

Art and Architecture Thesaurus SKOSified

ATHENA WP4 SKOS Workshop

Rome, ICCU, 16 July 2009

Axel Vitzthum

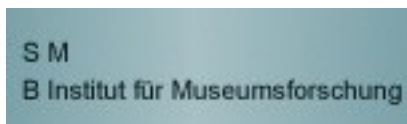
digiCULT Museen Schleswig-Holstein



Translation the AAT to German using the xTree Vocabulary Tool.

Partners:

- Institut für Museumsforschung, Berlin
- Bildarchiv Foto Marburg Deutsches Dokumentationszentrum für Kunstgeschichte
- digiCULT Museen Schleswig-Holstein
- Zuse Institut Berlin
- Getty Reserch



working AAT

1st step, Juni 2009: Import 17000 Subjects + 79000 Terms into xTree Ver 0.86

2nd step, August – October 2009: translation the „Visual and Verbal Communication“ Tree

- Subjects: 2666
- Hierarchical Relations: 2774 (inside VaVC-Tree)
- Terms:
 - en: 9828
 - en-US: 427
 - en-GB: 245
 - de: 32


Research














Research Home > Conducting Research > Art & Architecture Thesaurus > Hierarchy Display

Art & Architecture Thesaurus® Online
Hierarchy Display

[New Search](#) [Previous Page](#)

[View Selected Records](#) [Clear All](#)

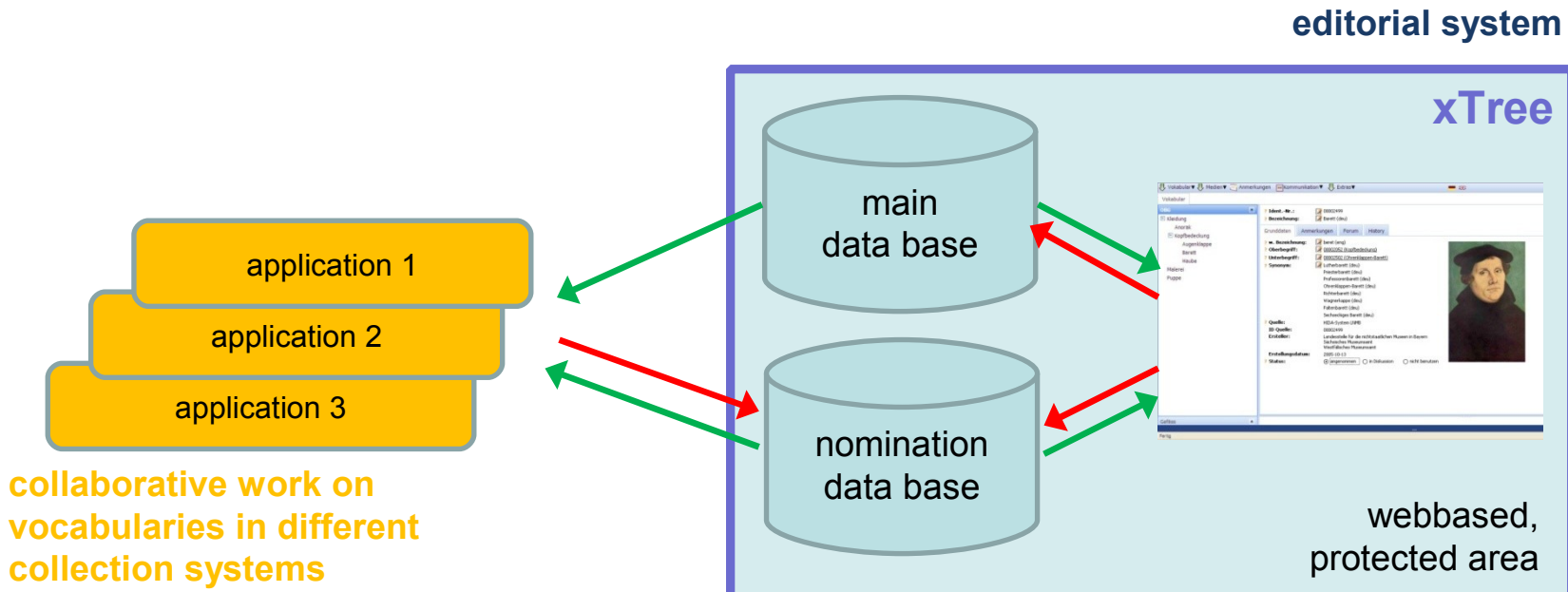
Click the  icon to view the hierarchy.
Check the boxes to view multiple records at once.

-  Top of the AAT hierarchies
-  Objects Facet
-  Visual and Verbal Communication 
-  Visual Works (Hierarchy Name)
-  <visual works (Guide Term)>
-  Exchange Media
- coupons
-  money
-  negotiable instruments
-  stamps (exchange media)
-  tickets
-  tokens
- Information Forms (Hierarchy Name)
-  <information forms (Guide Term)>

what is xTree?

xTree

- is a central, web-based tool to administrate vocabularies (e.g. thesauri, classifications, lists, taxonomies, folksonomies)
- is build to be mostly compartible with Standards/Formats like ANSI/NISO Z39.19-2005, BS8723-2/5, SKOS, DD8723 and museumvok 0.2
- has a multi-lingual Datamodel
- the editorial system is usable with common web-browser software (e.g. Firefox 3, Internet Explorer 8)
- is easy to handle (e.g. drag and drop)
- ensures interoperability between different applications
- uses museumvok-ws 0.5 (xTree >= Ver. 0.86) as exchanging mechanism
 - output scheme: skosified museumvok 0.2



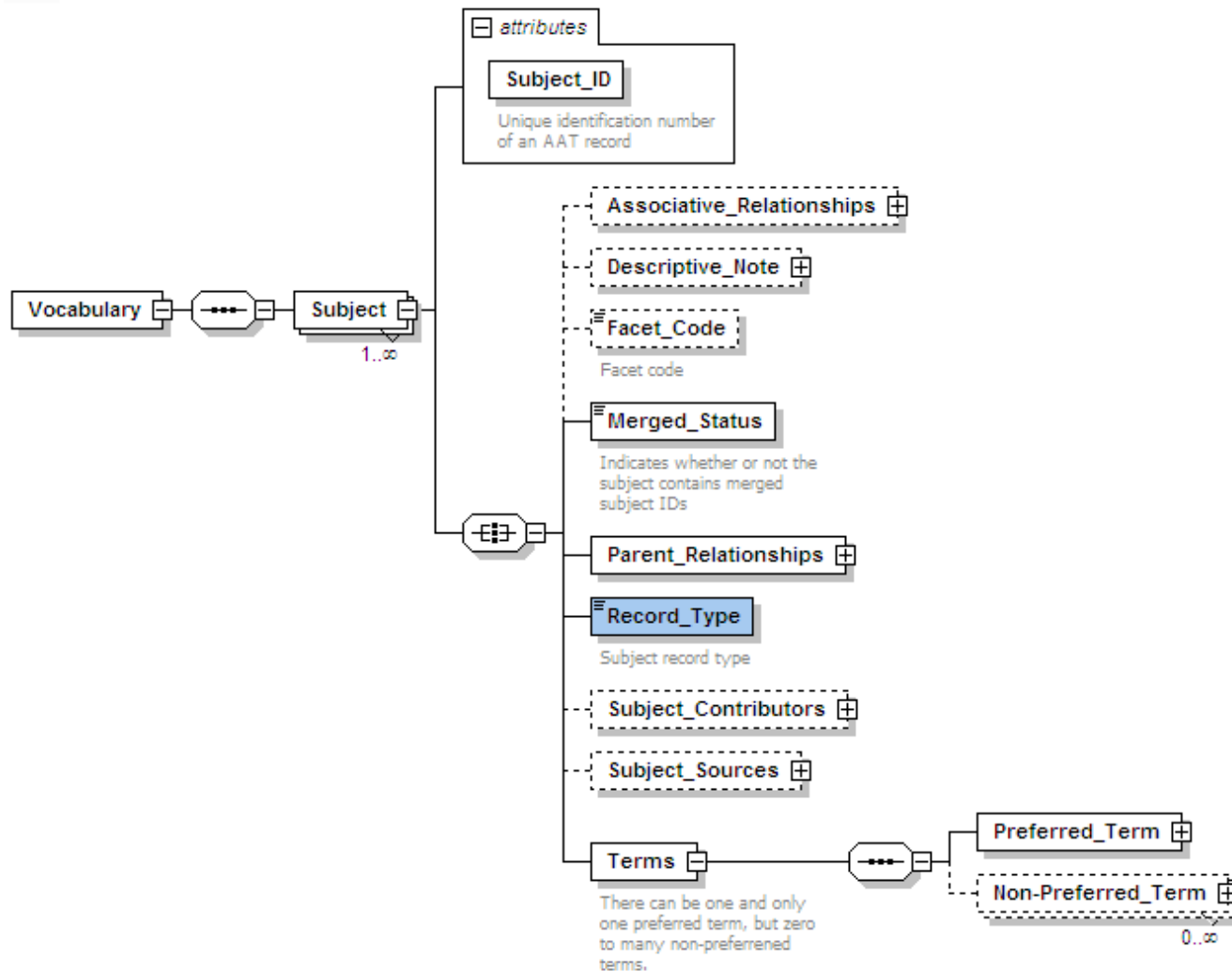
digiCULT: more than 40 used Vocabularies in Tree (most still in Ver. 0.5)

