

MIMO multilingual thesaurus

Rodolphe Bailly – Cité de la musique

Linked Heritage Seminar - 18th of April 2013



MIMO

musical instrument museums online

Explore the world
collections of musical
instruments

Welcome to the world's largest freely accessible database for information on musical instruments held in public collections. Our database now contains the records of **50 815 instruments**.

SEARCH

INSTRUMENT FAMILIES

MAP

© MIMO - Musical Instrument Museums Online



[About MIMO](#) | [How to join MIMO](#) | [Contact](#) | [Credits](#)

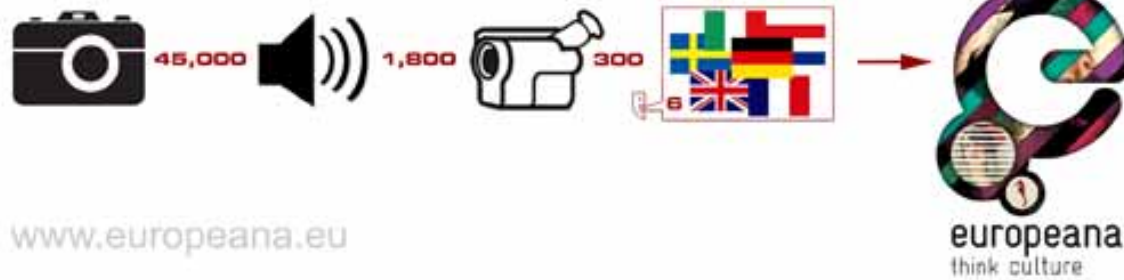
Déroulé

- Context: the MIMO project
- MIMO multilingual issue
- Our solution
 - The MIMO vocabulary
 - Management Tool
- Use of the vocabulary
 - mimo-db
 - Europeana
 - External projects

Image of Hardanger fiddle by University of Edinburgh

MIMO

musical instrument museums online



www.europeana.eu

www.mimo-project.eu



THE UNIVERSITY of EDINBURGH

Co-funded by the European Union

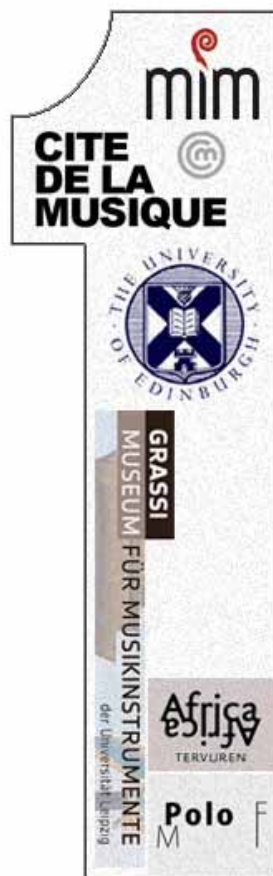




eContent*plus*

01/09/2009 - 31/08/2011

€3,197,870



1. University of Edinburgh (EUCHMI)
2. Germanisches Nationalmuseum, Nürnberg
3. University of Leipzig, Museum für Musikinstrumente
4. Africamuseum, Tervuren
5. Associazione "Amici del Museo degli Strumenti Musicali," Florence
6. Cité de la Musique, Paris
7. Musical Instrument Museum, Brussels
8. Università degli Studi di Firenze, Florence
9. Horniman Museum, London
10. Ethnologisches Museum, Berlin (Stiftung Preußischer Kulturbesitz)
11. The Stockholm Music Museum

MIMO
musical instrument museums online

GERMANISCHES
**NATIONAL
MUSEUM**

Alle Zeiten. Alle Sinne

Polo F
M



**CITE
DE LA
MUSIQUE**

mim

S M
B Staatliche Museen
zu Berlin

Africa
TERVUREN

Musikmuseet.

