

Principles of subject indexing – conclusions from a review by the German expert panel for subject cataloguing



# Subject cataloguing in Germany, Austria and Switzerland ("D-A-CH")

Libraries and library networks do subject indexing cooperatively

Organisation: political board for standardisation in libraries (Standardisierungsaussschuss, STA)

> Expert panel for subject cataloguing (representatives from all library networks)

Common rules: "Regeln für den Schlagwortkatalog (RSWK)"

Common authority records: Integrated Authority File (GND) (until 2012: Subject Heading Authority File, SWD)



# Common rules for subject cataloguing: Regeln für den Schlagwortkatalog – **RSWK**

History: Implementation of data processing in cataloguing in Bavaria in the 1980s.

Early partners: Deutsche Nationalbibliothek, Bayerische Staatsbibliothek, university libraries in Bavaria

#### **Editions:**

- First edition: 1986
- 3rd edition 1998: loose-leaf-edition with 7 supplements
- Electronical edition 2010 based on the 7th supplement urn:nbn:de:101-2012053100



# Regeln für den Schlagwortkatalog – **RSWK** (Rules for subject cataloguing)

RSWK is based on the German standards for thesauri

Rules for all kinds of entities (persons, corporate bodies, conferences, places, works, topical headings, biological nomenclature, events etc.)

Instructions for cataloguing the form of work Instructions for cataloguing the temporal aspect

Single subject headings are put together while indexing; this string represents the content of the document



A very flexible system (no prefabricated strings as in LCSH)

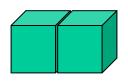


# Regeln für den Schlagwortkatalog – **RSWK** (Rules for subject cataloguing)

Difference between RSWK and LCSH

#### LCSH:

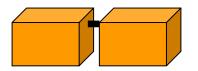
Academic libraries—Collection development



Big, prefabricated building block of several tightly connected elements

#### **RSWK:**

Wissenschaftliche Bibliothek; Bestandsaufbau Academic libraries; Collection development



Several small building blocks are put together during indexing according to the content of the resource



## RSWK and the authority file (SWD, GND)

- Simultaneous to the development of RSWK:
  development of a common authority file for subject headings
  called SWD
- SWD: authority records are created when needed but the principles of a thesaurus are observed
- Since 2012: GND (Gemeinsame Normdatei = Integrated Authority File) instead of SWD

GND (and former SWD) is a hybrid file:

A name authority file for names like persons, corporate bodies, places etc.

A thesaurus for topical headings



#### Some information about GND

#### Before GND:

**Different authority files** for entities acting as agents used in **descriptive cataloguing**: persons – name authority file for persons (PND) corporate bodies – name authority file for corporate bodies (GKD)

Subject authority file for all entities used as subjects in subject cataloguing (SWD)



Duplicate records for the same entities in different authority files created by different rules which lead to different access points



#### Some information about GND

#### Aims of GND:

Only one record for the same entity (no parallel authority records for descriptive and subject cataloguing any longer)

#### Consequences:

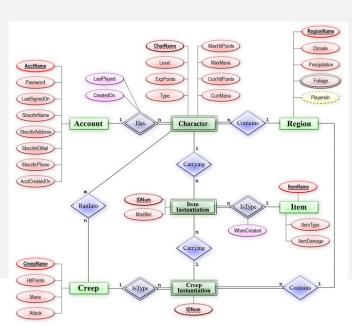
- Same rules for descriptive and subject cataloguing are needed for such entities
   entities affected: entities of group 2 of FRBR (persons, corporate bodies including places, families)
   entities of group 1 of FRBR (work, expression etc.)
   common rules since 2014/2015: RDA
- Same authority records for places acting as agent needed in descriptive cataloguing and the geographical space needed in subject cataloguing (deviation from FRBR)

Modern data model



## GND - data model

- Entity-Relationship-Model (ERM)
- Entities have attributes and relationships to other entities
- The types of relationship are specified by codes
- Modular data structure
- GND itself is a semantic web





## Assignment to investigate what a forwardlooking subject indexing system might look like

Due to many changes the common rules for subject cataloguing RSWK have to be revised.

The political board for standardisation (STA) charged the expert panel for subject cataloguing to investigate how subject indexing should be done in a forward-looking way.