	semantic mapping
Hessische Systematik (subject group)	Schlagwortnormdatei (SWD, by Dt. Nationalbib.)
ikonographie	ICONCLASS, SWD
Material	SWD
Technique	SWD
Style	SWD
Medicine	Züricher Systematik
Places	SWD, TGN
Objectworktype Archeology	-
Material Archeology	-
Technique Archeology	-
Mineral systematic	Strunz Classification
Geological eras	UNESCO International Stratigraphic Chart
Meteoritical systematic	-
digicult Artists	SWD, ULAN
digicult Botanists	SWD

Motivation xTree

- create collaborative knowledge
- share Vocabulary Items in XML between software applications using Webservice and REST
- Connect Content/Metadata to Concepts/Terms (e.g. museumdat to museumvok)
- using SKOS/RDF to transport knowledge to Semantic Web
- Mapping different concept schemes together (VMF, skos:mappingRelation)

Import AAT to xTree: AATGetSubject.xsd



xTree: Vokabulary Items / Terms

XTREE - Mozilla Firefox

http://xtree.digicult-museen.de/

Vokabular Medien Quellen Extras abmelden

Willkommen Vokabular AAT

Tree Suche Liste

extra items (en) (ID: aat00000002)

Visual and Verbal Communication (en) (ID: 3002645)

Exchange Media (en) (ID: 300037221)

coupons (en) (ID: 300191365)

money (en) (ID: 300037316)

fractional currency (en) (ID: 300193415)

(money by form (en) (ID: 300264712))

bar money (en) (ID: 300265383)

bell money (en) (ID: 300264711)

blade money (en) (ID: 300265293)

coins (money) (en) (ID: 300037222)

(coins by form or technique (en) (ID: 300037222))

(coins by function (en) (ID: 300037222))

(coins by origin (en) (ID: 300037222))

(Asian coins (en) (ID: 30019191))

(Early Western World coins (en) (ID: 300037222))

(Islamic coins (en) (ID: 300037222))

dinars (en) (ID: 300037297)

dirhams (en) (ID: 300037258)

(Later Western World coins (en) (ID: 300037222))

(Oceanic coins (en) (ID: 300193415))

gong money (en) (ID: 300264715)

Katanga crosses (en) (ID: 300263937)

Kissi pennies (en) (ID: 300263938)

knife money (en) (ID: 300264716)

? Ident-Nr.: 300037297

? Bezeichnung: dinars (en)

? Typ: Konzept

Grunddaten Relationen Mappings Anmerkungen Forum

? Ident-Nr.: 300037297

? Typ: Kategorie Konzept Hierarchienname Node Label

? Bezeichnung: dinars Englisch Rolle: bevorzugt Art: Unbestimmt Entfernen

Quellen (3)

dinar Englisch Rolle: alternativ Art: Unbestimmt Entfernen

Quellen (1)

Weitere Bezeichnung

? URI: ---

? Quelle:

? ID Quelle:

? Ersteller:

? Erstellungsdatum: Donnerstag, 01.01.1970, 01:00:00

? letzte Änderung:

? Status: angenommen vorgeschlagen veraltet

? Notation:

