Relevance redefined

Lukas Koster
Library of the University of Amsterdam
@lukask

IGeLU 2014 - Oxford

Main discovery tool feedback issues

Content

Not enough

Too many

Wrong types

No ‘full text’

Relevance

Not #1

Too many

Known item!?

WTF?

Usual responses to feedback issues

Change the front end!

Tabs - Facets - Filters - - Font

~~Positions~~

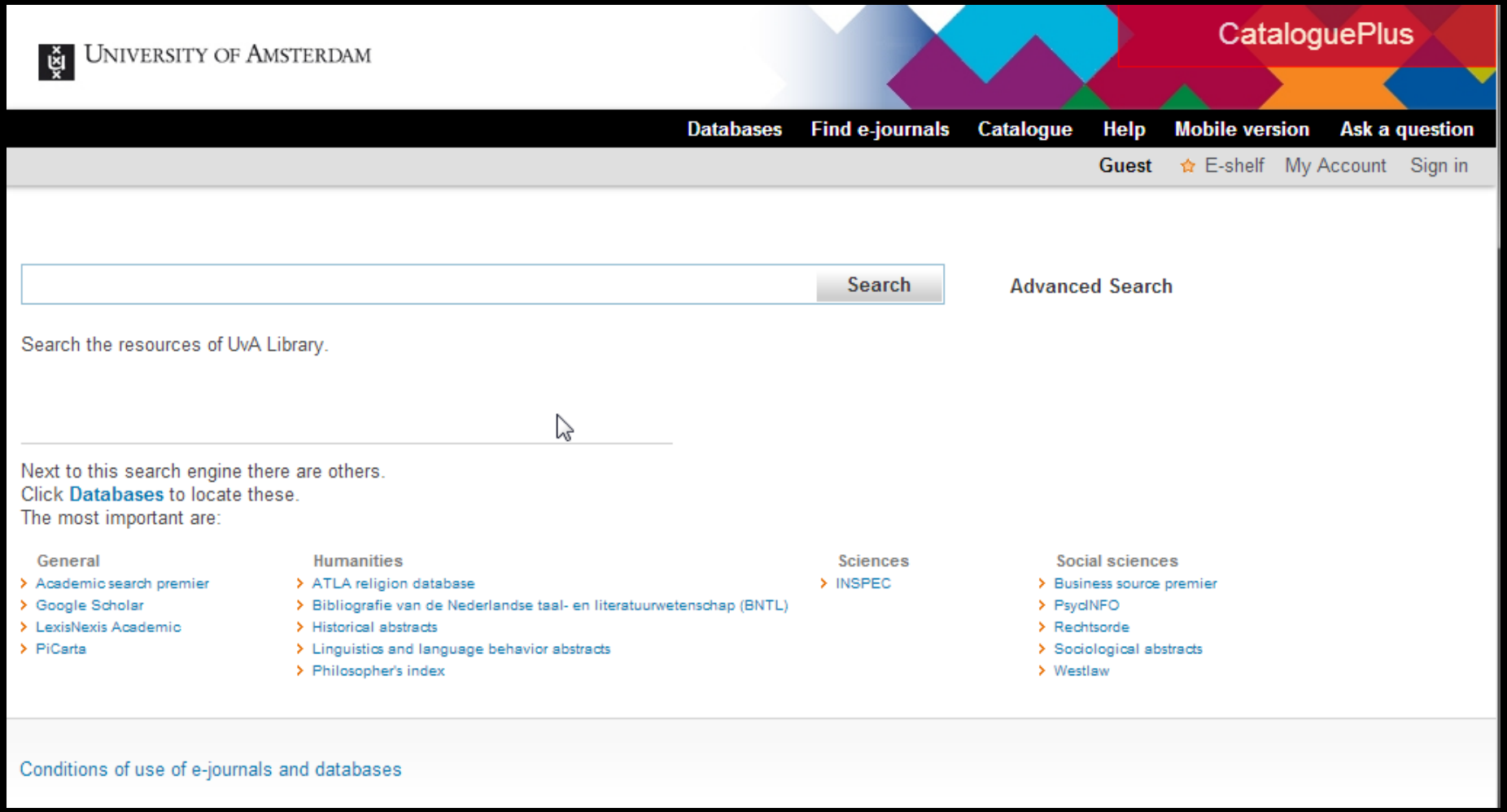
More/less content!

More of the same same same

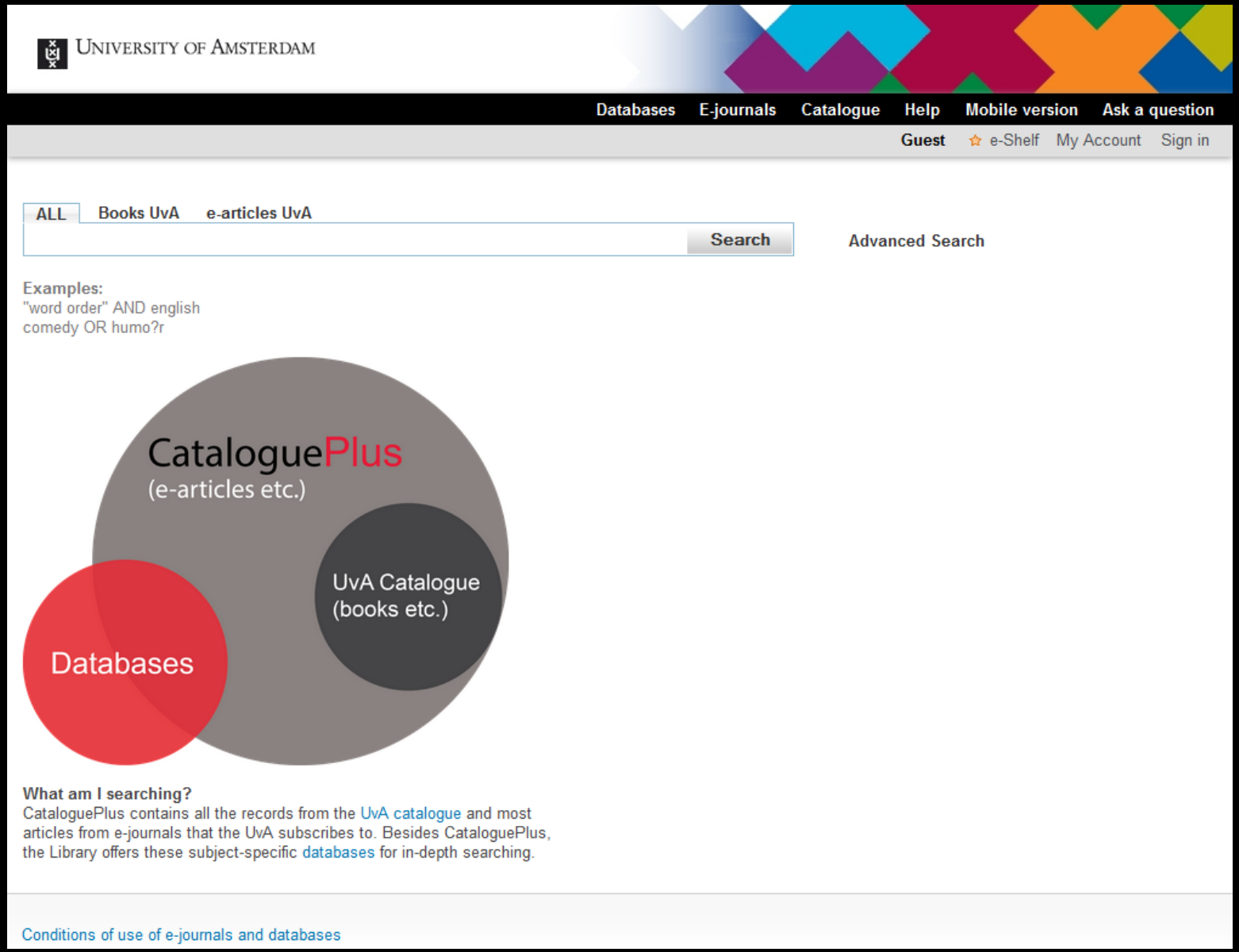
Improve relevance ranking algorithms!

