources are about and what they cover (this could get awfully meta since you've now got an assignment and readings about thesauri)