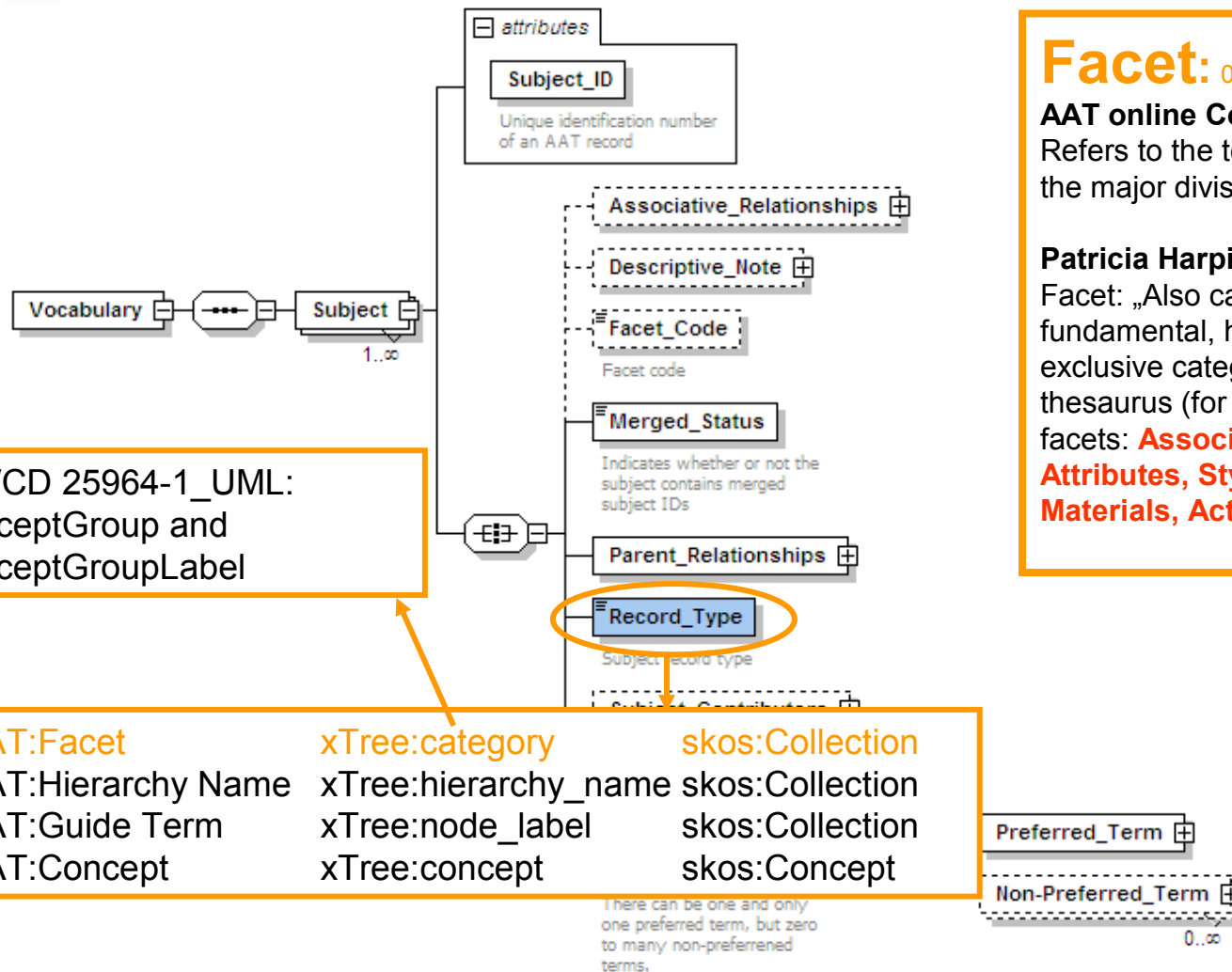
Fertig

zotero

the AAT-data is structured in four types (Concept, Facet, Guide Term, Hierarchy Name)

Import AAT to xTree: Record_Type

(Using AATGetSubject.xsd)



ISO/CD 25964-1_UML:
ConceptGroup and
ConceptGroupLabel

AAT:Facet	xTree:category	skos:Collection
AAT:Hierarchy Name	xTree:hierarchy_name	skos:Collection
AAT:Guide Term	xTree:node_label	skos:Collection
AAT:Concept	xTree:concept	skos:Concept

Facet: 0 in VaVC

AAT online Code Lookup:

Refers to the top of a facet, which is one of the major divisions of the AAT.

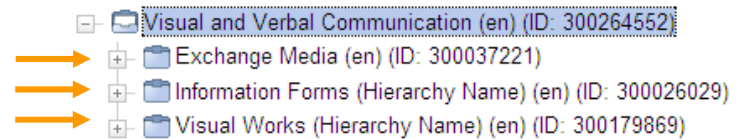
Patricia Harping:

Facet: „Also called a faceted display. A fundamental, homogeneous, and mutually exclusive category of information in a thesaurus (for example, the AAT has seven facets: **Associated Concepts, Physical Attributes, Styles and Periods, Agents, Materials, Activities, Objects**).“

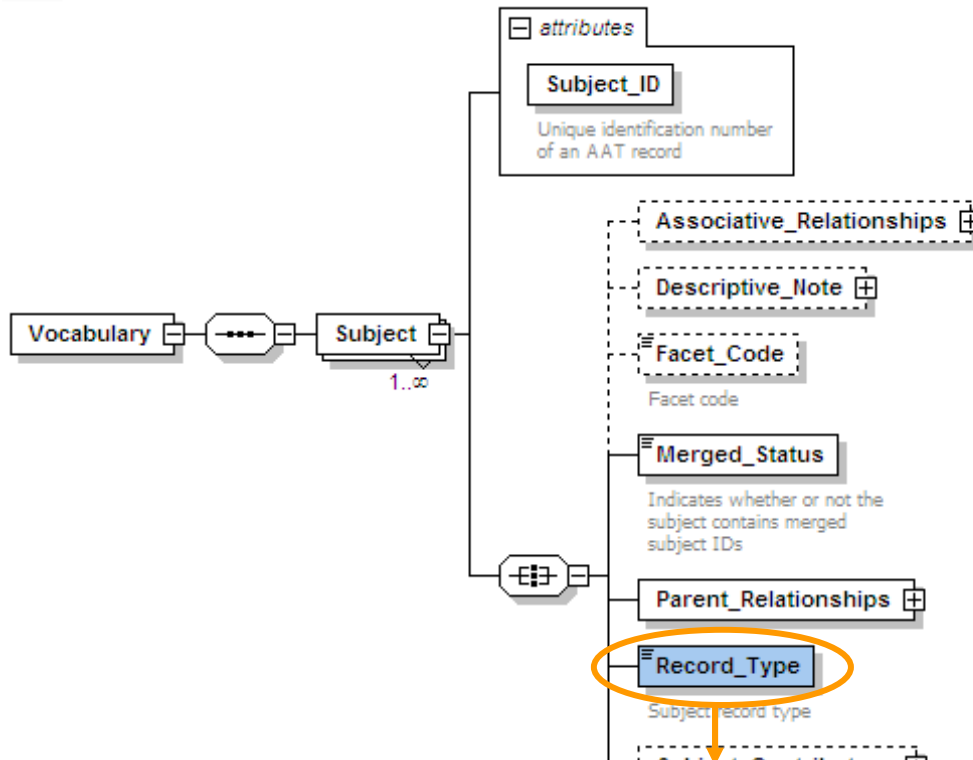
There can be one and only one preferred term, but zero to many non-preferred terms.

Import AAT to xTree: Record_Type

Using AATGetSubject.xsd

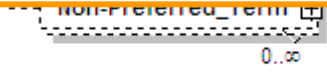


Hierarchy Name 3 in VaVC
AAT online Code Lookup:
 Refers to the top of a hierarchy. The hierarchy name is generally not used for indexing or cataloguing



AAT:Facet	xTree:category	skos:Collection
AAT:Hierarchy Name	xTree:hierarchy_name	skos:Collection
AAT:Guide Term	xTree:node_label	skos:Collection
AAT:Concept	xTree:concept	skos:Concept

There can be one and only one preferred term, but zero to many non-preferred terms.

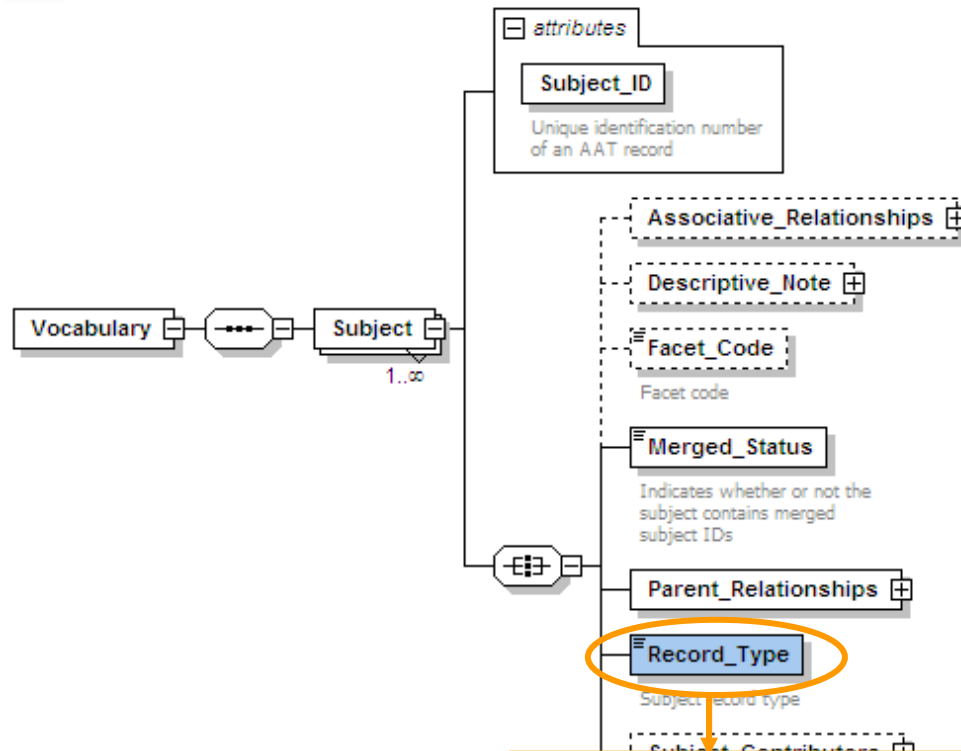


Import AAT to xTree: Record_Type

Guide Term 175 in VaVC

Patricia Harping:

Also called a **node label**. A record represented by a term or phrase that is created as a hierarchical level to provide order and structure to thesauri by grouping narrower terms according to a given logic. Guide terms are not used for indexing and are often enclosed in angled brackets or otherwise distinguished from other terms in displays (for example, <photographs by form>).



