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DAM 207



**Indexing and Classification
Theory
Module 3**

DAM 207 (Indexing and Classification Theory) Module 3

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Unit I Subject Headings List

1.0 Introduction

The subject heading is a word or phrase that describe the subjects treated in the book. As much as possible, a subject heading must represent the common usage among the readers of that subject and also the subject heading chosen must be specific to the content of the document. However, only one subject term can be chosen to index all materials on the same subject in the collection.

This unit describes the Sears Subject Heading list and the Library of Congress subject heading list.

2.0 Objectives

At the end of this unit, you should be able to:

- describe a subject heading
- give examples of the two types of subject headings
- describe the Library of Congress subject heading
- explain the similarities between the Sears and Library of Congress heading lists.

3.0 Main Content

3.1 Sears Heading List

The list is primarily used in small public and school libraries. It was first published in 1923 by Minnie Sears. The first edition was known as the List of Subject Headings for Small Libraries. It was based on the subject terms used by nine small libraries in the United States of America. Sears List of Subject Headings is narrower in scope than the Library of Congress Subject Headings (LCSH). The headings of sears are based on LCSH but with modifications to cater for small libraries. Many terms from LCSH for children's literature are included. Sears List of Subject Headings appears both in electronic version and print version. The CD-ROM version is updated annually while the print version is updated every three years.

The philosophy of Sears's list is based on two principles:

- Theory of Specific Entry
- Theory of Unique Entry

In the theory of Specific Entry, Sears emphasizes the need to choose the most specific entry to describe a document. Thus, soccer will be used to describe a book on football rather than sports.

The second theory, *Theory of Unique Entry* emphasizes the need to choose only one subject heading to describe all documents on the same subject. For example, while the terms and phrases-librarianship, library science and library studies refer to the same subject, only one on these terms and phrases can be used to describe all documents on the same subject at all

times. Other terms and phrases would be referred to the chosen term and phrase. The chosen subject term must be logical, consistent and unique.

Self-Assessment Exercise

Discuss the features of a Sears heading list

3.2 Library of Congress Subject Headings (LCSH)

Library of Congress Subject Headings (LCSH) is a list of subject headings originally developed by the Library of Congress for use on its cataloguing records. The list began toward the end of the 19th century and first published in 1914. Since then, it has become the standard list used by most large general libraries in the United States, as well as by many special libraries and some smaller libraries; it is also used in many libraries around the world.

The machine-readable version is also available on CD-ROM, called CDMARC subjects. LCSH is revised weekly, with new and changing headings incorporated into the Subject Authority file. The weekly updates are published every month in print; the microfiche and the CD-ROM versions are issued every three months and represent an accumulation of recent additions and changes into the main list.

LCSH is essentially a subject authority list; it is a list of terms authorised by the Library of Congress for use in its own subject cataloguing. Libraries using LCSH for subject authority control have relied on the list and follow Library of Congress policies and practices as de facto standards. To use LCSH effectively, it is important to realize its scope: what it contains and what it does not. Its most prominent feature is the set of headings authorized for use as subject access points in bibliographic records.

4.0 Conclusion

Subject headings list require ongoing maintenance. This could be accomplished through a control system called subject authority system which for each term documents the basis for decisions on the term and on what links connect it with other terms.

5.0 Summary

In this unit, you have learnt that a subject heading list is a term (a word or a group of words) denoting a subject under which all material on that subject is entered in a catalogue and that the Sears list of subject heading and the Library of Congress subject headings list are very similar in format and structure.

6.0 Self-Assessment Exercise

Differentiate between the Sears heading list and the Library of Congress Heading list.

7.0 References/Further Reading

Foskett, A.C. (1996). *The Subject Approach to Information*. (5th ed.). London: Library Association.

Rowley, J. (1992). *Organizing Knowledge: An Introduction to Information Retrieval* (2nd ed.). London: Gower.

Rowley, J.E. & Farrow J. (2000). *Organizing Knowledge: An introduction to Managing Access to Information*. (3rd ed.). London: Gower.

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Wynar, B. S. (1992). *Introduction to Cataloging and Classification*. (8th ed.). Englewood, Colorado: Libraries Unlimited.

Unit 2 General Principles of Subject Headings

1.0 Introduction

On the concept of subject headings, the public usage becomes an important determining factor in selecting the terms and the forms of subject headings. The effective approach to effective subject headings attempts to develop a system that adheres to strictly formed principles. This unit enumerates some of these general principles of subject headings.

2.0 Objectives

At the end of this unit, you should be able to:

- discuss the essence of the principles of a subject heading list
- list and explain the general principles of subject headings
- Relate these principles to different subject headings.

3.0 Main Content

3.1 General Principles of Subject Headings

In current subject heading systems, the most important factors evolved over the years are the general principles of subject headings. These are: (1) uniform and unique headings, (2) specific and direct entry, (3) consistency and currency in terminology, and (4) provision of cross-references.