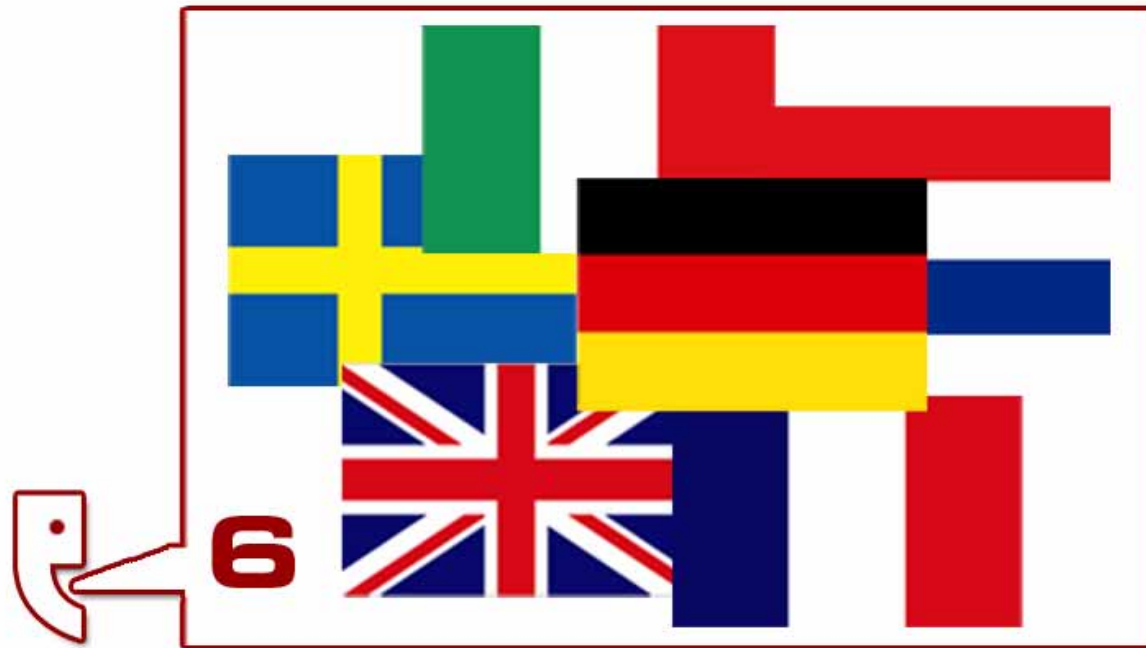
GRASSI
MUSEUM FÜR MUSIKINSTRUMENTE
der Universität Leipzig



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europeana
think culture



Problem

Search by “instrument type”

Inside the original museum records:

Flute ; Flûte ; Flauto ; Flöte ; Fluit ; Flöjt

Search phrase using one language must return records in multiple languages

Our Solution

- 1/ Create a multilingual dictionary
- 2/ Add one of the dictionary term into each of the records
- 3/ Use the dictionary during the search request

Create a multilingual dictionary

1/ Define a structure for the dictionary :

- Build a 3 levels Thesaurus
- Duplicate this thesaurus for each language
- => 1 « pivot » thesaurus + 6 language specific