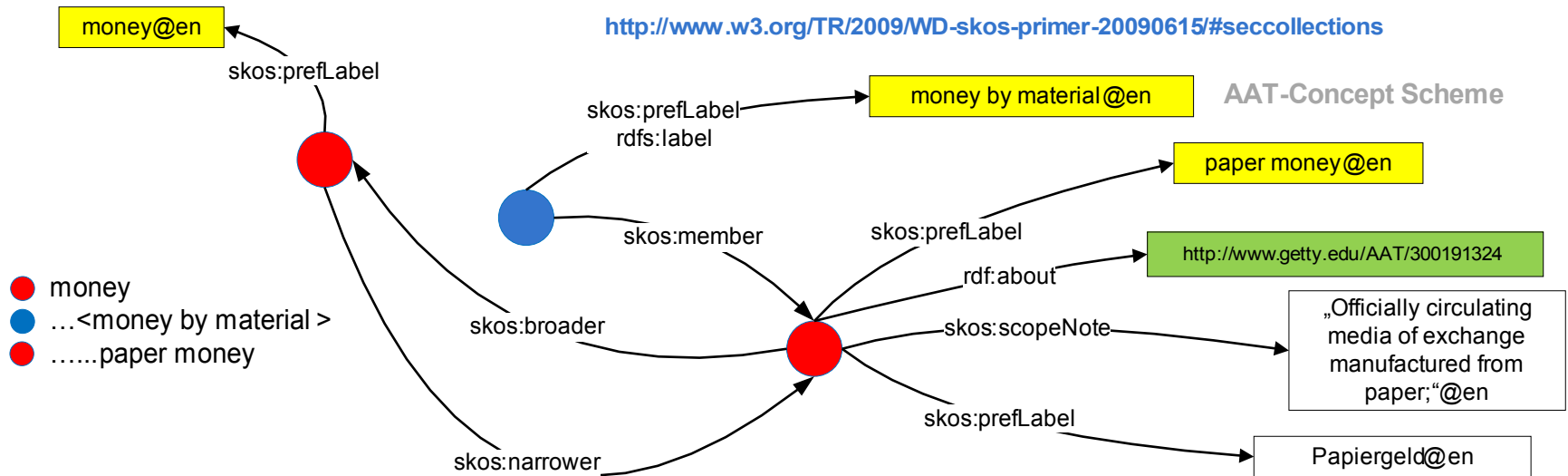
AAT:Facet	xTree:category	skos:Collection
AAT:Hierarchy Name	xTree:hierarchy_name	skos:Collection
AAT:Guide Term	xTree:node_label	skos:Collection
AAT:Concept	xTree:concept	skos:Concept

There can be one and only one preferred term, but zero to many non-preferred terms.

0..∞

Graph Concept / Collection

<http://www.w3.org/TR/2009/WD-skos-primer-20090615/#seccollections>



xTree: Vocabulary Items / Terms

The screenshot shows the xTree web application in Mozilla Firefox. The browser address bar displays <http://xtree.digicult-museen.de/>. The application interface includes a navigation menu with options like 'Vokabular', 'Medien', 'Quellen', and 'Extras'. The main content area is divided into a tree view on the left and a detailed view on the right.

The tree view on the left shows a hierarchy of items, with 'dinars (en) (ID: 300037297)' selected. The detailed view on the right shows the following information:

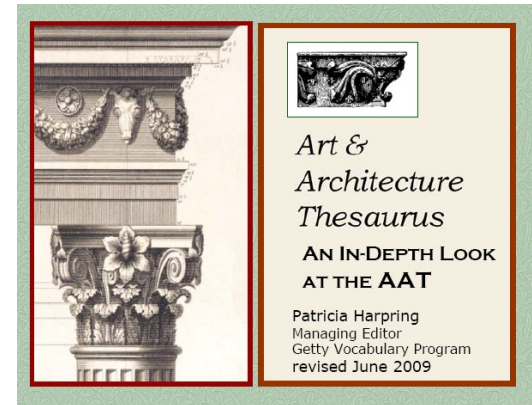
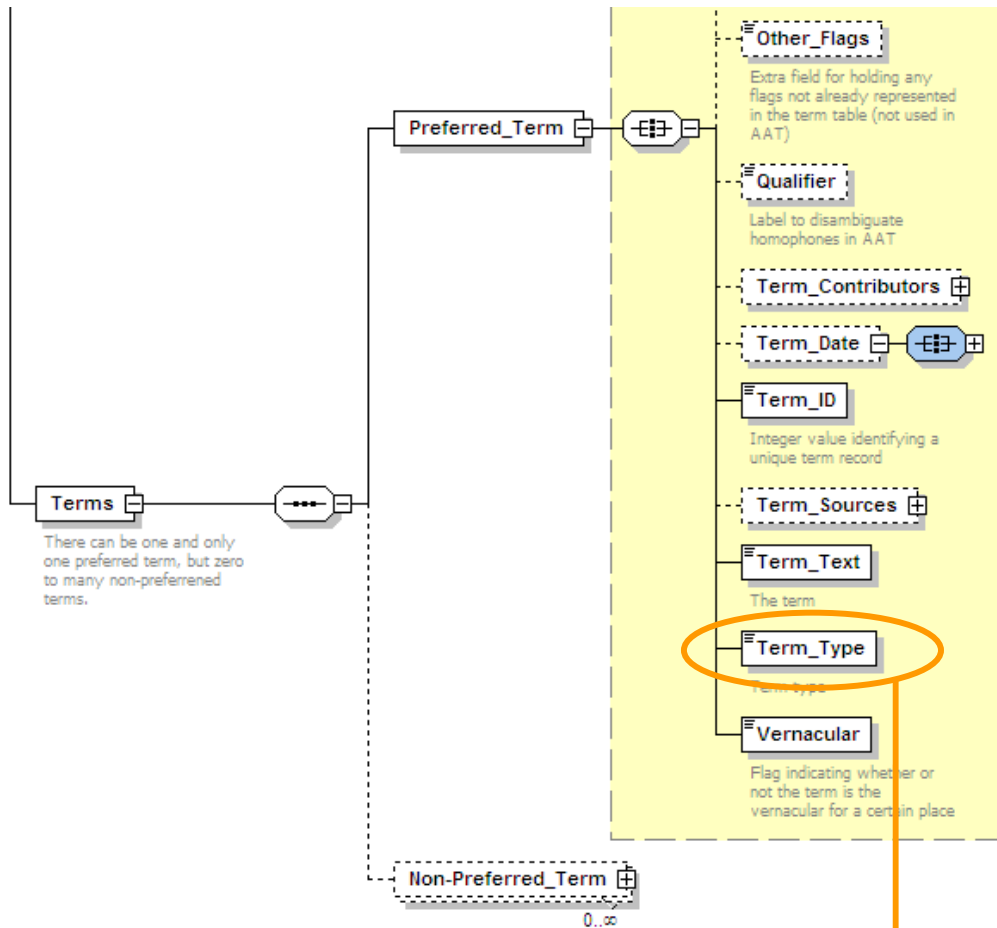
- Ident-Nr.:** 300037297
- Bezeichnung:** dinars (en)
- Typ:** Konzept