3.1.1 Uniform and Unique Headings

In order to show what a collection or a database has on a given subject, it must adopt a principle of uniform headings; that is, it must bring under one heading all the materials dealing principally or exclusively with that particular subject. This principle is similar to that requiring a uniform heading for a given personal author. If a subject has more than one name (ascorbic acid and vitamin C, for instance), one must be chosen as the heading. In general, it is hoped that the term chosen is unambiguous and familiar to all users of the catalogue.

Similarly, if there are variant spellings of the same terms (e.g. marihuana and marijuana) or different possible forms of the same heading, only one is used as the heading. Examples of variant heading forms might be Air quality versus Air-Quality or Quality of air. One must be chosen, with the others listed as lead-in terms.

The converse of the principle of uniform headings is unique headings; that is, the same term should not be used for more than one subject. If the same term must be used in more than one sense, as is often the case when different disciplines or fields of knowledge are involved, some qualification or classification must be added so that it will be clear to the user which meaning is intended, e.g., Cold and Cold (Disease).

3.1.2 Specific and Direct Entry

The principle of **specific entry** governs both how subject headings are formed (thesaurus construction and maintenance) and how they are assigned to documents (indexing or subject cataloguing). Regarding formulation, the principle requires that a heading be as specific as (in other words no broader than) the topic it is intended to cover. In application, it requires that a work be assigned the most specific heading that represents its subject content. Ideally, the heading should be coextensive with (no broader or narrower than) the subject content of the work.

3.1.3 Consistent and Current Terminology

It follows from what has been said above, particularly regarding the justifications for uniform headings, that the terminology in headings should be both consistent and current. Two elements are particularly important here: **synonymy and changing usage**.

Choices among synonymous terms may require difficult decisions. By principle, common usage prevails when it can be determined. For example, a popular term is preferred to a scientific one in a general library and in standard lists of headings designed for general collections. Of course, the more specialized a library's collection and clientele is, the more specialized its indexing terminology should be. Special libraries, therefore, often develop their own thesauri or make extensive modifications of standard lists.

3.1.4 Cross-References

Three types of cross-references are used in the subject headings structure:

- the see (or USE) reference
- the see *also* (or BT (broader term), NT (narrower term), or RT (related term) reference
- the general reference.

See (or USE) References

To make sure that users who consult the catalogue under different names (or different forms of the name) for a given subject are able to locate material on it, see or USE references are provided to lead them from the terms they have looked under to the authorized heading for the subject in question. These references guide users from terms that are not used as headings to the authorized headings.

See Also (including BT, NT, and RT) References

This type of reference connects headings that are related in some way, either hierarchically or otherwise. Unlike the see reference, a see also reference relates headings that are all used as entries in the catalogue. The headings involved may overlap in meaning but are not fully synonymous – if they were, they would not both be used in the catalogue. By connecting related headings, the see also (RT, for related term) reference calls the user's attention to material related to his or her interest. By linking hierarchically related headings, see also (BT, for broader term, and NT, for narrower term) references restore some of the advantages of the classed catalogue in an alphabetical specific catalogue, in that the user is guided to specific branches or aspects of a subject.

General Reference

While a specific reference directs the user from the term being consulted to another individual heading, a general reference directs the user to a group or category of headings instead of to individual members of the group or category. An obvious advantage of using general reference is economy of space; they obviate the need to make long lists of specific references.

Self-Assessment Exercise

What are the types of cross-references used in the subject headings structure?

4.0 Conclusion

In this unit, you have learnt about the general principles of subject headings.

5.0 Summary

You have learnt that the general principles of subject headings are:

- Uniform and Unique Headings
- Specific and Direct Entry
- Consistency and Current terminology
- Cross- References.

6.0 Self-Assessment Exercise

List and discuss the general principles of subject headings.

7.0 References/Further Reading

Chan, Lois Mai (1994). *Cataloguing and Classification: An Introduction*. New York: McGraw Hill Inc.

Foskett, A.C. (1996). *The Subject Approach to Information*. (5th ed.). London: Library Association.

Rowley, J. (1992). *Organizing Knowledge: An Introduction to Information Retrieval*. (2nd ed.). London: Gower.

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Unit 3 Thesaurus and Practice in Thesaurus Construction

1.0 Introduction

In this unit, we shall discuss a few basic concepts of a thesaurus as one of the methods of subject access system. This unit will introduce you to the practice of a thesaurus construction

2.0 Objectives

At the end of this unit, you should be able to:

- explain the term thesaurus
- explain terms “descriptors” and “non-descriptors”
- discuss the relationships in thesaurus
- differentiate between a thesaurus and subject heading list
- describe the process of a thesaurus construction.