Very shhhophisticated - Very shhhecret

Before


University of Amsterdam
CataloguePlus
Databases
Find e-journals
Catalogue
Help
Mobile version
Ask a question
Guest
E-shelf
My Account
Sign in
Search
Advanced Search
Search the resources of UvA Library.
Next to this search engine there are others.
Click Databases to locate these.
The most important are:
General
Academic search premier
Google Scholar
LexisNexis Academic
PiCarta
Humanities
ATLA religion database
Bibliografie van de Nederlandse taal- en literatuurwetenschap (BNTL)
Historical abstracts
Linguistics and language behavior abstracts
Philosopher's index
Sciences
INSPEC
Social sciences
Business source premier
PsycINFO
Rechtsorde
Sociological abstracts
Westlaw
Conditions of use of e-journals and databases

After


UNIVERSITY OF AMSTERDAM
Databases
E-journals
Catalogue
Help
Mobile version
Ask a question
Guest
e-Shelf
My Account
Sign in
ALL
Books UvA
e-articles UvA
Search
Advanced Search
Examples:
"word order" AND english
comedy OR humo?r
CataloguePlus
(e-articles etc.)
UvA Catalogue
(books etc.)
Databases
What am I searching?
CataloguePlus contains all the records from the UvA catalogue and most articles from e-journals that the UvA subscribes to. Besides CataloguePlus, the Library offers these subject-specific databases for in-depth searching.
Conditions of use of e-journals and databases

Same old

Same old UX tricks

Same old Content types

Same old View on relevance

iNTERLiNKED

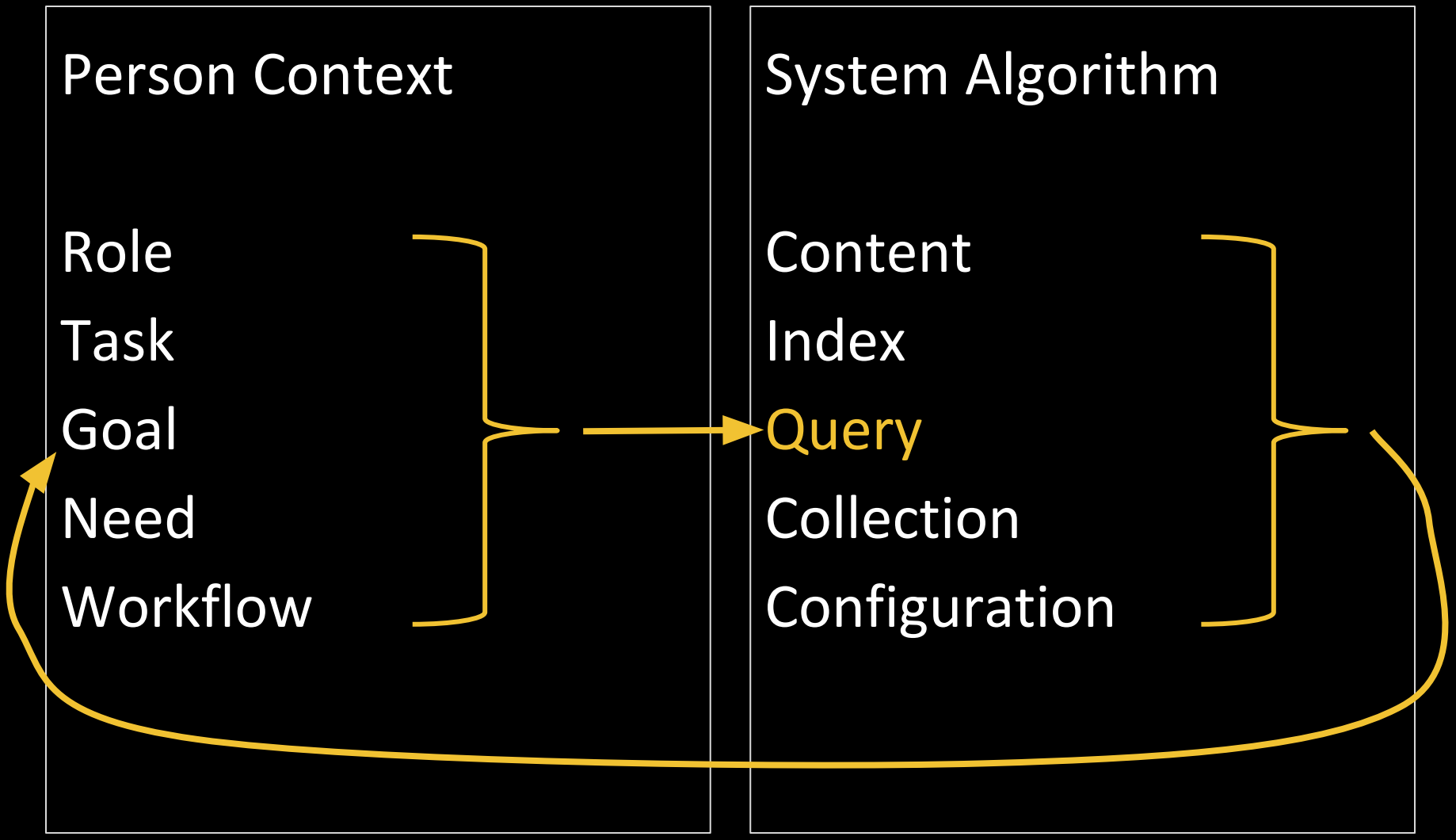
Relevance

Context

+

Content

Relevance=Relative:Subjective:Contextual



Relevance

Recall

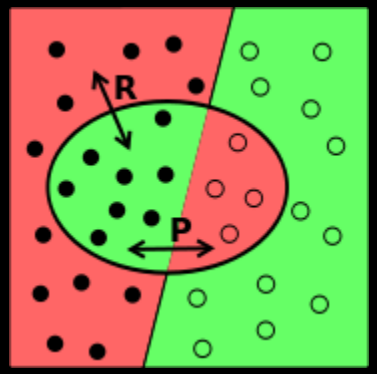
The fraction of relevant instances that are retrieved

$$\frac{\textit{retrieved relevant instances}}{\textit{total relevant instances}}$$

Precision

The fraction of retrieved instances that are relevant

$$\frac{\textit{retrieved relevant instances}}{\textit{total retrieved instances}}$$



Relevance

Total: 1000 items

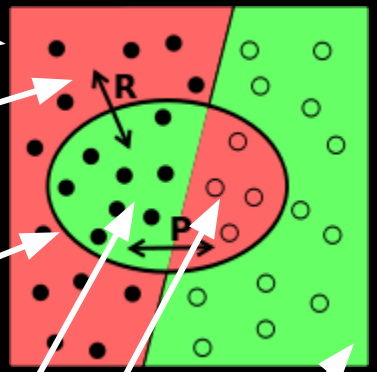
Relevant: 300

Retrieved: 180

Retrieved relevant: 120

Retrieved unrelevant: 60

Unrelevant: 700



Recall:

120/300=0.4

Precision:

120/180=0.66

Relevance ranking is NOT Relevance

Relevance = Finding appropriate items

Recall, Precision

Relevance ranking = Determining most relevant within retrieved set

Term Frequency, Inverse Document Frequency, Proximity, Value Score

Retrieved set may not contain any relevant items at all, but can still be ordered according to relevance.

Primo Central search and ranking enhancement - July 8, 2014

As part of our continuing efforts to enhance search and ranking performance in Primo, we changed the way Primo finds matches for keyword searches within indexed full text. As part of this approach Primo lowers the ranking of, or excludes, items of low relevance from the result set that were previously included. You may find as part of this change that the number of results for some searches is reduced, although result lists have become more meaningful.