2/ Begin the work in one language using Excel

- Ask every participant to send terms proposals
- Manually de-duplicate

3/ In the meantime, choose or build a tool to translate and manage the thesaurus

Create a multilingual dictionary

	A	B	C	D	E
1	FAMILY (Pivot)	GROUP (Pivot)	KEYWORD (Pivot)	SYNONYMS, ALTERNATIVE TRANSLITERATIONS AND SPELLINGS (Pivot)	Pivot Language
689	Strings	Lutes	Komuz		
690	Strings	Lutes	Konting		
691	Strings	Lutes	Kopuz	Qopuz	
692	Strings	Lutes	Krajappi	Kra-chapee ; Chapee	Thai
693	Strings	Lutes	Lutar	Lotar ; Lothar	
694	Strings	Lutes	Lute		
695	Strings	Lutes	Lyre-bandurria		
696	Strings	Lutes	Mamokhorong		
697	Strings	Lutes	Mandole		
698	Strings	Lutes	Mandolone		
699	Strings	Lutes	Mandora	Calichon ; Gallichon	
700	Strings	Lutes	Molo		
701	Strings	Lutes	Nanduni		
702	Strings	Lutes	Nkoni	Ngoni	
703	Strings	Lutes	Orpharion	Orpheoreon	
704	Strings	Lutes	Pandoura		Greek
705	Strings	Lutes	Panduri	Phanduri	
706	Strings	Lutes	Penorcon		
707	Strings	Lutes	Pi-bang		
708	Strings	Lutes	Pipa	Pepa	
709	Strings	Lutes	Qabus	Qabus ; Kabosy ; Qabus ; Kabosa ; Qanbu	
710	Strings	Lutes	Quwaytara	Kawaitara ; Kuwaytara ; Kuwithra ; Kuwi	
711	Strings	Lutes	Rabab	Rebab ; Ribab ; Rebâb	
712	Strings	Lutes	Rabel		
713	Strings	Lutes	Ruan		
714	Strings	Lutes	Sanshin		
715	Strings	Lutes	Sanxian	San hsien ; San-heen	
716	Strings	Lutes	Saradiya vina		
717	Strings	Lutes	Sarasvati vina		

MIMO Vocabulary Web Management Tool

The screenshot displays the MIMO Vocabulary Web Management Tool interface. On the left is a hierarchical tree under 'Musical instruments (9)', with 'Wind instruments (23)' expanded to show 'Trumpets (86)', which includes the selected term 'Alphorn'. The main area shows a central 'Current term' box for 'Alphorn' with arrows pointing to four related sections: 'Broader terms' (Trumpets), 'Synonyms' (Alpenhorn), 'Related terms' (423.121.12 End-blown straight labrosones with mouthpiece), and 'Narrower terms'. A 'Translations' section on the right lists the term in English, French, Italian, German, Dutch, and Swedish.

