How We are Searching Cultural Heritage

A qualitative analysis of search patterns and success in The European Library

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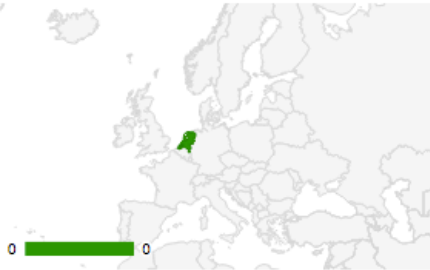
Lida 2014, 17.06.2014

"Penguin Classics Modern Edition" by Crossett Library Bennington College http://www.flickr.com/photos/crossettlibrary/5909232480/

Surrogates & Metadata

LOCATION OF CONTRIBUTOR



Onverbreekbare banden

Harvard-Style Citation
UFA (Berlin), n.d. Onverbreekbare banden. (s.l.): (s.n.)

Services
Access Online
At Contributor
See other versions (2)
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Description
Zarah Leander

Creator
UFA (Berlin)

Contributor
UFA (Berlin)
Mettes, Frans
Mes & Bronkhorst

Source
BG E17/3 (affiche), 150 jaar Nederlandse reclame, ReclameArsenaal

Publication
22-06-2004

Resource type
Still image

Extent
1000 x 650 mm

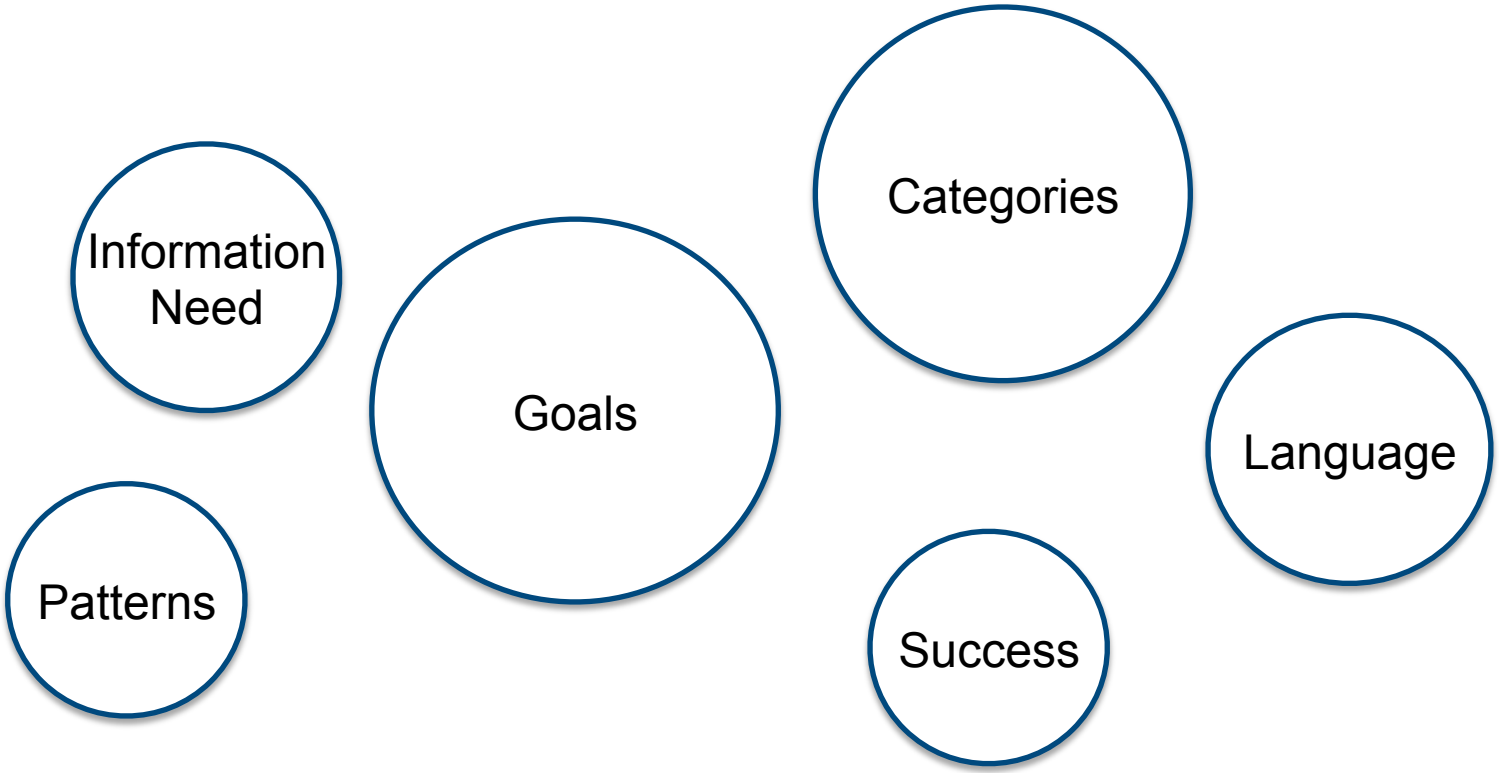
Medium
text/xml

Format
affiche

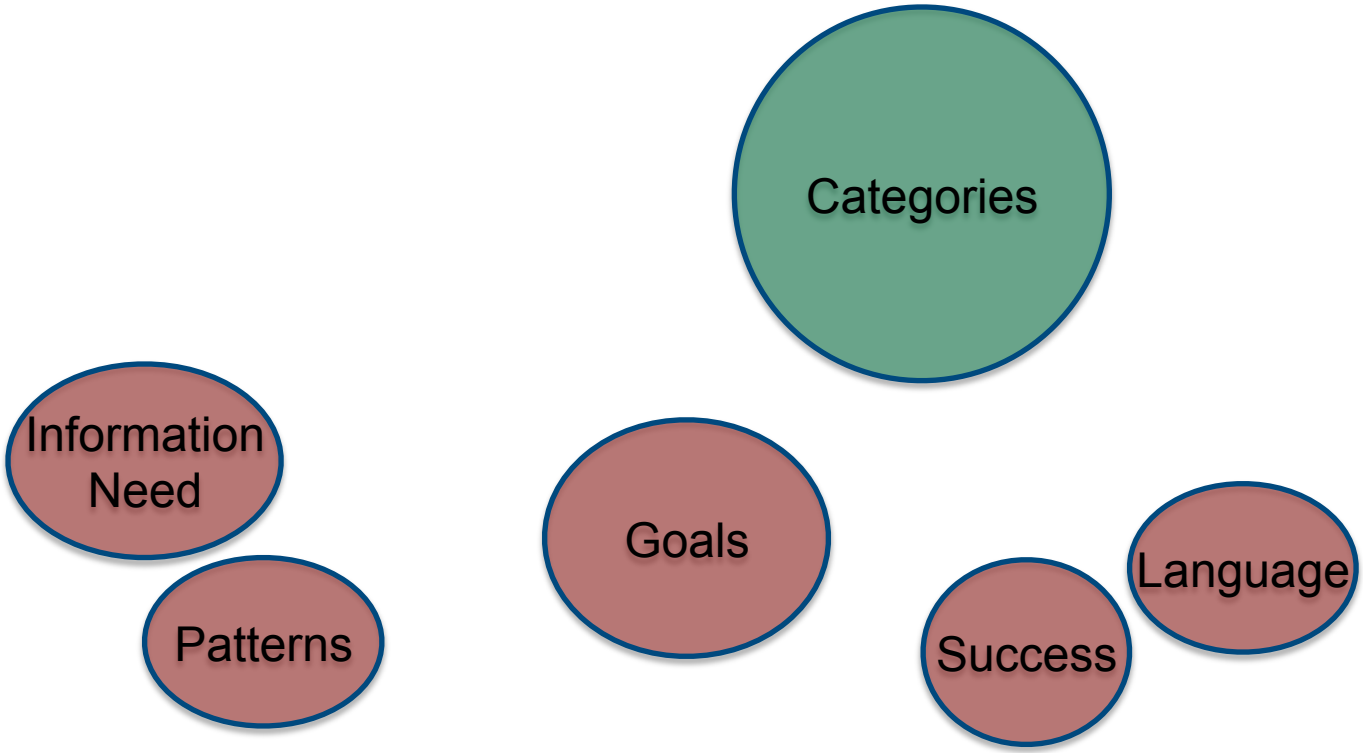
Query Statistics

Search Term	Total Unique Searches	Results Pageviews / Search	% Search Exits	% Search Refinements	Time after Search	Average Search Depth
	186,148 % of Total: 100.00% (186,148)	3.93 Site Avg: 3.93 (0.00%)	37.89% Site Avg: 37.89% (0.00%)	21.45% Site Avg: 21.45% (0.00%)	00:02:36 Site Avg: 00:02:36 (0.00%)	0.25 Site Avg: 0.25 (0.00%)