The 'Grunddaten' tab is active, showing the following details:

- Ident-Nr.:** 300037297
- Typ:** Kategorie **Konzept** Hierarchienname Node Label
- Bezeichnung:** dinars (English) **Term_type** **Vernacular**
Rolle: **bevorzugt** An: Unbestimmt [Entfernen](#)
- Quellen (3):** dinar (English) Rolle: **alternativ** An: Unbestimmt [Entfernen](#)
- Quellen (1):** [Weitere Bezeichnung](#)
- URI:** ---
- Quelle:**
- ID Quelle:**
- Ersteller:**
- Erstellungsdatum:** Donnerstag, 01.01.1970, 01:00:00
- letzte Änderung:** 0000-00-00 00:00:00
- Status:** **angenommen** vorgeschlagen veraltet
- Notation:**

**Vernacular: Mapping AAT > xTree
Vernacular > 003 (Regionalvarietät)
Other > 006 (Andere)
Undetermined > 007 (Unbestimmt)**

Import AAT to xTree: Term_Type

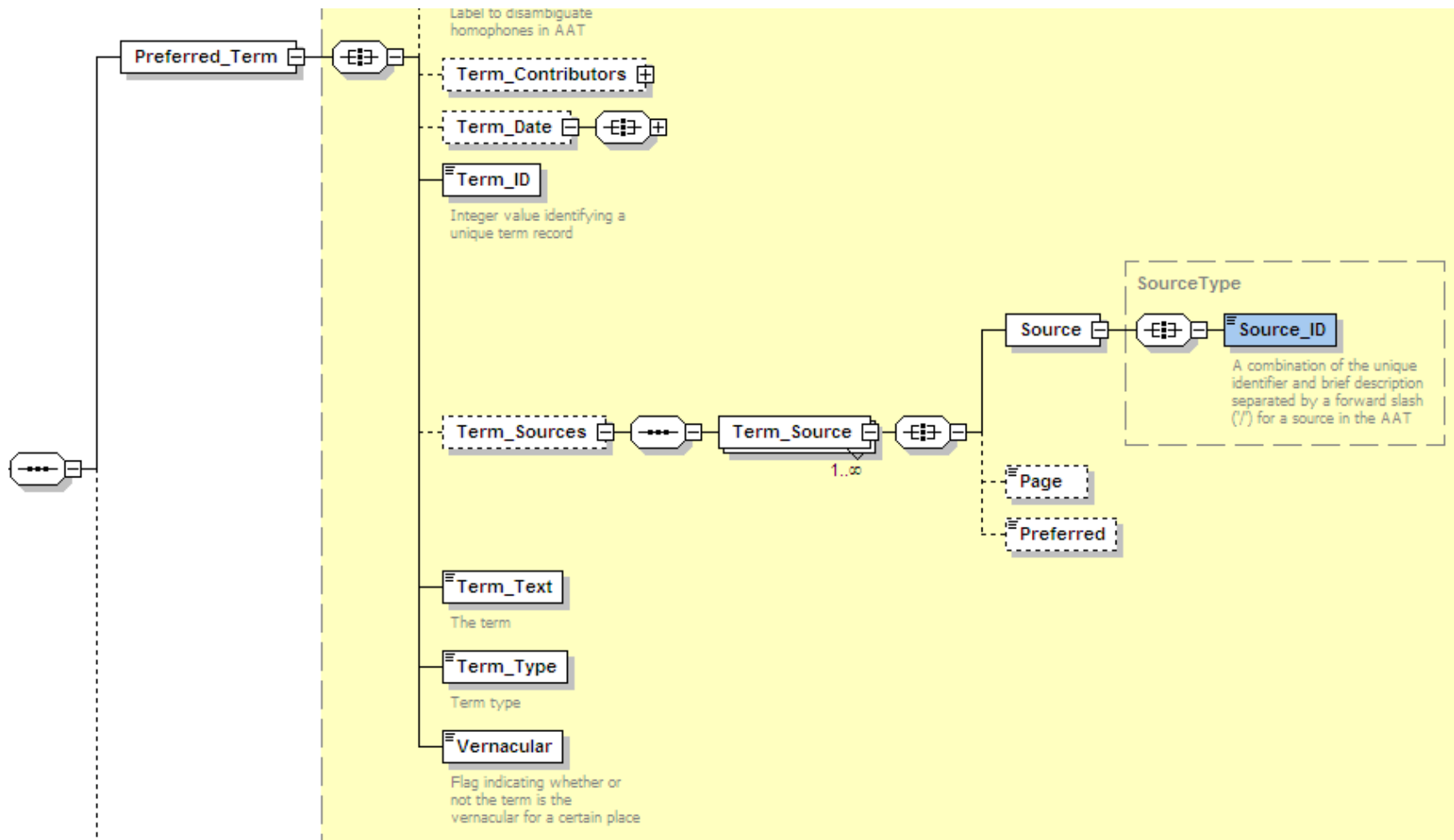


More Informations:

[http://www.getty.edu/research/
conducting_research/
vocabularies/aat_in_depth.pdf](http://www.getty.edu/research/conducting_research/vocabularies/aat_in_depth.pdf)

AAT:Descriptor	xTree:prefLabel	skos:prefLabel
AAT:Alternate Descriptor	xTree:altLabel	skos:altLabel
AAT:Used For Term	xTree:used_for_term	skos:altLabel

Import AAT to xTree: Term_Sources



xTree: Sources

XTREE - Mozilla Firefox

Suche nach folgenden Quellen:

- 1911 Edition Encyclopedia [online] (n.d.)
- 1980 Census of Population and Housing (1984)
- 1987 Charaette Catalog
- 1st International Conference on the History of Ethiopian Art (1989)
- 2000 Years of Tapestry Weaving (1952)
- 29th Annual Catalogue, S. Karpen & Brothers (1909)
- 3 Great Centuries of Venetian Glass (1958)
- 44 Eyes in a Museum Storeroom (2000)
- 5 Centuries of Italian Textiles (1981)
- A.C. Hanson & Co., Furniture Catalog (1907)
- AA Files (1981-)
- AAM, Official Museum Directory (1989)
- AARP, Staying at Home (1992)
- AATHONL
- Abate and Jewell, New Oxford American Dictionary (2001)
- Abbey Newsletter (1975-)
- Abby Aldrich Rockefeller Folk Art Center, American Folk Paintings (1988)
- ABCO, Medical Supplies, Product catalog, in d.
- Aboriginal Art, online (2003)
- Abraham and Lano, Dictionary of the Hausa Language (1949)

4796 Brief + Full Citations

Suggest

Ident-Nr.: 300037297
Bezeichnung: dinars (en)
Typ: Konzept

Grunddaten | Relationen | Mappings

Ident-Nr.: 300037297
Typ: Kategorie 1 - 20 (4976)
Bezeichnung: dinars Englisch Rolle: Art: Entfernen

Quellen (3)