3.0 Main Content

3.1 Thesaurus

A thesaurus is a compilation of words; it is also a form of an authority list. It is similar to a subject heading list because it is a ‘compilation’ of words and phrases showing synonyms, hierarchy and other relationships and dependencies, the function of which is to provide a standardized vocabulary for information storage and retrieval. Just like subject headings list, it exercises control over subject terms and displays the relationship amongst terms which will inform the reader of other search terms that can be used in searching. Unlike the subject headings list, which are generally aimed at all types of searches; the thesaurus is aimed at a specialized collection. Thus, it is limited in subject scope.

The thesaurus consists of both descriptors and non-descriptors. The descriptors are terms that can be used to describe the subjects or concepts in a document while the non-descriptors cannot be used as search terms, but helps the searcher to have a broader search, nevertheless as the searcher would be directed to the appropriate descriptor. For each descriptor listed, there is a sort of relationship between the descriptor and other words. Generally, the descriptors are single terms or what is called uni-terms but occasionally they could be multi-terms. Each term that is used as a descriptor or an index term is unambiguous.

3.2 Relationship in a Thesaurus

3.2.1 Hierarchical Relationship

There are some descriptors that are used to index subject catalogues but they have hierarchical relationships.

Broader Term (BT): This involves directing the user to a broader term of the descriptor being searched. For example:

- Journalism
- BT Press
- Media

Narrower Term (NT): This is used to direct the searcher to other narrower terms of the descriptor chosen.

- Press
- NT Journalism
- Broadcasting
- Broadcasting” and “journalism” are narrower terms to Press.

These terms (BT and NT) have hierarchical relationships to the descriptor under which they are indicated. This enables the searcher to look for additional information that might aid the search. The use of (BT and NT) allows a searcher to expand his/her own search.

3.2.2 Preferential Relationship

This type of relationship is more or less preferential. The searcher is directed from a term that cannot be used to the one that is allowed to be used. Examples of these relationships are USE and UF (Used for).

USE precedes word that can be used as a descriptor. There are terms that are listed which cannot be used but can only use the descriptor under which they are listed.

- Librarianship
- USE Library Science
- Library Science
- UF Librarianship.

3.2.3 Affinitive Relationship

There are terms that have no hierarchical relationship but the relationships between such terms are coordinate. These terms are designated as related terms.

Related Terms (RT) are used to connect terms that are related (the two terms are descriptors). For example:

- Media
- RT Press
- Press
- RT Media.

These terms are only indicated in the thesaurus, they will not be found in the in the catalogue or in the index.

Besides these three common relationships, there are some others that are regularly used in a thesaurus depending on the complexity of the subject or the users of the system.

These include:

- GT Generic To
- SA See Also
- TT Top Term in Hierarchy
- XT Overlapping Term
- AT Associated Term
- CT Coordinate Term
- ST Synonymous Term
- SU See Under.

The use of scope notes (SN) is also prevalent in a thesaurus as it provides explanations on the proper use of the terms in the thesaurus.

Self-Assessment Exercise

Describe the relationships stated in a thesaurus.

3.3 Practices in Thesaurus Construction

The process of thesaurus construction involves the following steps:

- The coverage of the subject field must be determined, so also is the depth of the subject to be covered. It is advisable to consult an encyclopedia in order to gauge the breadth of the subject.
- The coverage of the subject field can be categorised into two classes: these are the core subject field and the peripheral subject field. A thesaurus compilation should be restricted to the core area of the subject field.
- There is need to identify the main subject areas on the field. It is important to go through indexes, abstracts, dictionaries, encyclopedias etc to ensure that all relevant terms have been selected.
- This stage involves selecting the synonyms, related terms and other variants of the terms selected earlier. This might be obtained from existing thesauri or classification schemes that cover the subject area or subject fields.
- The term can be recorded on a 3 by 5 slip. Each slip would show the index term BT, NT, RT, USE and UF (whichever is applicable) and the source from which the term was located. This slip is made in duplicate copies; one set would be filed in a straightforward alphabetical order while the order sets of slips would be filed according to the major subject categories.

- The thesaurus should be tested to see if it works. Checks should be made on relationships. At this stage, the thesaurus may be edited as appropriate. The thesaurus should be revised regularly to keep pace with new terminologies on the subject.

4.0 Conclusion

This unit has highlighted thesaurus as a compilation of words and as a form of an authority list. Unlike the subject headings list, which are generally aimed at all types of searches; the thesaurus is aimed at a specialized collection and is limited in subject scope.

5.0 Summary

In this unit, you have learnt the meaning of the term “thesaurus” and its relationships. We have also considered the practice of thesaurus construction.

6.0 Self-Assessment Exercise

1. What is a thesaurus?
2. Describe the process of a thesaurus construction.

7.0 References/Further Reading

Aina, L. O. (2004). *Library and Information Science Text for Africa*. Nigeria: Third World Information Services Ltd.

Chowdhury (1999). *Introduction to Modern Information Retrieval*. London: Facet Publishing.