

**Lecture no. 10**  
**Department: Information and Library Science**  
**Subject: Information Storage & Retrieval**  
**Name of the lecture : thesaurus**  
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## **Thesaurus**

A thesaurus (plural = thesauri) is a an organized list of terms from a specified vocabulary arranged to facilitate the selection of synonyms and of words that are otherwise related for retrieval system. The thesaurus is used to bring the vocabulary for the searcher into coincidence with that of the index.

A thesaurus could be defined also as a book of descriptors that shows explicitly the relationships among the descriptors it contains. These relationships are:

- 1- Hierarchical relationship : These involves the following relations:
  - 1-Specific to generic relationship (often called Broader term (BT)). To identify terms that are parts of a broader class. e.g. ethanol and butanol may both be considered to belong to the class alcohol.  
Ex: Geometry BT Mathematics
  - 2- Generic to specific relationship (often called Narrower term (NT)). To identify a term  
Ex: Geometry NT Analytical geometry  
that may represent a group of more specific words  
e.g. spraying equipment includes airless spraying equipment.
  - 3- General nonspecific relationship (often called Related term (RT)).To indicate terms which are related to other terms but not in a totally synonymous or generic specific manner. e.g. fire retardant coating may have meaning related to non flammable coating.  
If the term is Adjustment

Ex: RT Adjustment problems  
Life satisfaction

## 2 Referential relations (cross references).

A Cross reference is a notation that makes explicit a relationship between two or more terms used to designate the subject contents of graphs, records, or between two or more portions of classification system. Some forms of cross reference are:

A- Use Reference (use) (see): For terms that are said to be functionally synonymous for a particular information retrieval system.

-Example of synonyms: To indicate terms that may be used interchangeably to represent a simple concept, e.g.  
lead peroxide and red lead.

Ex: Corridors see (use) Hallway

Ex: Canary see Birds

-Example of antonyms:

Instability see (use) Stability

ORGANIC see(use) INORGANIC

If the term is Adjustment

Ex: Adjustment (use) Maladjustment

-Example of spelling: Colour see (use) color

B- Used For (UF): Means the terms to be right is not a valid descriptor; use the entry in Bald face instead.

If the term is Adjustment

Ex: UF Coping behavior

Maladjustment

Social adjustment

3- Scope Note (SN): It means information about the descriptor If the term is Administration on aging

Ex: SN: The older American act

Ex: RT: Poverty programs

It is perhaps obvious that none of these relationships among terms can be defined in a totally unambiguous way, since different people think of (and use) words differently in various contexts.

**For a thesaurus it is necessary to specify:**

- 1- the objectives.
- 2- Subject area.
- 3- Terms to be retrieved.
- 4- Relations among the terms.
- 5- Display of terms.

### **# Language:**

A Thesaurus could be :

#### **1. In one language.**

**EX: ERIC (Educational Resources Information Center) .**

#### **2. In two languages (bilingual)**

**EX: Merriam-Webster Online: Dictionary and Thesaurus.**

[www.merriam-webster.com](http://www.merriam-webster.com)

Free online dictionary, thesaurus, Spanish-English and medical dictionaries, audio pronunciations, Word of the Day, word games, and many more high-quality.

#### **3. It could be multilingual (more than two languages).**

**EX : UNBIS (United Nation Bibliographic Information Service) in English, French, Spanish and Arabic.**

مكتنز الجامعة اعداد جامعة الدول العربية.

### **Organization:**

Usually an ideal thesaurus should include the following four parts:

- 1- Alphabetical.**
- 2- Classified.**
- 3- Hierarchical.**
- 4- Graphical.**

**Comparison between a subject heading list and a thesaurus  
In terms of relationships and cross references**

<b>Subject heading list</b>	<b>Thesaurus</b>
SEE	USE
X (SEE FROM)	UF (USED FOR)
SEE ALSO	BT (BROADER TERM)
SEE ALSO specific	NT (NARROWER TERM)
SEE ALSO FROM	RT (RELATED TERM)