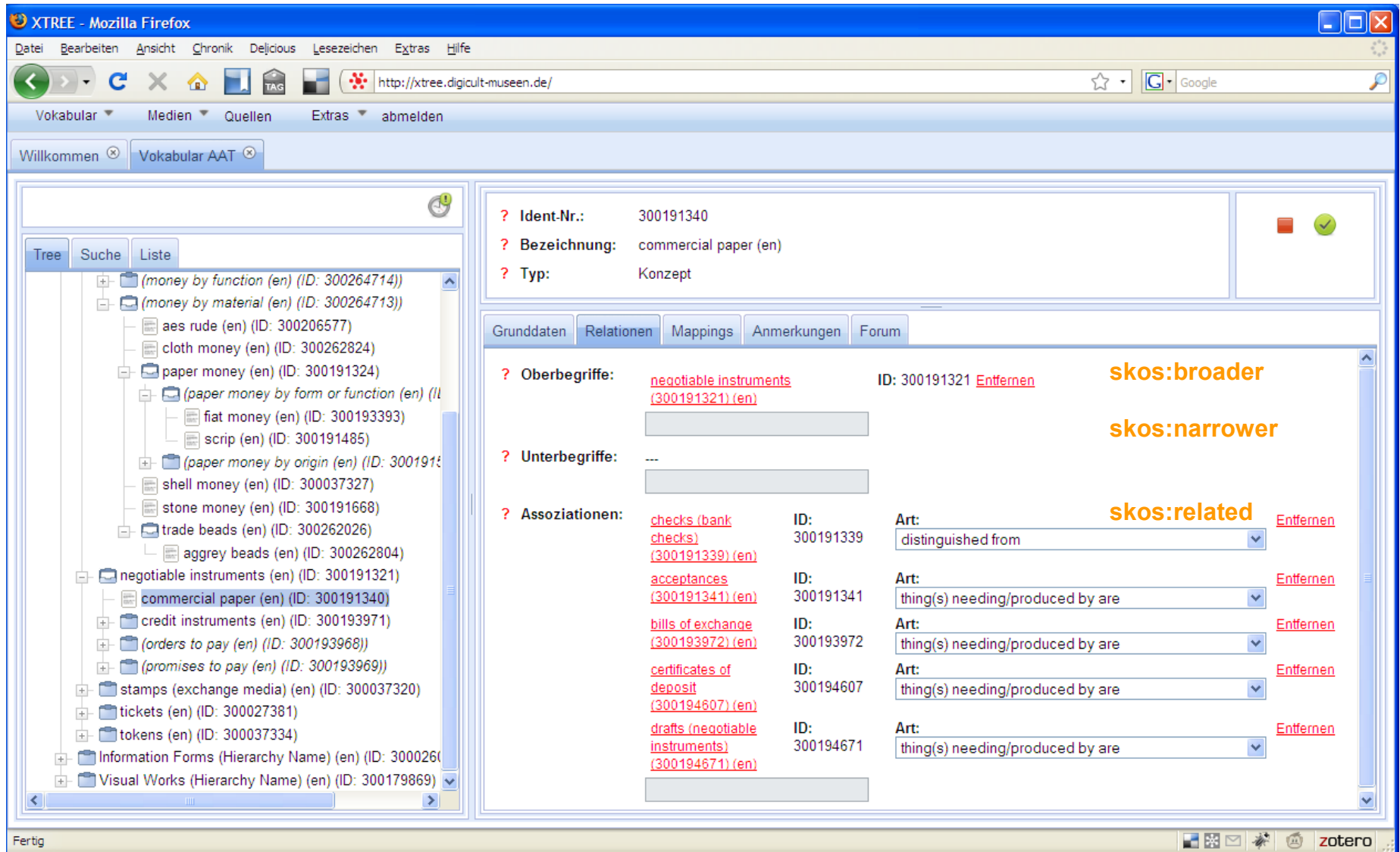
- weitere Quelle
- Price, Coins (1980) Seite: illustration, 259 Bevorzugt? Entfernen
- Webster's Third New Interna Seite: Bevorzugt? Entfernen
- Doty, Macmillan Encycloped Seite: illustration Bevorzugt? Entfernen
- dinar Englisch Rolle: Art: Entfernen

Quellen (1)

Weitere Bezeichnung

URI: ---
Quelle:
ID Quelle:
Ersteller:
Erstellungsdatum: Donnerstag, 01.01.1970, 01:00:00
letzte Änderung: 0000-00-00 00:00:00

Linking Concepts: semantic relations



The screenshot shows the XTREE web application in Mozilla Firefox. The browser address bar displays <http://xtree.digicult-museen.de/>. The application interface includes a navigation menu with options like 'Vokabular', 'Medien', 'Quellen', 'Extras', and 'abmelden'. The main content area is divided into two sections: a hierarchical tree on the left and a detailed view on the right.

Tree View (Left):

- (money by function (en) (ID: 300264714))
 - (money by material (en) (ID: 300264713))
 - aes rude (en) (ID: 300206577)
 - cloth money (en) (ID: 300262824)
 - paper money (en) (ID: 300191324)
 - (paper money by form or function (en) (ID: 300191321))
 - fiat money (en) (ID: 300193393)
 - scrip (en) (ID: 300191485)
 - (paper money by origin (en) (ID: 300191322))
 - shell money (en) (ID: 300037327)
 - stone money (en) (ID: 300191668)
 - trade beads (en) (ID: 300262026)
 - aggrey beads (en) (ID: 300262804)
- negotiable instruments (en) (ID: 300191321)
 - commercial paper (en) (ID: 300191340)**
- credit instruments (en) (ID: 300193971)
 - (orders to pay (en) (ID: 300193968))
 - (promises to pay (en) (ID: 300193969))
- stamps (exchange media) (en) (ID: 300037320)
- tickets (en) (ID: 300027381)
- tokens (en) (ID: 300037334)

Detail View (Right):

Ident-Nr.: 300191340
Bezeichnung: commercial paper (en)
Typ: Konzept

Grunddaten | **Relationen** | **Mappings** | **Anmerkungen** | **Forum**

Oberbegriffe: [negotiable instruments \(300191321\)\(en\)](#) ID: 300191321 [Entfernen](#) **skos:broader**

Unterbegriffe: ---

Assoziationen:

Concept	ID	Art
checks (bank checks) (300191339)(en)	300191339	distinguished from
acceptances (300191341)(en)	300191341	thing(s) needing/produced by are
bills of exchange (300193972)(en)	300193972	thing(s) needing/produced by are
certificates of deposit (300194607)(en)	300194607	thing(s) needing/produced by are
drafts (negotiable instruments) (300194671)(en)	300194671	thing(s) needing/produced by are