The System Perspective

Objectivizing a subjective experience

Recall issues

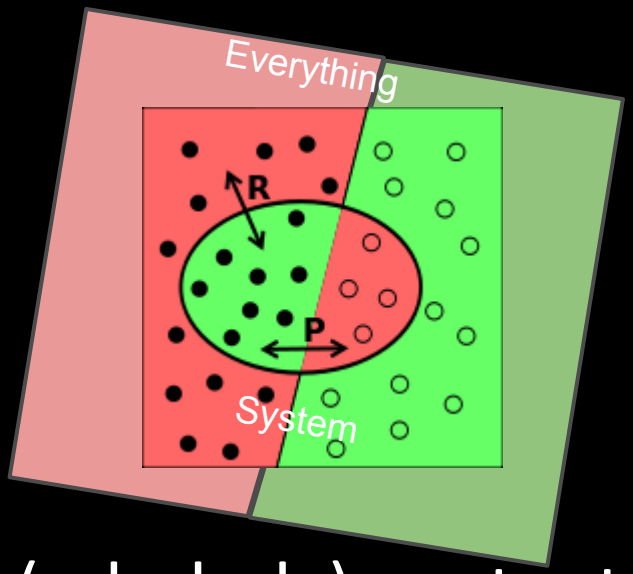
Discovery tool index limits recall scope in advance

Relevance is calculated on:

available

selected

indexed



(scholarly) content

By vendors

By libraries

Recall issues

NOT indexed:

Not accessible
Not subscribed
Not enabled

Unusual resource types
Connections
Not digital

Recall issues

Indexed, but NOT found:

By author name (string based)

By subject (string based, languages)

Related but unlinked items (chapter in book)

Author

Charlotte Brontë

1854 photograph

Born	21 April 1816 Thornton, West Riding of Yorkshire, England
Died	31 March 1855 (aged 38) Haworth, West Riding of Yorkshire, England
Pen name	Lord Charles Albert Florian Wellesley Currer Bell
Occupation	Novelist, poet
Nationality	British
Genres	Fiction, poetry
Notable work(s)	*Jane Eyre* *Villette*
Spouse(s)	Arthur Bell Nicholls (1854–1855 (her death))

Signature

Author ▾ | contains ▾ | currer bell

Any ▾ | contains ▾ |

Any ▾ | contains ▾ |

Resource Type: All items ▾

Language: Any language ▾

Start Date: Day ▾ Month ▾ Year

End Date: Day ▾ Month ▾ Year

Search | Simple Search

Did you mean: career bell?

Expand results

Expand results beyond direct availability

Refine my results

Author
Bell, Currer (13)
Bell, Ellis (1)
Mensing, C.M. (1)
Lesbazeilles Souvestre, Eugène (1)
Bell, Acton Currer (1)
More options

Language
Dutch (6)
English (6)
French (2)
More options

Topic
18XX (2)
1800-1900 (1)
More options

Results 1 - 10 of **14** Sorted by: Relevance

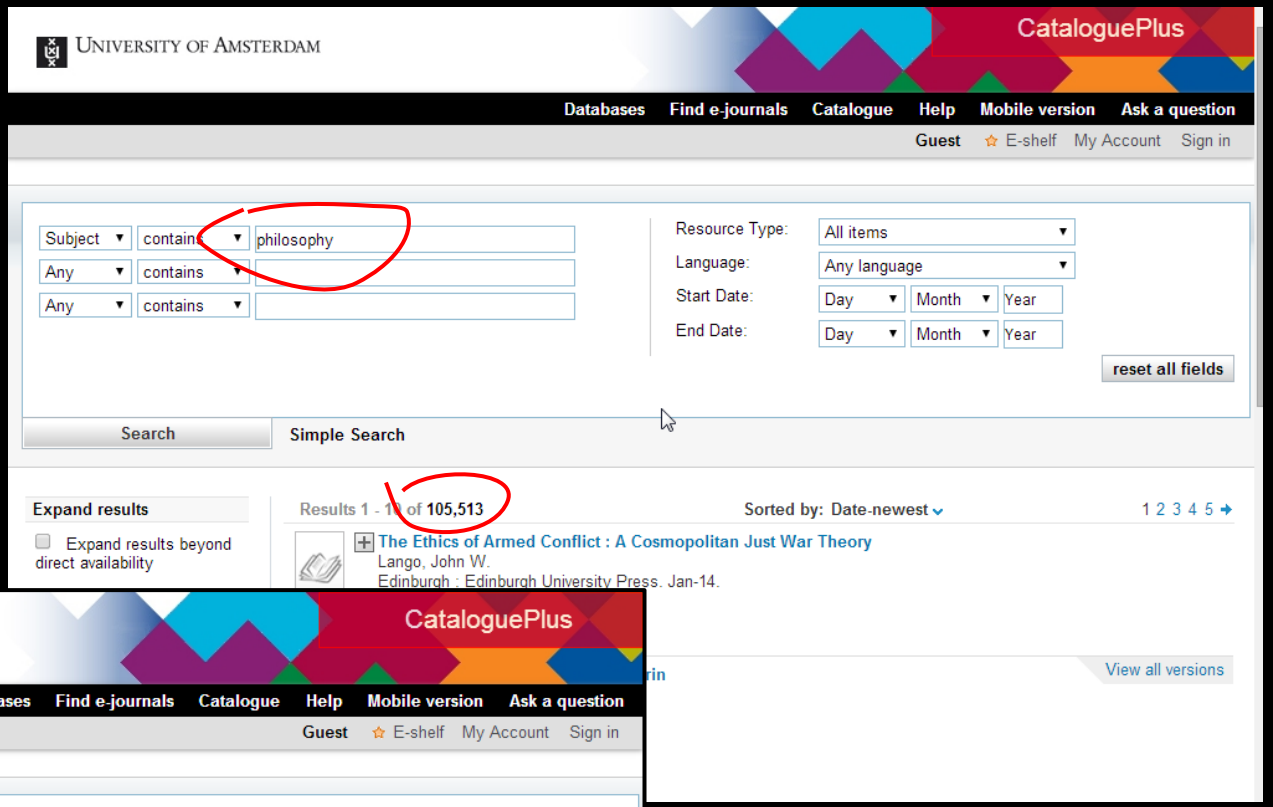
Book
Shirley : a tale / by Currer Bell
Bell, Currer
Leipzig : Tauchnitz Copyright ed 1849
Available at UBA-Boekendepot (IWO)
Locations Details

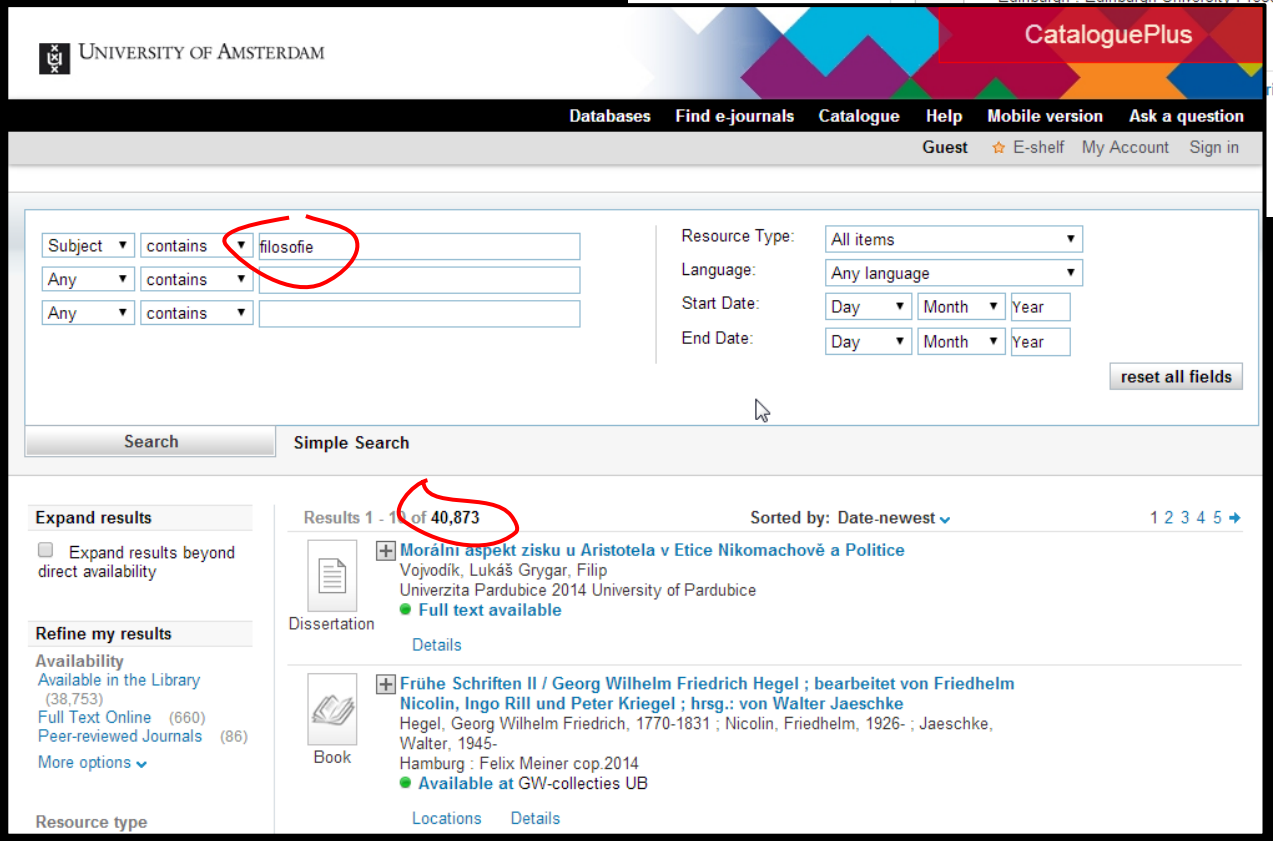
Book
La maîtresse d'anglais, ou Le pensionnat de Bruxelles / Currer Bell
Bell, Currer
Bruxelles 1855
Available at UBA-Boekendepot (IWO)
Locations Details