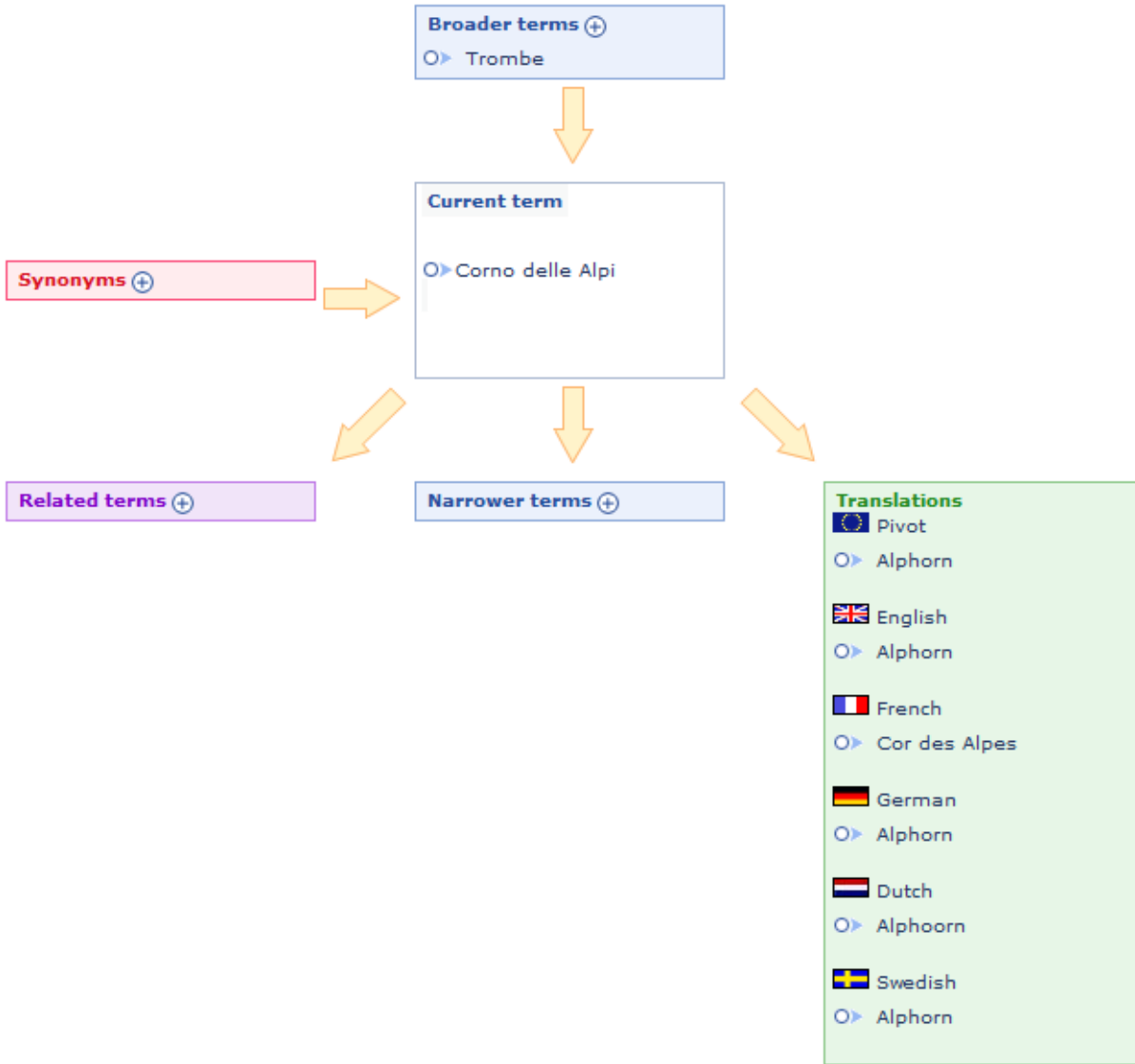
Hierarchical View:

- New top term
- Tricks and options
- Musical instruments (9)
 - Electronic instruments (1)
 - Elements of musical instruments (4)
 - Keyboard instruments (8)
 - Mechanical instruments (1)
 - Mirlitons (1)
 - Other instruments (1)
 - Percussion instruments (19)
 - Stringed instruments (18)
 - Wind instruments (23)
 - Accordions (11)
 - Bagpipes (38)
 - Bassoons (20)
 - Bugles (6)
 - Bullroarers (2)
 - Clarinets (36)
 - Cornets (4)
 - Cornetts (7)
 - Flugelhorns (5)
 - Flutes (257)
 - Harmonicas (2)
 - Horns (12)
 - Hunting horns (4)
 - Mouth organs (14)
 - Oboes (91)
 - Ophicleides (7)
 - Others (14)
 - Saxhorns (21)
 - Saxophones (8)
 - Serpents (6)
 - Trombones (7)
 - Trumpets (86)
 - Agwara
 - Alphorn
 - Amakondere
 - Ananta vijaya
 - Bak