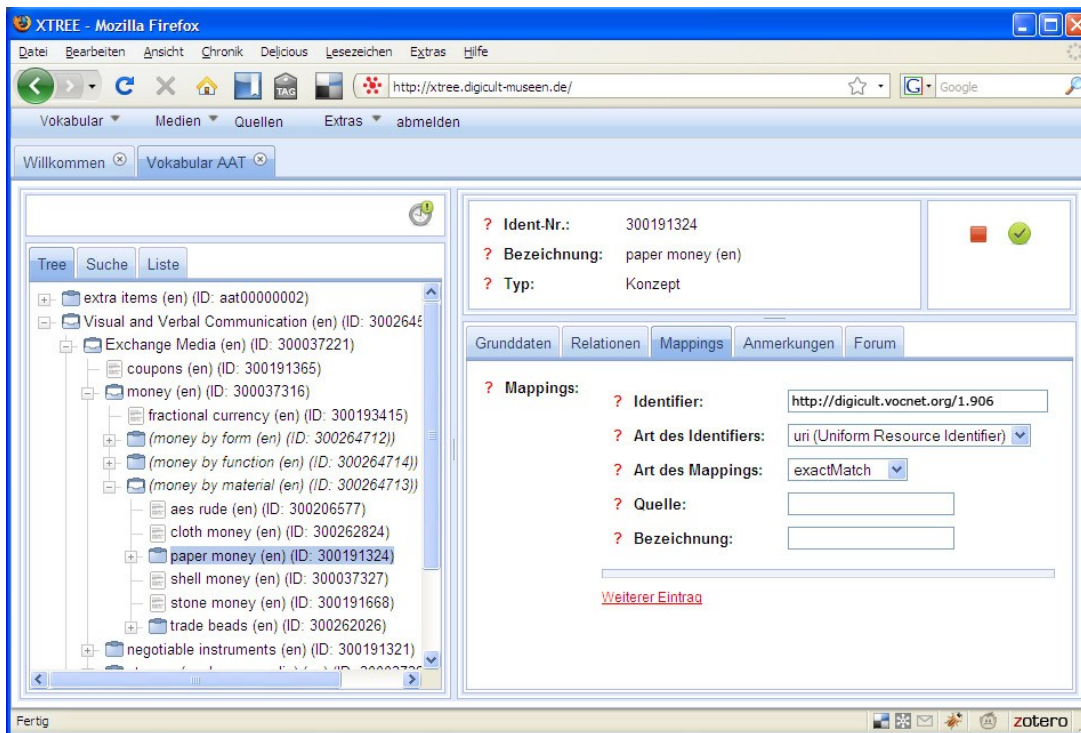
skos:narrower

skos:related

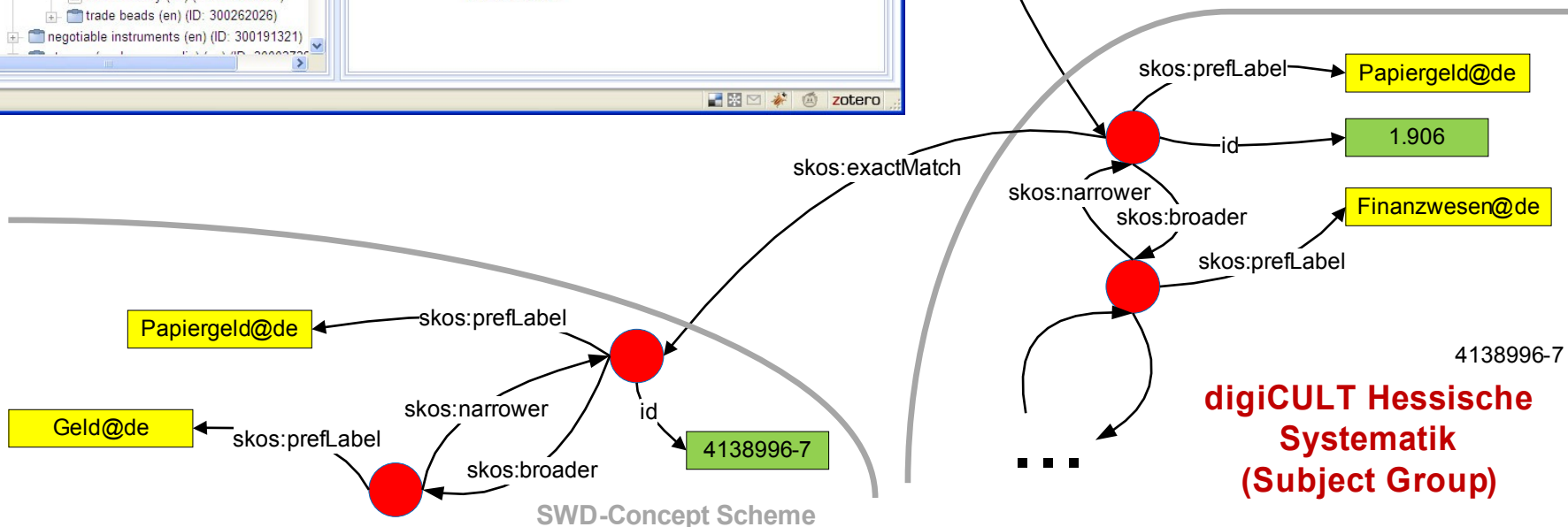
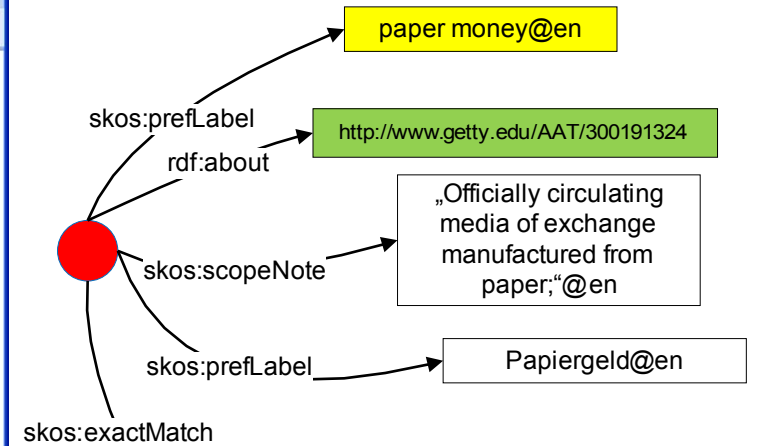
Entfernen

Fertig

Linking Concepts: semantic mapping, not in AAT



AAT-Concept Scheme



Dokumenting Concepts: AAT:descriptiveNote

Tree Suche Liste

- extra items (en) (ID: aat00000002)
- Visual and Verbal Communication (en) (ID: 300264552)
 - Exchange Media (en) (ID: 300037221)
 - coupons (en) (ID: 300191365)
 - money (en) (ID: 300037316)
 - fractional currency (en) (ID: 300193415)
 - (money by form (en) (ID: 300264712))
 - (money by function (en) (ID: 300264714))
 - (money by material (en) (ID: 300264713))
 - aes rude (en) (ID: 300206577)
 - cloth money (en) (ID: 300262824)
 - paper money (en) (ID: 300191324)**
 - shell money (en) (ID: 300037327)
 - stone money (en) (ID: 300191668)
 - trade beads (en) (ID: 300262026)
 - negotiable instruments (en) (ID: 300191321)
 - commercial paper (en) (ID: 300191340)
 - credit instruments (en) (ID: 300193971)
 - (orders to pay (en) (ID: 300193968))
 - (promises to pay (en) (ID: 300193969))
 - stamps (exchange media) (en) (ID: 300037320)
 - tickets (en) (ID: 300027381)
 - tokens (en) (ID: 300037334)
 - Information Forms (Hierarchy Name) (en) (ID: 300026029)
 - Visual Works (Hierarchy Name) (en) (ID: 300179869)

? Ident-Nr.: 300191324

? Bezeichnung: paper money (en)

? Typ: Konzept

type of note:
skos:note
skos:changeNote
skos:definition
skos:editorialNote
skos:example
skos:historyNote
skos:scopeNote

type of text:
Literal
Resource
Document Reference

Grunddaten Relationen Mappings **Anmerkungen** Forum

? Art der Anmerkung: scopeNote

? Text der Anmerkung: Officially circulating media of exchange paper; used in Asia from the 8th century from the 17th century.