Book
Edward Crimsworth, het leven van een onderwijzer : een verhaal / Currer Bell
Bell, Currer
Groningen 1859
Available at UBA-Boekendepot (IWO)
Locations Details

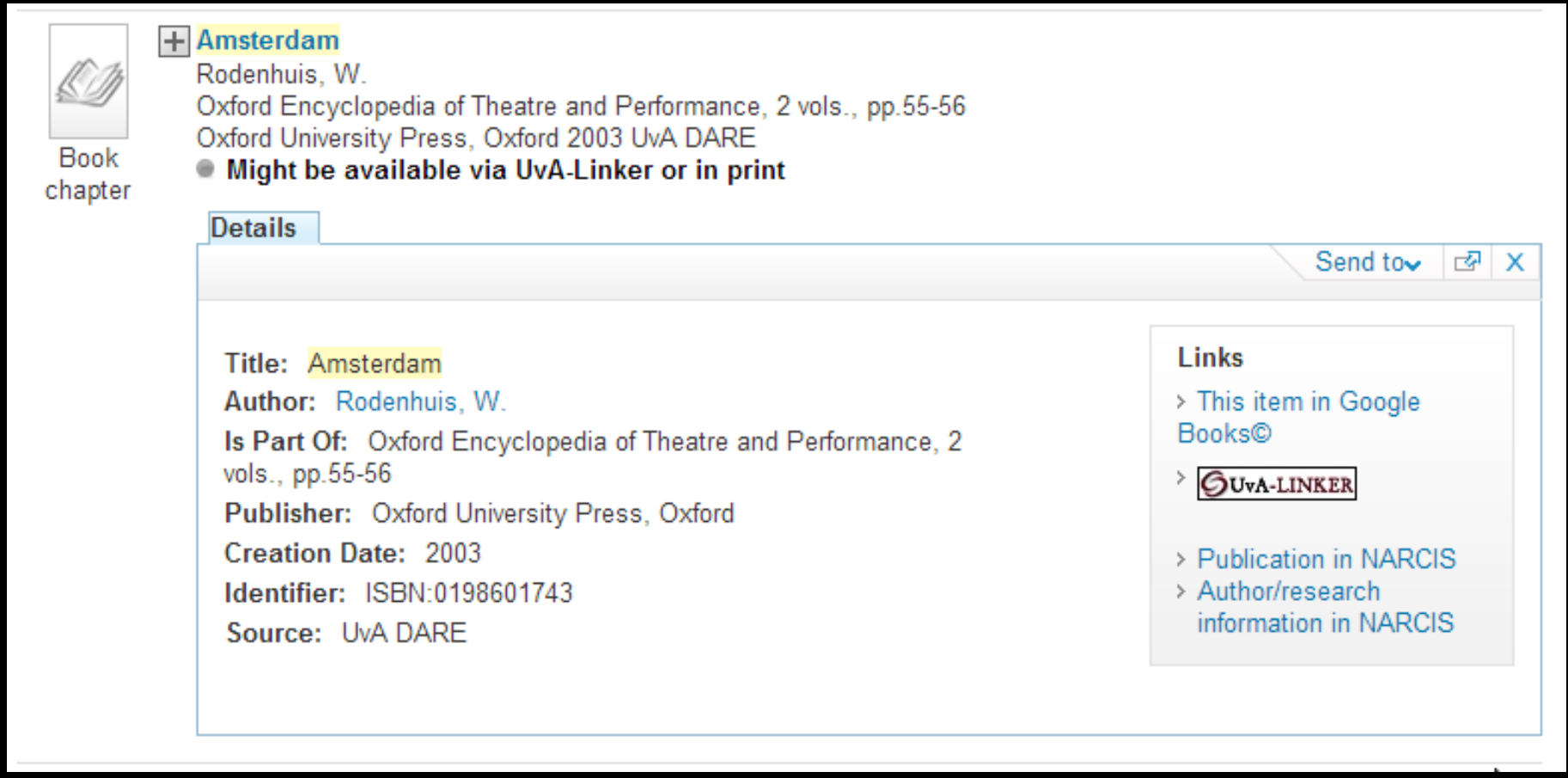
Book
Jane Eyre : an autobiography / ed. by Currer Bell
Bell, Currer
Ilkley : Ebor 1991
Available at UBA-Boekendepot (IWO)
Locations Details

Subject


University of Amsterdam
CataloguePlus
Databases Find e-journals Catalogue Help Mobile version Ask a question
Guest E-shelf My Account Sign in
Subject contains philosophy
Any contains
Any contains
Resource Type: All items
Language: Any language
Start Date: Day Month Year
End Date: Day Month Year
reset all fields
Search Simple Search
Expand results
Expand results beyond direct availability
Results 1 - 10 of 105,513
Sorted by: Date-newest
1 2 3 4 5
The Ethics of Armed Conflict : A Cosmopolitan Just War Theory
Lango, John W.
Edinburgh : Edinburgh University Press. Jan-14.
View all versions


University of Amsterdam
CataloguePlus
Databases Find e-journals Catalogue Help Mobile version Ask a question
Guest E-shelf My Account Sign in
Subject contains filosofie
Any contains
Any contains
Resource Type: All items
Language: Any language
Start Date: Day Month Year
End Date: Day Month Year
reset all fields
Search Simple Search
Expand results
Expand results beyond direct availability
Results 1 - 10 of 40,873
Sorted by: Date-newest
1 2 3 4 5
Dissertation
Morální aspekt zisku u Aristotela v Etice Nikomachově a Politice
Vojvodík, Lukáš Grygar, Filip
Univerzita Pardubice 2014 University of Pardubice
Full text available
Details
Book
Frühe Schriften II / Georg Wilhelm Friedrich Hegel ; bearbeitet von Friedhelm Nicolin, Ingo Rill und Peter Kriegel ; hrsg.: von Walter Jaeschke
Hegel, Georg Wilhelm Friedrich, 1770-1831 ; Nicolin, Friedhelm, 1926- ; Jaeschke, Walter, 1945-
Hamburg : Felix Meiner cop.2014
Available at GW-collecties UB
Locations Details
Refine my results
Availability
Available in the Library (38,753)
Full Text Online (660)
Peer-reviewed Journals (86)
More options
Resource type

Chapter


Book chapter
Amsterdam
Rodenhuis, W.
Oxford Encyclopedia of Theatre and Performance, 2 vols., pp.55-56
Oxford University Press, Oxford 2003 UvA DARE
Might be available via UvA-Linker or in print
Details
Send to
Title: Amsterdam
Author: Rodenhuis, W.
Is Part Of: Oxford Encyclopedia of Theatre and Performance, 2 vols., pp.55-56
Publisher: Oxford University Press, Oxford
Creation Date: 2003
Identifier: ISBN:0198601743
Source: UvA DARE
Links
This item in Google Books©
UvA-LINKER
Publication in NARCIS
Author/research information in NARCIS