 New top term  Print

 Tricks and options

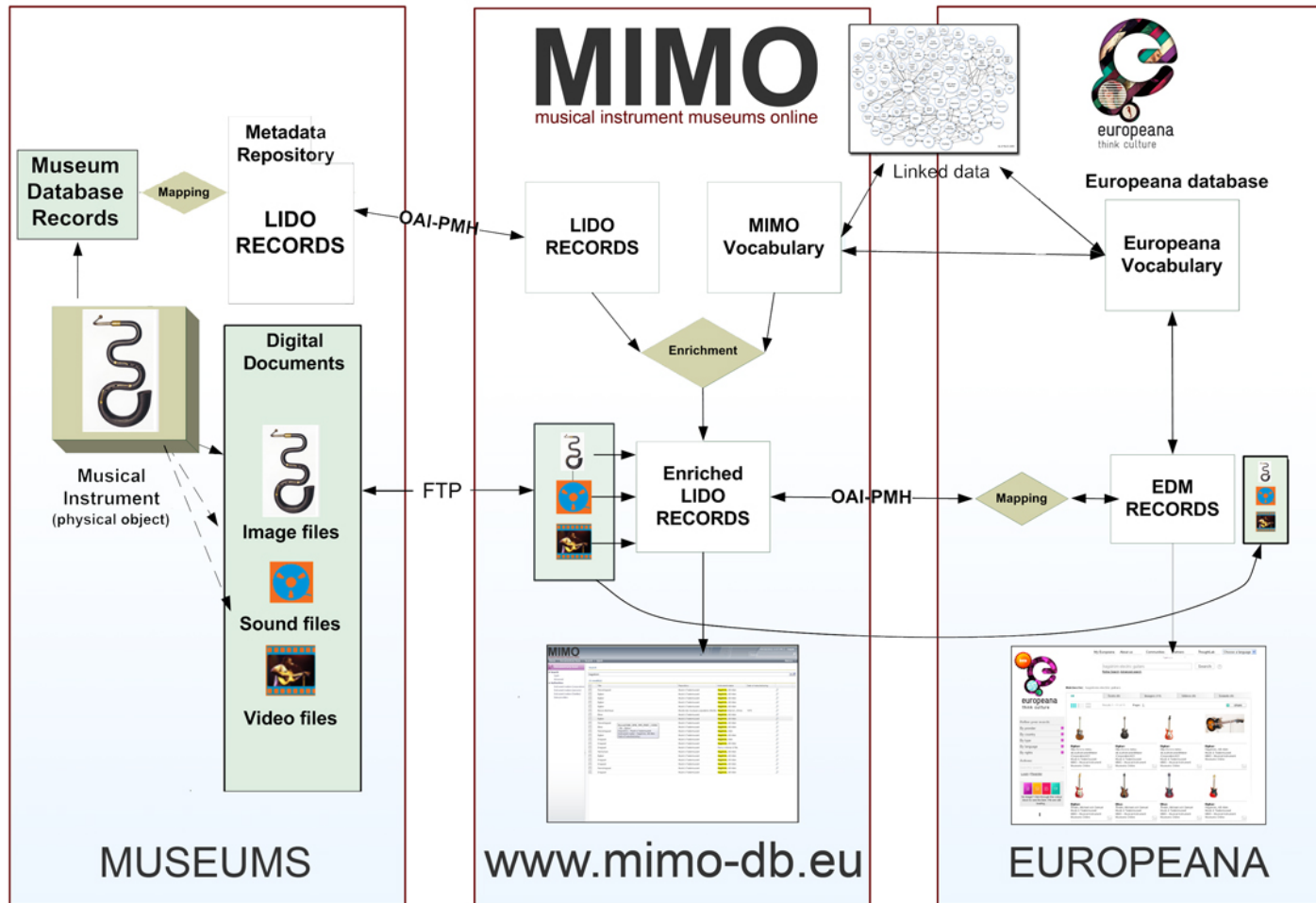
- MIMOTON (1)
- Strumenti a corde (18)
- Strumenti a percussione (19)
- Strumenti a tastiera (8)
- Strumenti ad aria (23)**
 - Altri (14)
 - Armoniche (2)
 - Clarinetti (36)
 - Cornamuse (38)
 - Cornette (4)
 - Cornetti (7)
 - Corni (12)
 - Corni da caccia (4)
 - Corni segnale (6)
 - Fagotti (21)
 - Fisarmoniche (11)
 - Flauti (257)
 - Flicorni (5)
 - Oboi (92)
 - Oficleidi (7)
 - Organi a bocca (14)
 - Rombi (2)
 - Sassofoni (8)
 - Saxhorn (21)
 - Serpenti (6)
 - Trombe (86)**
 - Agwara
 - Amakondere
 - Ananta vijaya
 - Bak
 - Barataka
 - Bargumi
 - Bion
 - Bockhorn
 - Buccina
 - Buccin-trombone
 - Büchel