#### Expert panel:

- Lively discussions of today's conditions
- Intensive study of different systems



## Access to content in the catalogue

## Past:

- Large libraries with many items in closed stacks accessible only through the catalogue
- Information about the content only written on the catalogue card
- Subject headings (or numbers from classification scheme)
  were the only window to the content of a resource
  (Library catalogues could be used only in the library)





## Access to content in the catalogue

#### Today:

- Keywords from the catalogue record (online catalogues) accessible from all over the world)
- Keywords from digitalised table of contents or from full-text
- Subject Headings: assigned intellectually or by a machine
- Numbers of classification schemes
- Presentation of the catalogue: eg. facettes for searching, drill down menues
- Index lists
- Hyperlinks to other (knowledge organisation) systems



## Subject indexing with subject headings

The natural language is used

Advantage: metadata are directly accessible in retrieval whereas classification numbers first need to be translated into natural language

Everything mentioned on the slide before can be used for verbal access to the content of a resource

-> this may lead to large lists of results with only minimal relevance

# Challenge:

- relevant lists of results
- well structured lists of results



- Wikipedia
- Indexing system of a Swiss Television company
- Indexing system of a picture library / archive
- Library of Congress Subject Headings (LCSH)
- Subject indexing by the service provider for public libraries
- Principles of a resource discovery system

Evaluated according to the user tasks ("find", "identify", "select", "obtain") of the Functional Requirements for Bibliographic Records

Documentation: Minutes from the Meeting of the Expert Panel, pp. 3-8 (in German only)



#### Wikipedia

Not a knowledge organisation system like a classification scheme or a thesaurus but with interesting features for giving guidance to content:

- Hyperlinks (ca. 25 per article)
- System of categories
- Multilingual access: articles in different languages with the same topic are linked together
- Well suited for the semantic web (DBPedia, RDF as standard)



## Indexing system of a Swiss television company

- Indexing according special rules for Swiss television companies
- A detailed abstract is created
- Controlled vocabulary for places and persons
- A database is used
- Target audience: only professionals



## Indexing system of a picture library / archive

- Several categories enabling to find the object (artist, date of manufacture, location, title or name, description of the motive etc.)
- Indexing according to special rules (MIDAS)
  - very well structured: 2200 different fields
  - 18 different controlled vocabularies including a classification scheme
  - temporal search is well developed



## Library of Congress Subject Headings (LCSH)

- Rules and experts for establishing headings (it is an elaborated procedure; it takes time to get headings for new topics)
- Precombination (with elements of precoordination = free floating) subdivisions)
- Often easy to understand due to use of conjunctions and prepositions (eg: "Cows on postage stamps")
- References (synonyms) and access points are not well established



#### Subject indexing by the service provider for public libraries

- Four different classification schemes for public libraries are being used
- No subject indexing with subject headings
- Alphabetical lists of "Circles of Interest"; the appellations are regularly revised and adapted by a team of experts



#### **Discovery systems**

A retrieval tool, not a knowledge organisation system like a classification scheme or a thesaurus, widespread and a basic understanding is useful

- Present different sources of records under one surface
- But the various records from different sources are not mapped on each other, they are not normalised; therefore the results depend strongly on the query
- Although they are more user-friendly than OPACS only experts can fully exploit their potential



The systems are very different

- concerning the used indexing methods
- concerning the depth of indexing
- concerning the target audience
- concerning the technical implementation



Is it possible to find common principles?

Concerning the theoretical concept

Concerning economical aspects



Common principle concerning the theoretical concept

#### Well structured data lead to good results

Well structured data = quality indexing (different aspects of the content can be expressed)

Well structured data = basis for a satisfying retrieval (different facettes can be offered; multiple possibilities for presentation)

Well structured data = cannot be generated by a machine alone



Requirements for well structured data

Binding rules

Consistent application of the rules

If the data are used by other communities or in other applications: Usage of common standards is highly recommended

An adequate data model



Common principles concerning economical efficiency

Minimizing production costs by cooperation

- Common rules
- Metadata exchange
- Providing technical interoperability (by using common standards)

Minimizing production costs by using automatical processes



# Summarising the review in 10 guidelines

The Expert Panel summarised the results in 10 guidelines how subject indexing should be done in D-A-CH in a forward-looking way:

Guidelines 1-4: General aspects (aims, scope, target audience, methods)

Guidelines 5-7: Statements concerning a common standard for subject indexing

Guidelines 8-10: Statements concerning the Integrated Authority File (GND) as the most essential tool

Complete guidelines, see <u>Scheven</u>, <u>2015</u>, slides 24-28 (in German only)



# Thank you for your attention!

Esther Scheven, Deutsche Nationalbibliothek e.scheven@dnb.de