Precision issues

Discovery tool limits precision by ambiguous indexing

Precision issues

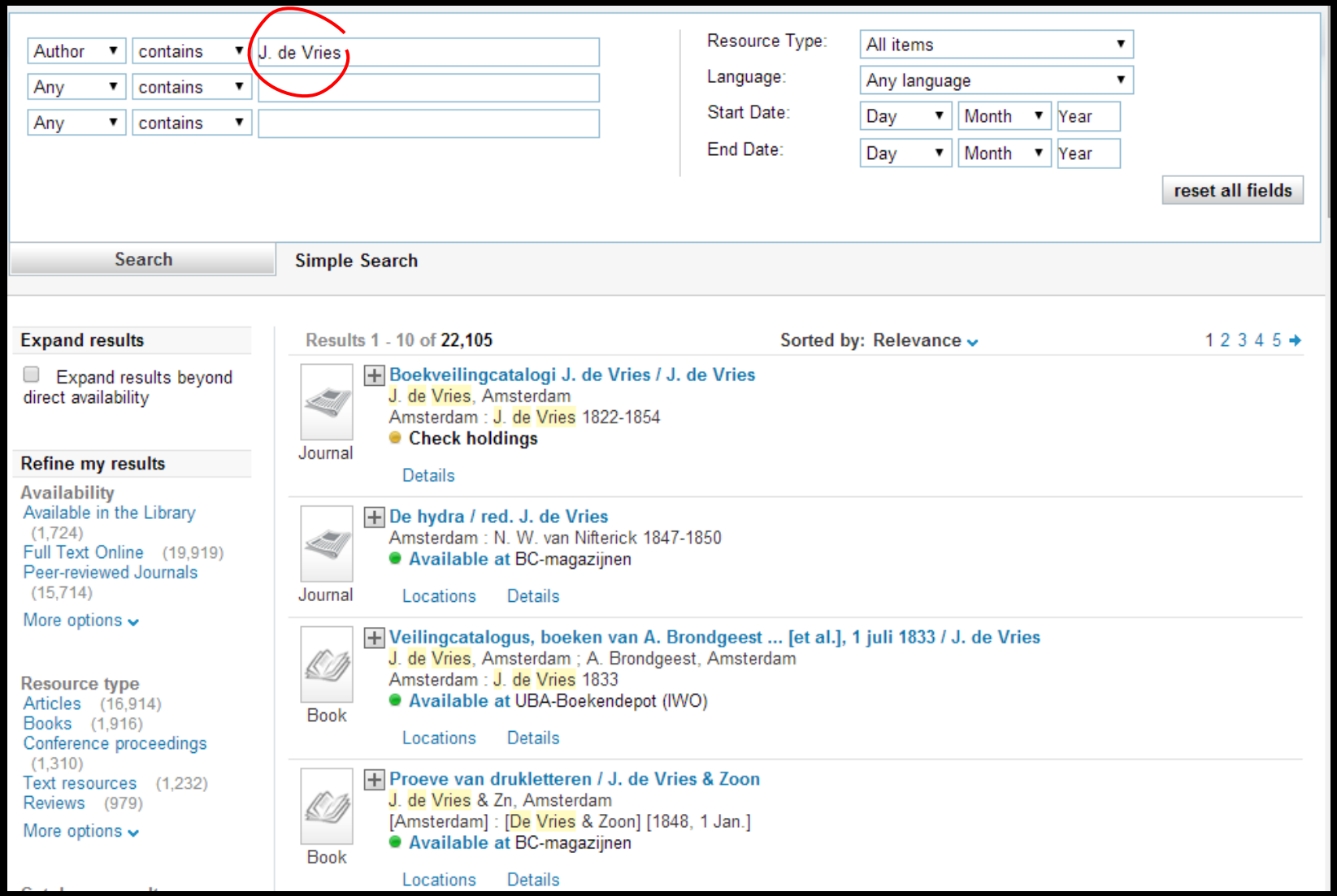
Indexed and/but erroneously found

By author name (string based)

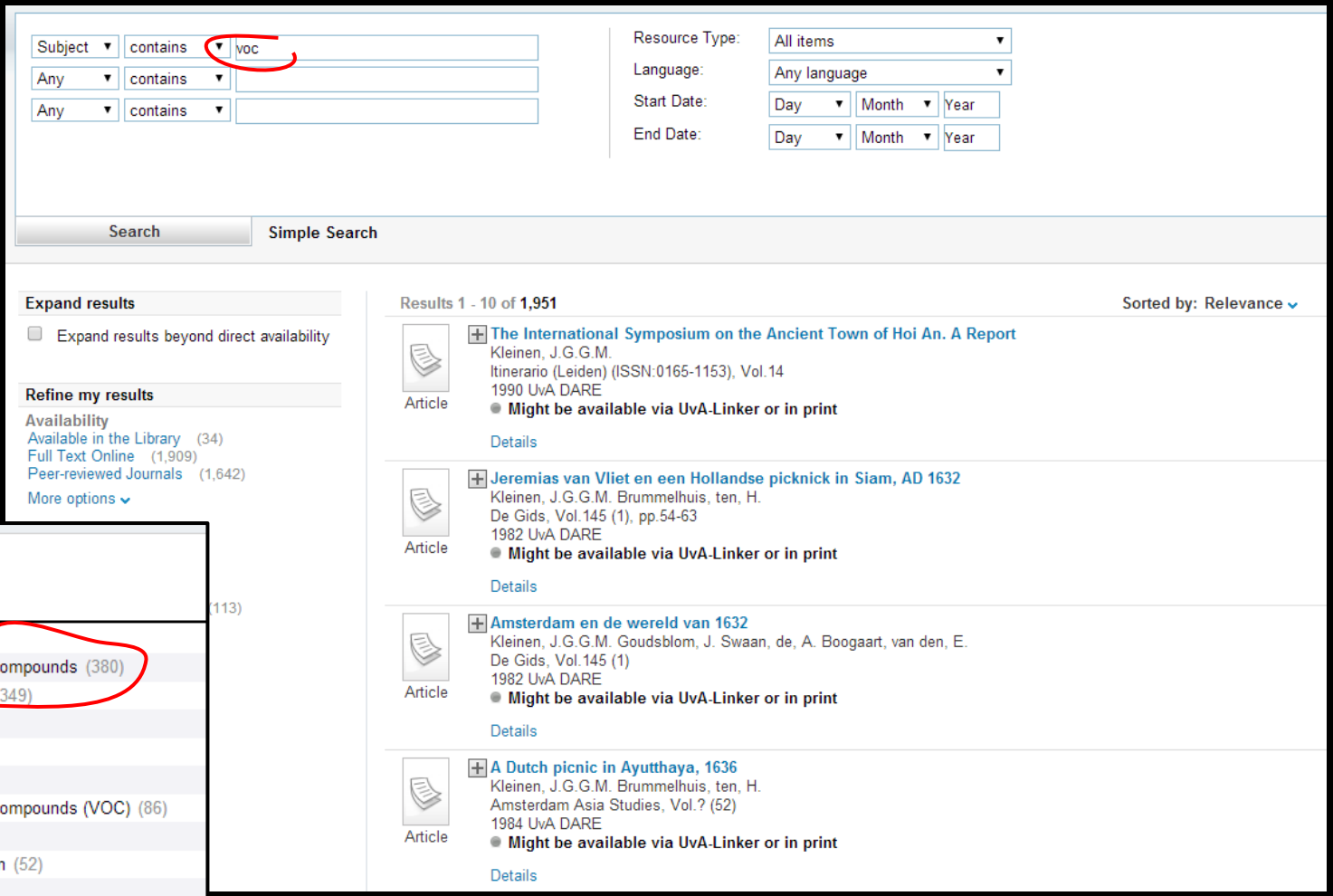
By subject (string based, languages)