Solution

- 1/ Create a multilingual dictionary
- 2/ Add one of the dictionary term into each of the records
- 3/ Use the dictionary during the search request

Technical Infrastructure



Add one of the dictionary term into each of the records

Entered by each museum into a specific LIDO field of the original record

link to the term into the thesaurus is programmatically added during metadata ingestion

Metadata enrichment

Museum

- <lido:classification>
- <lido:term>Euphonium</lido:term>
- </lido:classification>

MIMO-DB

- <lido:classification lido:type="InstrumentsKeywordsPivot">
- <lido:conceptID lido:type="URI"><http://www.mimo-db.eu/InstrumentsKeywords/4463></lido:conceptID>
- </lido:classification>

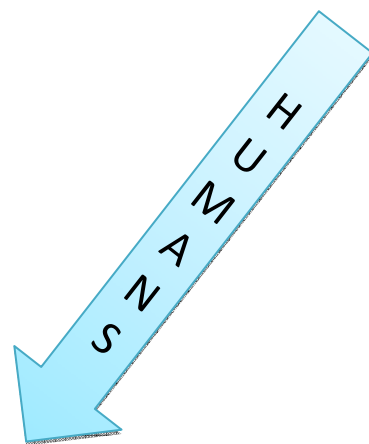
Europeana

- <dc:type rdf:resource="http://www.mimo-db.eu/InstrumentsKeywords/4463"/>
- <skos:Concept rdf:about="http://www.mimo-db.eu/InstrumentsKeywords/4463">
- <skos:prefLabel>Euphonium</skos:prefLabel>
- </skos:Concept>

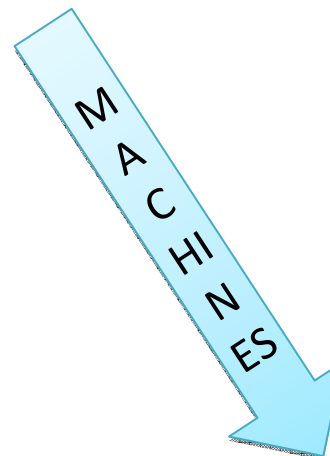
(LINKED) OPEN DATA EXPOSITION

URI for the instrument keyword « Octobass » :

<http://www.mimo-db.eu/InstrumentsKeywords/2232>



HTML



**RDF
(SKOS)**

Use by MIMO-DB

The screenshot displays the MIMO-DB search interface. The main page has a header with the MIMO logo and navigation links. A sidebar on the left contains search options and authorities. The main content area is divided into sections for instrument identification, classification, history, collection, and digital documents. A 'Select a term' dialog box is open, showing a tree view of instrument categories. The 'Clavichords' category is selected, and its details are shown in the 'Locations' panel.

MIMO
musical instrument museums online

Home > Documentary base > Search > Advanced

Documentary base

Search
Quick
Advanced

Authorities
Instrument makers (corporations)
Instrument makers (persons)
Instrument makers (families)
Data providers

Instrument Identification
Data provider =
Title =
Keyword (tree)
Keywords (tree)

Instrument Classification
H-S Classification
H-S Classification

Instrument history

Collection
Current
Inventory number =
Former owner or collection =

Digital documents
Media =

Select a term

Tree | Permuted display | Alphabetical list | Search

- Instruments
 - Musical instruments (9)
 - Electronic instruments (1)
 - Elements of musical instruments (4)
 - Keyboard instruments (8)
 - Clavichords (2)**
 - Harpsichords (14)
 - Mechanical (1)
 - Organs (9)
 - Others (9)
 - Pianofortes (33)
 - Reed organs (10)
 - Synthesizers (5)
 - Mechanical instruments (1)
 - Mirlitons (1)
 - Other instruments (1)
 - Percussion instruments (19)
 - Stringed instruments (18)
 - Mind instruments (23)

