DDC in Germany Recent Developments and Current Activities

Michael Panzer

Department of Information Management University of Applied Sciences Cologne

January 20, 2007



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DDC in Germany









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Image: A matrix

• Integration of heterogeneously indexed collections: CrissCross

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- Integration of heterogeneously indexed collections: CrissCross
- Unified strategy in handling subject indexing (and other) metadata (SWD, DDC, ...)

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- Unified strategy in handling subject indexing (and other) metadata (SWD, DDC, ...)
- Making metadata accessible and useful to the end user: "Recherche-Tool"

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- Dealing with online publications: dual language approach to Dewey in Germany: *MelvilClass*

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MACS

The "Multilingual ACcess to Subjects" project tries to link three independent indexing vocabularies (SWD, LCSH, RAMEAU) in a federative manner

Paradigms:

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MACS

The "Multilingual ACcess to Subjects" project tries to link three independent indexing vocabularies (SWD, LCSH, RAMEAU) in a federative manner

Paradigms:

• Full equivalence

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MACS

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Paradigms:

- Full equivalence
- Symmetry of the linking relations

MACS

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Paradigms:

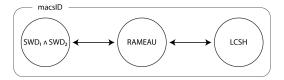
- Full equivalence
- Symmetry of the linking relations
- Formation of semantic clusters

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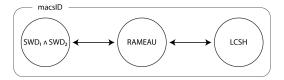
Paradigms:

- Full equivalence
- Symmetry of the linking relations
- Formation of semantic clusters
- Abstraction of individual thesaurus structure



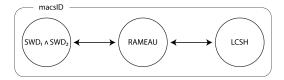
Problems:

• Structural differences are not taken into account



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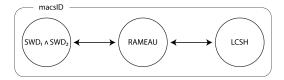
- Structural differences are not taken into account
- Separation from the source data



Problems:

- Structural differences are not taken into account
- Separation from the source data
- 1-to-many equivalences break the symmetry principle

Vocabulary 1	\leftrightarrow	Vocabulary 2
Object oriented data base	\leftrightarrow	Object orientation \wedge Data base



Problems:

- Structural differences are not taken into account
- Separation from the source data
- 1-to-many equivalences break the symmetry principle

Source vocabulary	\mapsto	Target vocabulary
Object oriented data base	\mapsto	Object orientation \wedge Data base

SWD

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SWD

• Indexing standard for German speaking countries

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SWD

- Indexing standard for German speaking countries
- Subject headings from all subject areas

SWD

- Indexing standard for German speaking countries
- Subject headings from all subject areas
- Updated daily

SWD

- Indexing standard for German speaking countries
- Subject headings from all subject areas
- Updated daily
- Mappings to other thesauri

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DDC German

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DDC German

• since 2005

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SWD

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DDC German

- since 2005
- SWD-terms: subject access to Dewey classified documents

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CrissCross aims at expanding the access vocabulary of the DDC by mapping SWD topical terms and eventually, using MACS data, English (LCSH) and French (RAMEAU) subject headings

Paradigms:

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Paradigms:

• DDC as language independent backbone

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Paradigms:

- DDC as language independent backbone
- Focused on improving retrieval

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Paradigms:

- DDC as language independent backbone
- Focused on improving retrieval
- Build-up of localized structures

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Image: A matrix

CrissCross aims at expanding the access vocabulary of the DDC by mapping SWD topical terms and eventually, using MACS data, English (LCSH) and French (RAMEAU) subject headings

Paradigms:

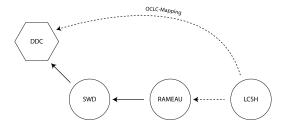
- DDC as language independent backbone
- Focused on improving retrieval
- Build-up of localized structures

Interoperability by switching through DDC classes:

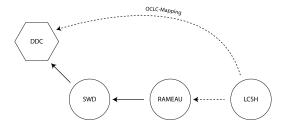
 $x \mapsto DDC \mapsto (y_1, z_1); \ldots; (y_n, z_n)$

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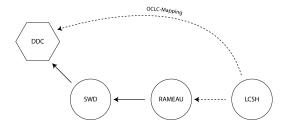
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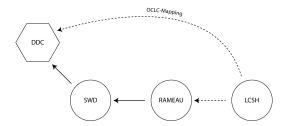
• Expansion of MAB to contain the mappings



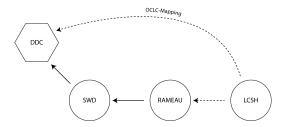
- Expansion of MAB to contain the mappings
- Structure of field 816



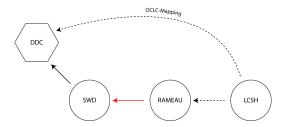
- Expansion of MAB to contain the mappings
- Structure of field 816
- Adaption of DDC web client MelvilClass



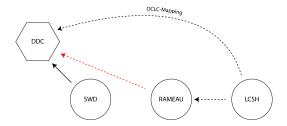
- Expansion of MAB to contain the mappings
- Structure of field 816
- Adaption of DDC web client MelvilClass
- Precision ('Determination') of the mappings as quality indicator



- Expansion of MAB to contain the mappings
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- Linking of MACS tuples either explicitly oder derived



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CrissCross Cookbook



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CrissCross Cookbook

MelvilClass / Klassen: 794.122 - Opera Datei Bearbeiten Ansicht Lesezeichen Widgets Extras Hilfe	- 8
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Michael Preuss FH Köln - CrissCross	MelvilClass The dot in 025.431
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DDC in Germany

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CrissCross Cookbook

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• Mapping as "framing" of the semantic boundary of the subject term

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- DDC as metalanguage providing context for the framing of the subject term

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- Referential vs. ontological relations

- Mapping as "framing" of the semantic boundary of the subject term
- DDC as metalanguage providing context for the framing of the subject term
- Referential vs. ontological relations

Example: s	Ropes Course	
302.3	Social interaction within groups	referential
371.384	Outdoor education	referential
616.8916	Mental and activity therapies	referential
796.5	Outdoor life	ontological (isA)

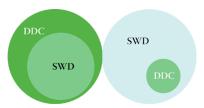
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Extent of correspondence between terms

General question: What is the expected quality of retrieval results that can be obtained on the basis of this mapping?

3

The DDC Class serves as semantic boundary to the SWD concept (or vice versa: the DDC class is completely covered by the SWD concept) and the SWD term essentially approximates the whole of the DDC class.



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Extent of correspondence between terms

General question: What is the expected quality of retrieval results that can be obtained on the basis of this mapping?

2

The DDC Class serves as semantic boundary to the SWD concept, but the SWD term does not approximate the whole of the DDC class.



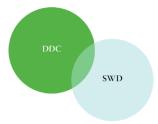
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Extent of correspondence between terms

General question: What is the expected quality of retrieval results that can be obtained on the basis of this mapping?

1

The core/bulk of the concept is not covered by any single DDC class. (It might be covered by many complementary '1' concepts.)



• "Merge without merging": web services, URIs and APIs

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- "Merge without merging": web services, URIs and APIs
- Enriching traditional subject indexing tools (SWD)

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Image: Image:

- "Merge without merging": web services, URIs and APIs
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- DDC as backdrop/cornerstone of all subject indexing activities