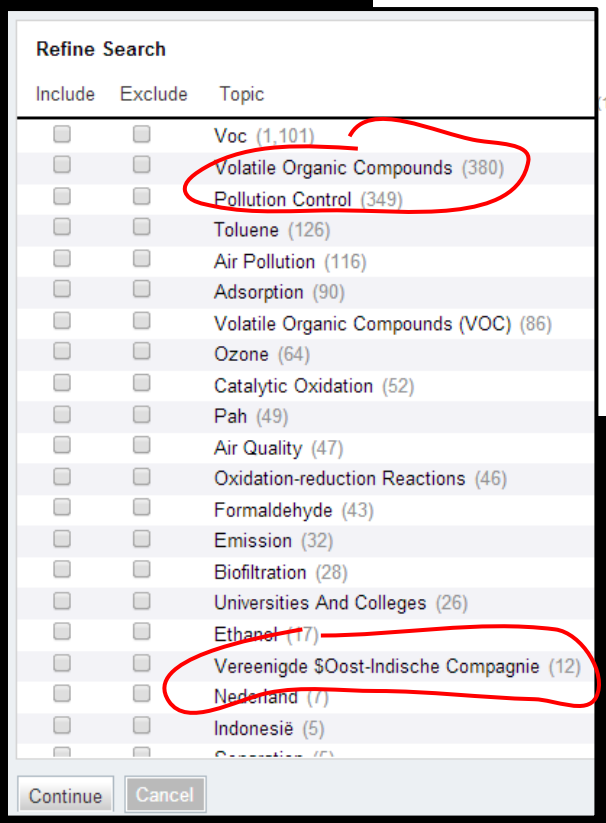
Query too broad

Author

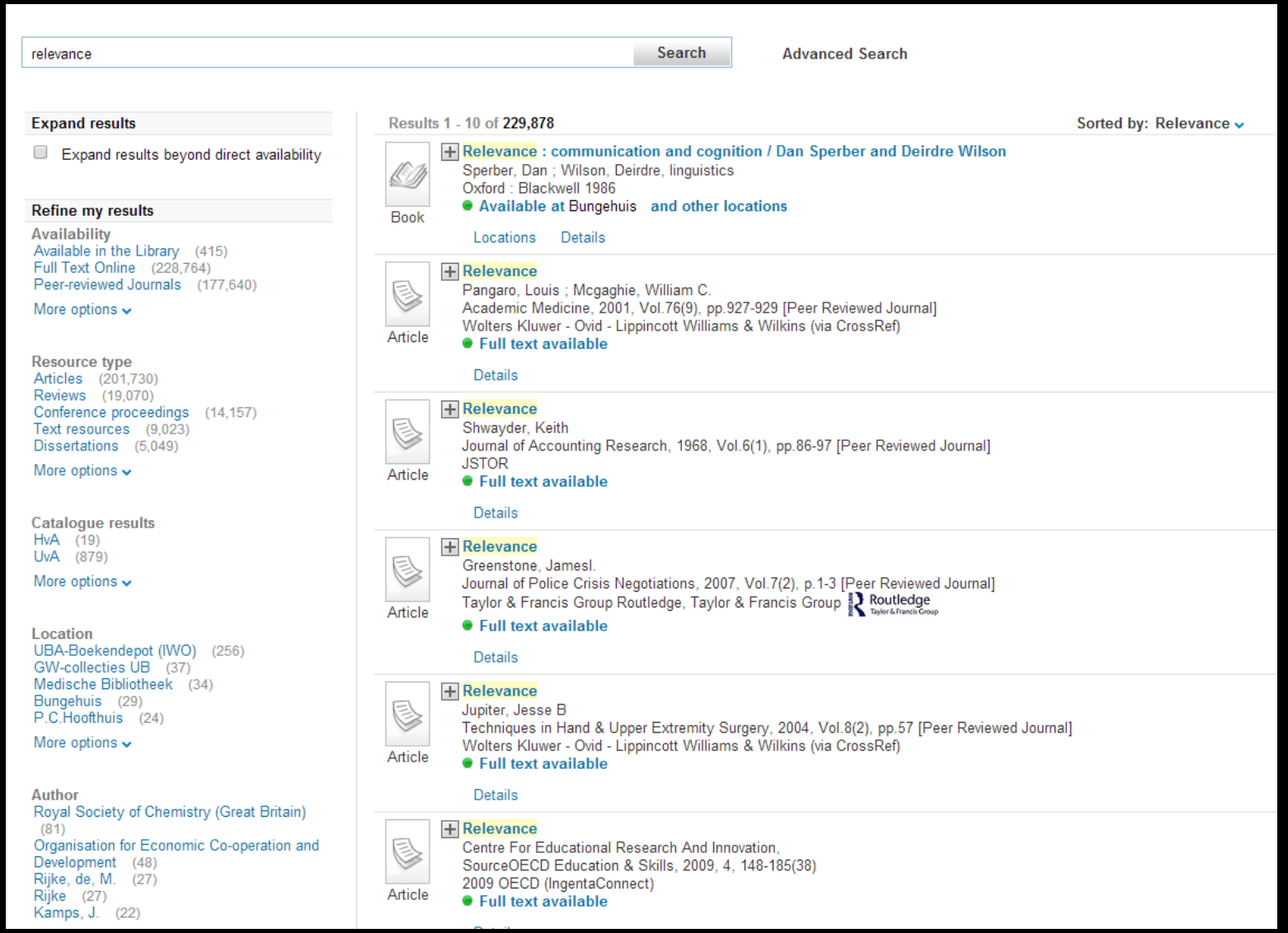

Author contains J. de Vries
Any contains
Any contains
Resource Type: All items
Language: Any language
Start Date: Day Month Year
End Date: Day Month Year
reset all fields
Search
Simple Search
Expand results
Expand results beyond direct availability
Refine my results
Availability
Available in the Library (1,724)
Full Text Online (19,919)
Peer-reviewed Journals (15,714)
More options
Resource type
Articles (16,914)
Books (1,916)
Conference proceedings (1,310)
Text resources (1,232)
Reviews (979)
More options
Results 1 - 10 of 22,105
Sorted by: Relevance
1 2 3 4 5
Boekveilingcatalogi J. de Vries / J. de Vries
J. de Vries, Amsterdam
Amsterdam : J. de Vries 1822-1854
Check holdings
Details
Journal
De hydra / red. J. de Vries
Amsterdam : N. W. van Nifterick 1847-1850
Available at BC-magazijnen
Locations Details
Journal
Veilingcatalogus, boeken van A. Brondgeest ... [et al.], 1 juli 1833 / J. de Vries
J. de Vries, Amsterdam ; A. Brondgeest, Amsterdam
Amsterdam : J. de Vries 1833
Available at UBA-Boekendepot (IWO)
Locations Details
Book
Proeve van drukletteren / J. de Vries & Zoon
J. de Vries & Zn, Amsterdam
[Amsterdam] : [De Vries & Zoon] [1848, 1 Jan.]
Available at BC-magazijnen
Locations Details
Book

Subject


Subject contains voc
Any contains
Any contains
Resource Type: All items
Language: Any language
Start Date: Day Month Year
End Date: Day Month Year
Search
Simple Search
Expand results
Expand results beyond direct availability
Refine my results
Availability
Available in the Library (34)
Full Text Online (1,909)
Peer-reviewed Journals (1,642)
More options
Results 1 - 10 of 1,951
Sorted by: Relevance
Article
The International Symposium on the Ancient Town of Hoi An. A Report
Kleinen, J.G.G.M.
Itinerario (Leiden) (ISSN:0165-1153), Vol.14
1990 UvA DARE
Might be available via UvA-Linker or in print
Details
Article
Jeremias van Vliet en een Hollandse picknick in Siam, AD 1632
Kleinen, J.G.G.M. Brummelhuis, ten, H.
De Gids, Vol.145 (1), pp.54-63
1982 UvA DARE
Might be available via UvA-Linker or in print
Details
Article
Amsterdam en de wereld van 1632
Kleinen, J.G.G.M. Goudsblom, J. Swaan, de, A. Boogaart, van den, E.
De Gids, Vol.145 (1)
1982 UvA DARE
Might be available via UvA-Linker or in print
Details
Article
A Dutch picnic in Ayutthaya, 1636
Kleinen, J.G.G.M. Brummelhuis, ten, H.
Amsterdam Asia Studies, Vol.? (52)
1984 UvA DARE
Might be available via UvA-Linker or in print
Details


Refine Search
Include
Exclude
Topic
Voc (1,101)
Volatile Organic Compounds (380)
Pollution Control (349)
Toluene (126)
Air Pollution (116)
Adsorption (90)
Volatile Organic Compounds (VOC) (86)
Ozone (64)
Catalytic Oxidation (52)
Pah (49)
Air Quality (47)
Oxidation-reduction Reactions (46)
Formaldehyde (43)
Emission (32)
Biofiltration (28)
Universities And Colleges (26)
Ethanol (17)
Vereenigde $Oost-Indische Compagnie (12)
Nederland (7)
Indonesië (5)
Continue
Cancel