Locations

Label	Clavichords
Id	LEXICON_00002231
Type of term	Terme Descripteur
Lexicon status	Standard
Creation date	15/11/2010 11:33:27
Term creator	Admin MIMO
Reference	New Grove Dictionary of Musical Instruments
Source	CM

Selected terms: 1
Clavichords

OK Close

Use by Europeana

```

<edm:ProvidedCHO rdf:about="#ULEI:M0005329">
  <dc:coverage rdf:resource="http://sws.geonames.org/2851079"/>
  <dc:coverage>Radeberg/Sachsen/Deutschland/Europa</dc:coverage>
  <dc:creator rdf:resource="http://www.mimo-db.eu/InstrumentMaker/Person/293">
  <dc:creator>Schöne</dc:creator>
  <dc:date>um 1860</dc:date>
  <dc:description>Gesellenstück des Glasmachers Wilhelm Schöne. Glashütte i
  <dc:title>Glastrompete</dc:title>
  <dc:type rdf:resource="http://www.mimo-db.eu/InstrumentsKeywords/4419"/>
  <edm:type>IMAGE</edm:type>
</edm:ProvidedCHO>
<edm:WebResource rdf:about="http://www.mimo-db.eu/media/ULEI/IMAGE/5486">
  <dc:rights>© Museum für Musikinstrumente der Universität Leipzig</dc:rights>
  <edm:rights rdf:resource="http://creativecommons.org/licenses/by-nc-sa/3.0/">
</edm:WebResource>
<edm:Agent rdf:about="http://www.mimo-db.eu/InstrumentMaker/Person/2935">
  <skos:prefLabel>Wilhelm Schöne</skos:prefLabel>
</edm:Agent>
<edm:Place rdf:about="http://sws.geonames.org/2851079">
  <skos:prefLabel xml:lang="de">Radeberg</skos:prefLabel>
  <skos:altLabel>Radeberg/Sachsen/Deutschland/Europa</skos:altLabel>
</edm:Place>
  <skos:Concept rdf:about="http://www.mimo-db.eu/InstrumentsKeywords/4419">
  <skos:prefLabel>Natural trumpet</skos:prefLabel>
</skos:Concept>
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  <edm:aggregatedCHO rdf:resource="#ULEI:M0005329"/>
  <edm:hasView rdf:resource="http://www.mimo-db.eu/media/ULEI/IMAGE/5486">
  <edm:dataProvider>Museum für Musikinstrumente der Universität Leipzig</edm:
  <edm:provider>MIMO - Musical Instrument Museums Online</edm:provider>
  <edm:rights rdf:resource="http://creativecommons.org/licenses/by-nc-sa/3.0/">
  <edm:isShownBy rdf:resource="http://www.mimo-db.eu/media/ULEI/IMAGE/54
  <edm:isShownAt rdf:resource="http://www.mimo-db.eu/ULEI/M0005329"/>
  <edm:object rdf:resource="http://www.mimo-db.eu/media/ULEI/IMAGE/5486.jpg">
</ore:Aggregation>

```

Use by Europeana



Search Search Help

Matches for:
gitaar

Refine your results:

▾ Add more keywords
 + Add

▾ By media type

- IMAGE (771)
- VIDEO (9)
- SOUND (2)
- TEXT (1)