? Art der Textes: literal

? Sprache des Textes: Englisch

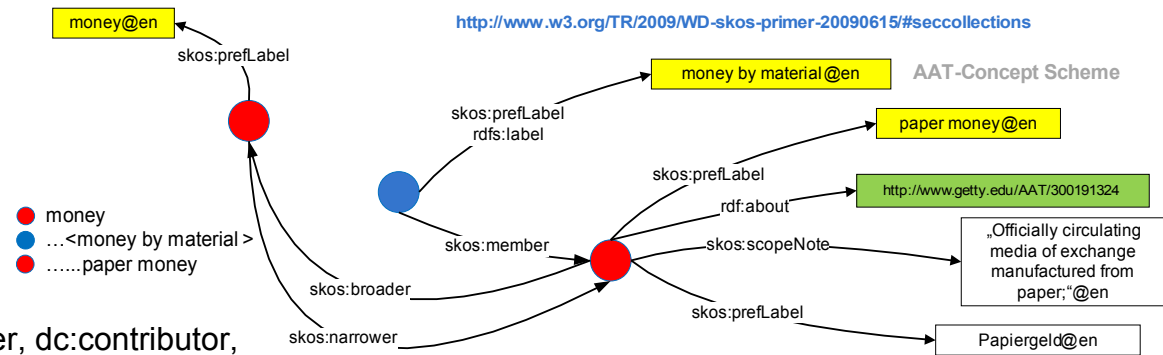
[Entfernen](#)
[Weiterer Eintrag](#)

javascript:loadVocItem(16160,12,1) zotero

museumvok next Version: 0.3 with xsd

in Discussion:

- Metadata for concept scheme (dc:identifier, dc:contributor, dc:creator, dcterms:created, dcterms:modified, dc:description, dc:format, dc:language, dc:rights, dc:subject, dc:title, ?)
- new: museumvok:Collection
- change museumvok:memberOfCollection to museumvok:member
- merge museumvok:prefTerm, museumvok:altTerm to museumvok:Term
- identifier for Terms
- notes for Terms
- multiple sources for Terms
- multiple sources for notes
- mappingRelation, subproperties: closeMatch, exactMatch, broadMatch, narrowMatch and relatedMatch
- rename museumvok:equivRelationship to museumvok:mappingRelationship
- museumvok:definition as sub-property of museumvok:note



museumvok: Elemente

Basic structure: Concept	
about	relationship (related, typeOfRelationship)
prefTerm (prefLabel, source)	equivRelationship (equivConcept (equivID, equivLabel, equivSource) mappingRelation)
altTerm (altLabel, source)	definition
hiddenLabel	depiction
notation	subjectIndicator
inScheme	note
memberOfCollection	creation
broader	status
narrower	
use	
useFor	

used Software xTree

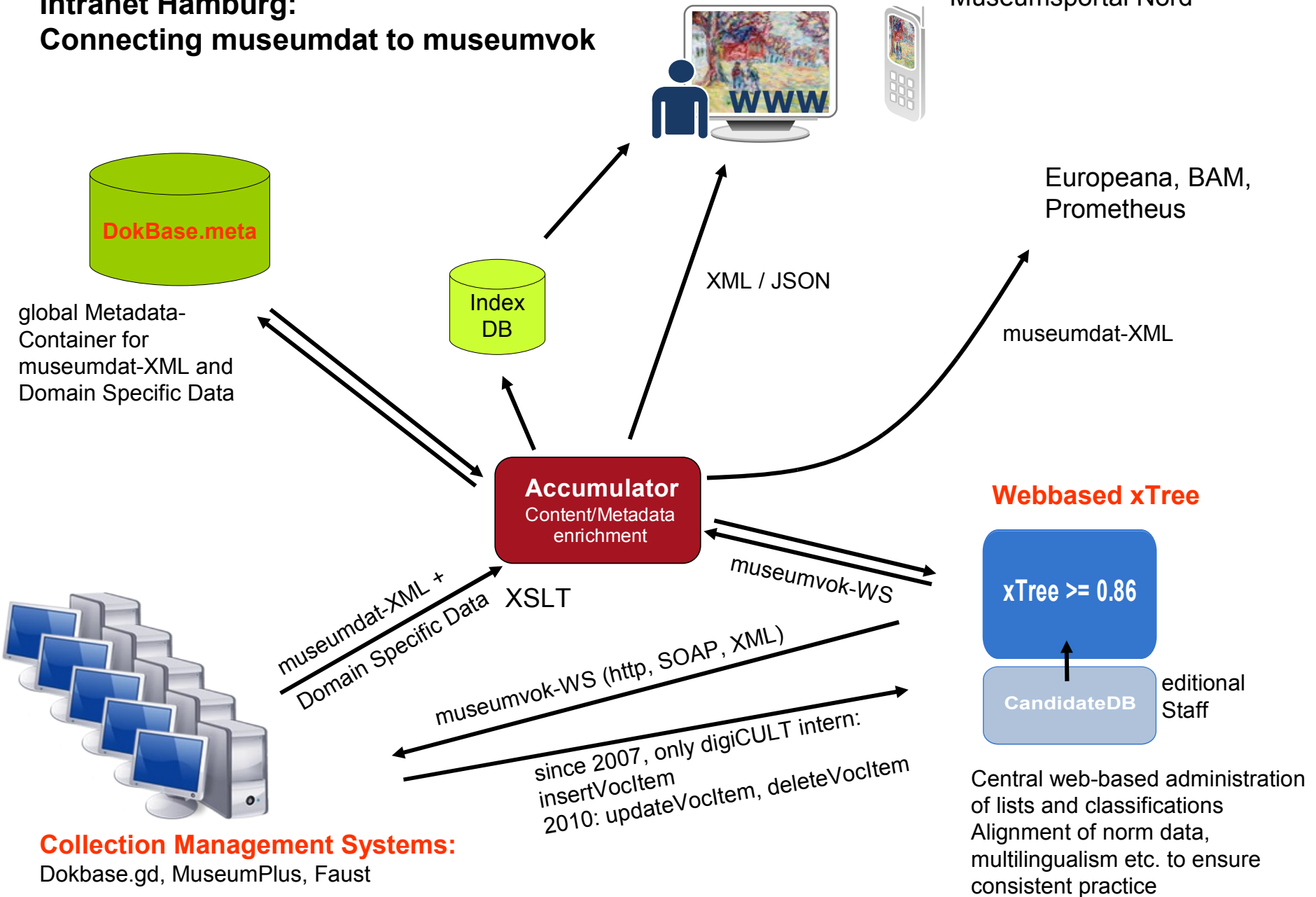
- Open Source Software
- developed mit PHP 5.2, Zend Framework 1.8
- AJAX-based GUI (Dojo Toolkit 1.3)
- Doctrine 1.1 as object relational mapper (ORM)
- MySQL 5
- Subversion 1.6 as version control

Links

- Getty Vocabularies Webservice:
http://www.getty.edu/research/conducting_research/vocabularies/vocab_web_services.pdf
 - AAT in depth
http://www.getty.edu/research/conducting_research/vocabularies/aat_in_depth.pdf
 - Glossary and Bibliography for Controlled Vocabularies
http://www.getty.edu/research/conducting_research/vocabularies/glossary_vocabs.pdf
 - Getty Vocabulary Program Web Services APIs
http://www.getty.edu/research/conducting_research/vocabularies/vocab_api_announcement.pdf
 - musemvok 0.2
<http://museum.zib.de/museumsvokabular/documents/museumvok0.2.pdf>
-
- <http://www.ethnologue.com/codes/default.asp>
 - <http://www.ietf.org/rfc/rfc3066.txt>
 - <http://www.rfc-editor.org/rfc/rfc4646.txt>
language-script-region-variant-extension-privateuse
<http://www.iana.org/assignments/language-subtag-registry>
 - RFC 4646 Validator:: <http://schneegans.de/lv/?tag=en-US>
 - Alpha4 Script Codes:
<http://unicode.org/iso15924/iso15924-codes.html>
 - <http://www.sil.org/iso639-3/>

Using vocabulary in the digiCULT Network, Intranet Hamburg: Connecting museumdat to museumvok

Intranet Hamburg,
Museumsportal Nord



thank you

Axel Vitzthum

avitzthum@digicult.uni-kiel.de

digicult Museen Schleswig-Holstein