Too broad


relevance
Search
Advanced Search
Expand results
Expand results beyond direct availability
Refine my results
Availability
Available in the Library (415)
Full Text Online (228,764)
Peer-reviewed Journals (177,640)
More options
Resource type
Articles (201,730)
Reviews (19,070)
Conference proceedings (14,157)
Text resources (9,023)
Dissertations (5,049)
More options
Catalogue results
HvA (19)
UvA (879)
More options
Location
UBA-Boekendepot (IWO) (256)
GW-collecties UB (37)
Medische Bibliotheek (34)
Bungehuis (29)
P.C.Hoofthuis (24)
More options
Author
Royal Society of Chemistry (Great Britain) (81)
Organisation for Economic Co-operation and Development (48)
Rijke, de, M. (27)
Rijke (27)
Kamps, J. (22)
Results 1 - 10 of 229,878
Sorted by: Relevance
Book
Relevance : communication and cognition / Dan Sperber and Deirdre Wilson
Sperber, Dan ; Wilson, Deirdre, linguistics
Oxford : Blackwell 1986
Available at Bungehuis and other locations
Locations Details
Article
Relevance
Pangaro, Louis ; Mcgaghie, William C.
Academic Medicine, 2001, Vol.76(9), pp.927-929 [Peer Reviewed Journal]
Wolters Kluwer - Ovid - Lippincott Williams & Wilkins (via CrossRef)
Full text available
Details
Article
Relevance
Shwayder, Keith
Journal of Accounting Research, 1968, Vol.6(1), pp.86-97 [Peer Reviewed Journal]
JSTOR
Full text available
Details
Article
Relevance
Greenstone, Jamesl.
Journal of Police Crisis Negotiations, 2007, Vol.7(2), p.1-3 [Peer Reviewed Journal]
Taylor & Francis Group Routledge, Taylor & Francis Group
Routledge
Full text available
Details
Article
Relevance
Jupiter, Jesse B
Techniques in Hand & Upper Extremity Surgery, 2004, Vol.8(2), pp.57 [Peer Reviewed Journal]
Wolters Kluwer - Ovid - Lippincott Williams & Wilkins (via CrossRef)
Full text available
Details
Article
Relevance
Centre For Educational Research And Innovation,
SourceOECD Education & Skills, 2009, 4, 148-185(38)
2009 OECD (IngentaConnect)
Full text available

Recall and precision issues

Content of index

Quality of search index units

Lack of connections (isolated string items)

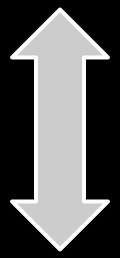
Algorithms for retrieving and ranking not transparent

Relevance - New perspective

Instead of

SYSTEM

Collections, Indexed content, Query



Context-Workflow-Goals- Environment of

USER

Is this technically possible, feasible?

Extend Content?

Know Context?

Relevance Redefined and Primo

What is already possible?

Content

Additional content types

Additional indexed fields

Third nodes (*not merged*)

External links (*not searchable, link out only*)

Context

Discipline (*for ranking, not searching*)

Algorithm improvements (*for current items*)

Relevance Redefined and Primo

What is missing?

Content

Internal links

Integrated Primo Central/Local

External links

External indexes

Normalised/multilingual authors/subjects

Context

Context

Relevance Redefined and Primo

Options

Content

Universal record format: RDF!

Identifier based authorities: VIAF! MACS? (DBpedia?)

Global metadata index!

Transparent algorithms!

Context

What would Google do?

A word about Google vs Primo

- Google knows
  - IP addresses
  - Account
  - Searches
  - Clicks
  - Location
- Primo makes an educated guess
  - Discipline?
  - Query type

VIAF
Virtual International Authority File

Search

Select Field: Personal Names ▾ | Select Index: All VIAF ▾ | Search Terms: currer bell | Search

4 headings found for *currer bell*

	Heading	Type	Sample Title
1	Brontë, Charlotte, 1816-1855 Brontë, Charlotte ברונטה, שרלוט, 1816-1855 Бронте, Шарлотта, 1816-1855 Brontë, Charlotte (English novelist, 1816-1855) برونتي، شارلوت، 1816-1855	Personal	Jane Eyre. Jane Eyre. Jane Eyre. Jane Eyre. Jane Eyre.
2	Brontë, Emily, 1818-1848 Brontë, Emily (Emily Jane), 1818-1848 برونتي، اميلي، 1818-1848 Brontë, Emily Jane Brontë, Emily Jane, 1818-1848 Brontë, Emily برونتي، أميلي ברונטה, אמילי, 1818-1848 Бронте, Эмилия, 1818-1848 Brontë, Emily (British novelist and artist, 1818-1848)	Personal	Wuthering heights Wuthering heights Wuthering heights Wuthering heights Wuthering heights Wuthering heights Wuthering heights Wuthering heights Wuthering heights
3	Bell, Currer	Personal	Jane Eyre : an autobiography
4	Bell, Acton Currer, [pseud.]	Personal	Broeder en zuster, of De zucht n

MACS

Multilingual ACCess to Subjects

Since 1997

Manual linking between strings

New future?

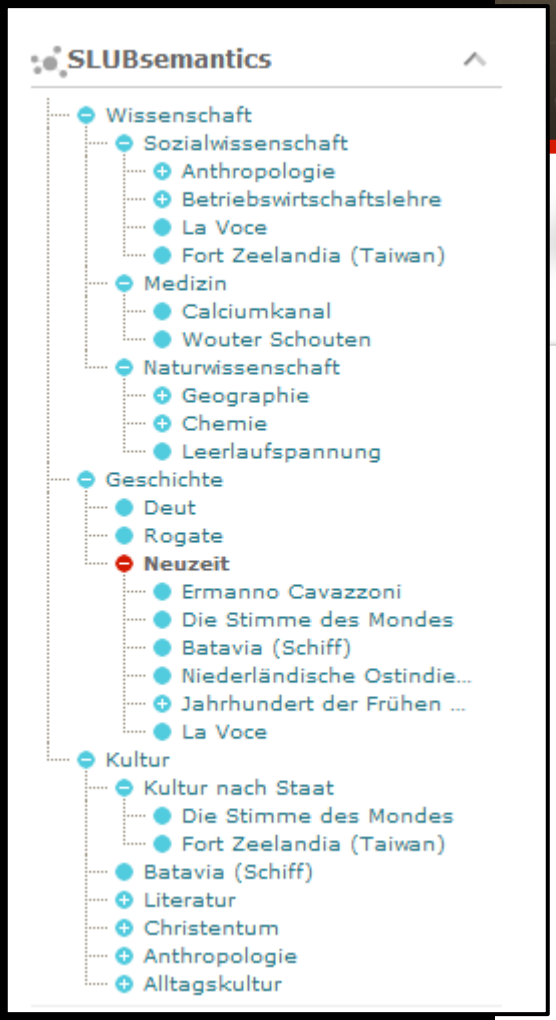
The European Library...