▾ By language of description


▾ By year

▾ By providing country













▾ By copyright

▾ By provider

Include content contributed by users

Share:
 Share

Results per page: 24 Results 1 - 24 of 783 1 of 33

 <p>Anoniem, gitaar van José Quitin, s.d...</p>	 <p>Midigitarr</p>	 <p>Spaanse gitaar van Koos Speenhof...</p>	 <p>Guitare</p>
 <p>Guitare</p>	 <p>Guitare</p>	 <p>Guitare</p>	 <p>Guitare</p>
 <p>Guitare</p>	 <p>Guitare</p>	 <p>Guitare</p>	 <p>Guitare</p>

Use by Europeana



Search ▼ Trombone à pistons

Search

Help

[Return to search results](#)

[< Previous](#) [Next >](#)



View



View item at
[Musik & Teatermuseet](#)

Share

Cite on Wikipedia

Translate details

Select language ▼

Powered by Microsoft® Translator

Ventilbasun

Creator: <http://www.mimo-db.eu/InstrumentMaker/Person/2836>; Schediva

Coverage: <http://sws.geonames.org/698740/>

Type: <http://www.mimo-db.eu/InstrumentsKeywords/6337>; <http://www.mimo-db.eu/HornbostelAndSachs/2161>

Identifier: #SMS-MM:M793

Data provider: Musik & Teatermuseet

Provider: MIMO - Musical Instrument Museums Online

Providing country: MUL

[Auto-generated tags ▼](#)

[What ▼](#)

Concept Term: <http://www.mimo-db.eu/InstrumentsKeywords/6337>

Concept Label: [Ventilposaune] (de); [Trombone a macchina] (it); [Valve trombone] (def); [Trombone à pistons] (fr); [Ventilbasun] (sv); [Valve trombone] (en); [Ventiltrombone] (nl)

Concept Broader Label: <http://www.mimo-db.eu/InstrumentsKeywords/4360>

Concept Term: <http://www.mimo-db.eu/HornbostelAndSachs/2161>

Concept Label: [423.233.2 Valve trumpets with long air column (more than 2 m)] (def); [423.233.2 Valve trumpets with long air column (more than 2 m)] (en)

Concept Broader Label: <http://www.mimo-db.eu/HornbostelAndSachs/360>

[Where ▼](#)

Place Term: <http://sws.geonames.org/698740/>

Place Label: [Odessa] (def); [Odessa] (sv)

Geo Space: 46.47747; 30.73262

[Who ▼](#)

Agent Term: <http://www.mimo-db.eu/InstrumentMaker/Person/2836>

Search also for:

Title

[Ventilbasun](#) (20)

Who

[Schediva](#) (1)

Provider

[Musik & Teatermuseet](#) (4848)

[MIMO - Musical Instrument Museums](#)

[Online](#) (36390)



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Use by External projects

- education.citedelamusique.fr
- RILM (répertoire international de littérature musicale) ?
- Musiconis (ANR project on sound representations in the middle age) ?

ministère de l'éducation nationale  **education.citedelamusique.fr** *version 1.3*
Les ressources numériques de la Cité de la musique pour l'enseignement

INSTRUMENTS CLASSIQUE JAZZ MUSIQUES DU MONDE CONNEXION

Retrouvez les photos, concerts, et autres documents liés à un instrument en cliquant sur les familles.

 CLAVIERS	 ACCORDÉONS	CHIBONI 1
 CORDES	 BASSONS	CORNEMUSE 42
 VENTS	 BUGLES	GAITA 3
 PERCUSSIONS	 CLAIRONS	GAJDE 7
 INSTRUMENTS ÉLECTRONIQUES	 CLARINETTES	MASAK 1
 INSTRUMENTS MÉCANIQUES	 CORNEMUSES	MUSETTE 18
 AUTRES INSTRUMENTS	 CORNETS À BOUQUIN	NEY-E ANBAN 5
	 CORNETS À PISTONS	ZAMPOGNA 4
	 CORS	ZUKRA 2
	 FLÔTES	
	 HARMONICAS	
	 HAUTBOIS	
	 OPHICLÉIDES	
	 ORGUES À BOUCHE	
	 RHOMBES	