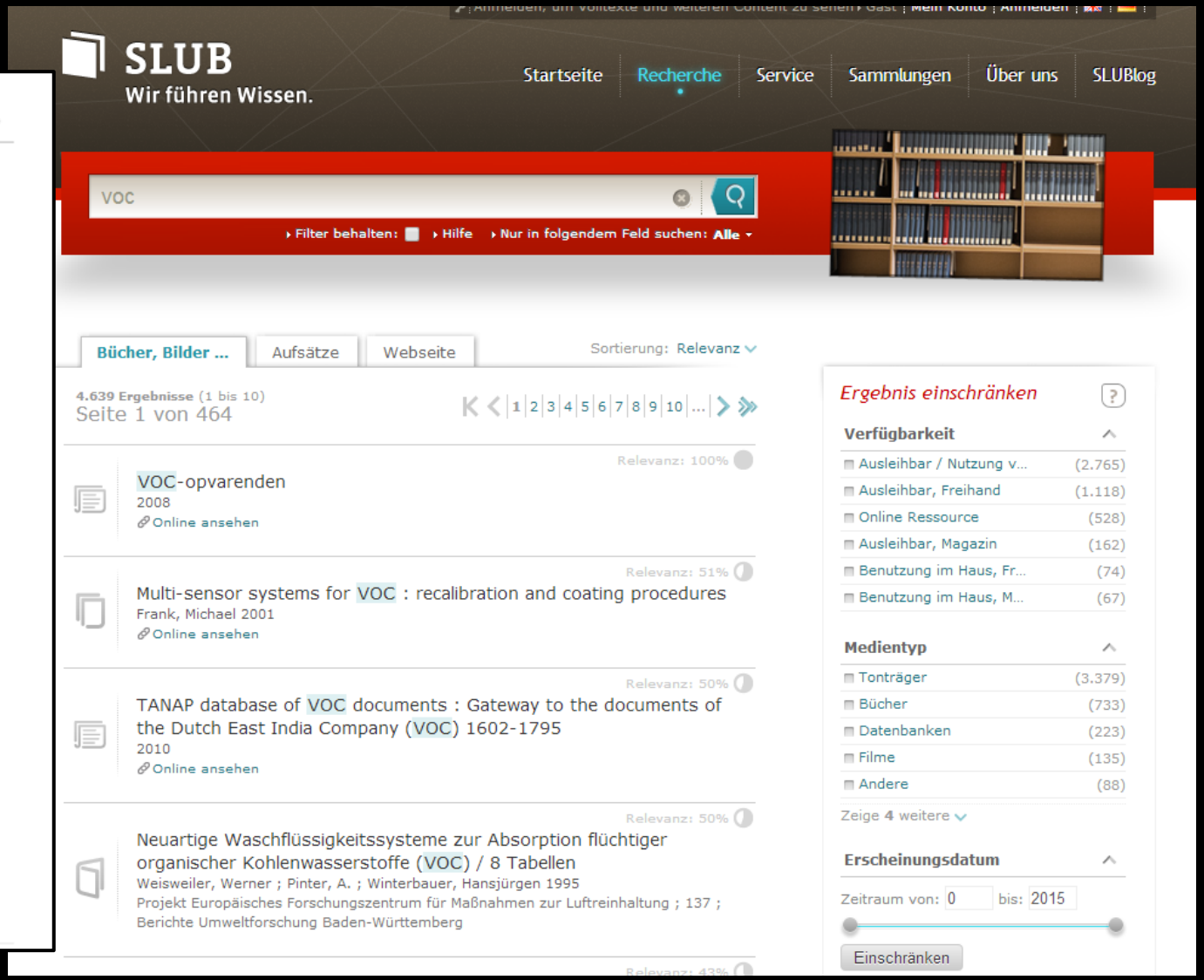
http://www.nb.admin.ch/nb_professionnel/projektarbeit/00729/00733/index.html?lang=en

This is the list of concepts related to **voc**

Volatile organic compounds (Topic)
[-] MACS00114444
VOC (Ökologische Chemie) (German)
Composés organiques volatils (French)
Volatile organic compounds (English)
Sources:
MACS: MACS0011444
SWD: 4351499-6
RAMEAU: FRBNF120235188
LCSH: sh 93000972

WikiPedia/DBpedia





But, wait a minute...

RDF?

Identifiers?

Global index?

Transparency?

**** the system

Open independent transparent web based connected data infrastructure

Linked Open Data

Should libraries, vendors invest in data infrastructure instead of systems?

Ŧ ц©Ⱶ the system

Open independent transparent web based connected data infrastructure

Linked Open Data

Should libraries, vendors invest in data infrastructure instead of systems?

NISO Open Discovery Initiative

"Transparency in discovery" 2014 (*http://www.niso.org/workrooms/odi/*)

"... facilitate increased transparency in the content coverage of indexbased discovery services …

Full transparency will enable libraries to objectively evaluate discovery services …"

NISO Open Discovery Initiative

In scope:

Quantity of content
Form of content
Do not favor or disfavor items from any given content source or material type
Specific metadata fields indexed
Whether controlled vocabularies or ontologies are included

NISO Open Discovery Initiative

Out of scope:

“Relevancy ranking” (may fall within the realm of proprietary technologies used competitively to differentiate commercial offerings)

APIs exposed by discovery service (initially, reluctantly)

NISO Open Discovery Initiative

Nothing about:

Content linking/identifiers
Normalised/multilingual authority files
Relevancy ranking
System independent data infrastructure

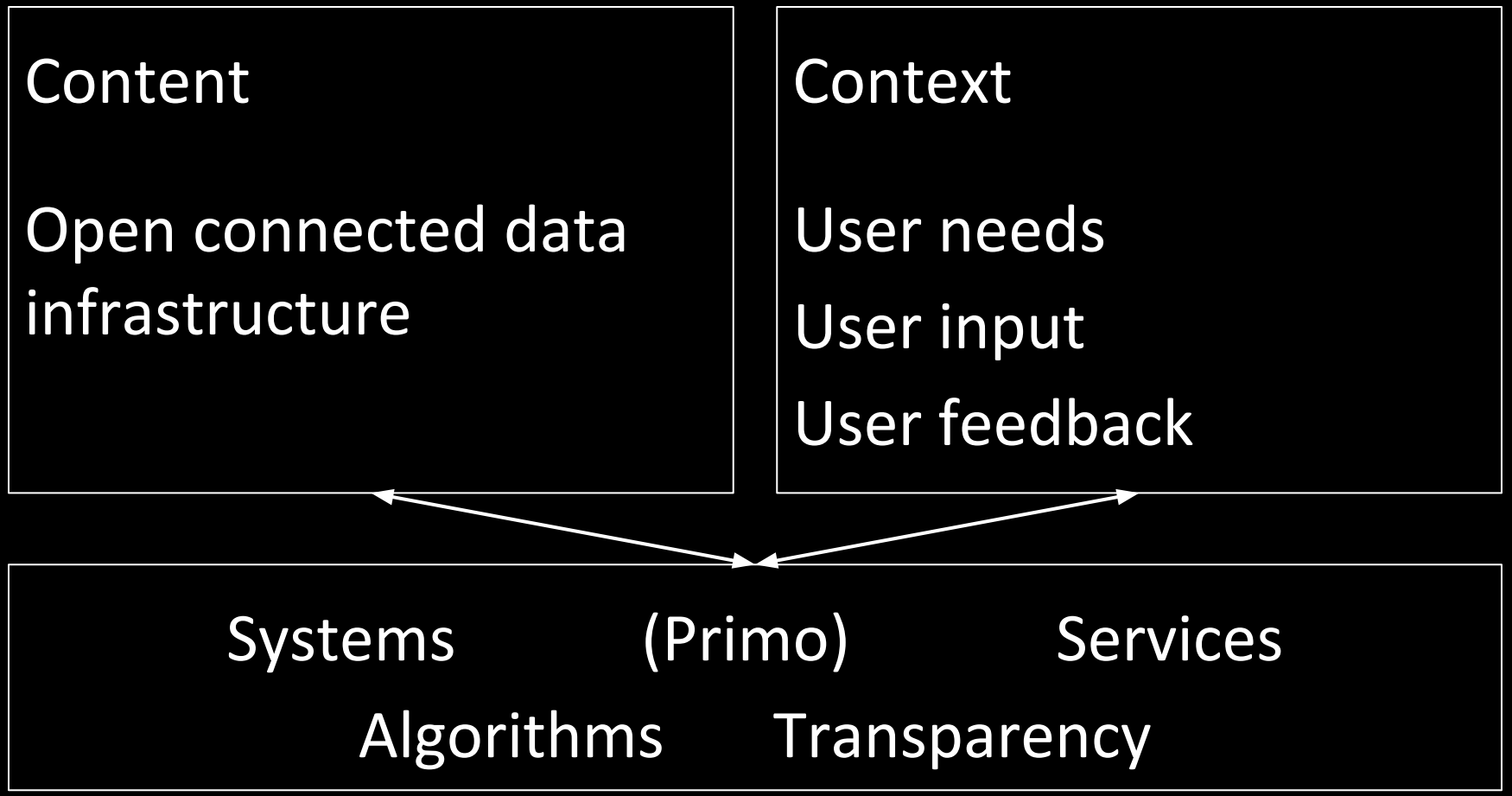
NISO Open Discovery Initiative

Stakeholders/Working group members:

Content providers
Discovery service providers
Libraries

Who's missing?

Relevance redefined



SOA - Service Oriented Architecture + Context

That's all Folks!