1. *:*	3,948 (2.12%)	7.15	53.09%	6.60%	00:04:58	0.88
2. "photo" OR "foto" OR "photographie" OR "photography" OR "fotografie" OR "fotografía"	984 (0.53%)	3.66	47.26%	34.25%	00:02:15	0.10
3. photo" OR "foto" OR "photographie" OR "photography" OR "fotografie" OR "fotograf&#65533;	604 (0.32%)	2.99	60.60%	43.21%	00:01:41	0.08
4. what:"map"	470 (0.25%)	6.07	62.98%	6.80%	00:06:05	0.27
5. what:"TEXT"	330 (0.18%)	1.31	27.27%	12.70%	00:00:43	0.99
6. europeana_collectionName:90402*	326 (0.18%)	5.92	59.20%	7.04%	00:02:52	0.30
7. what:"Image"	260 (0.14%)	1.73	28.46%	15.78%	00:01:14	0.93
8. 1	243 (0.13%)	1.01	98.77%	1.22%	00:00:01	0.01
9. what:"text"	223 (0.12%)	1.80	23.77%	17.21%	00:01:39	1.02
10. what:"Photo"	222 (0.12%)	1.58	28.38%	14.00%	00:01:17	1.14
11. what:"Text"	193 (0.10%)	1.44	24.87%	25.27%	00:01:35	1.03
12. what:"photograph"	178 (0.10%)	1.60	22.47%	14.04%	00:01:20	1.34
13. what:"d day" OR "normandy landings"	170 (0.09%)	3.06	93.53%	1.54%	00:02:08	0.13
14. who:(Massi-Lehre)	147 (0.08%)	1.17	77.55%	1.16%	00:00:19	0.21

Beyond Statistics: Semantics



So far...


Categories
Information Need
Goals
Language
Patterns
Success

Query Categories

Named Entities

- Person
- Work title
- Geographic
- Event
- Organization

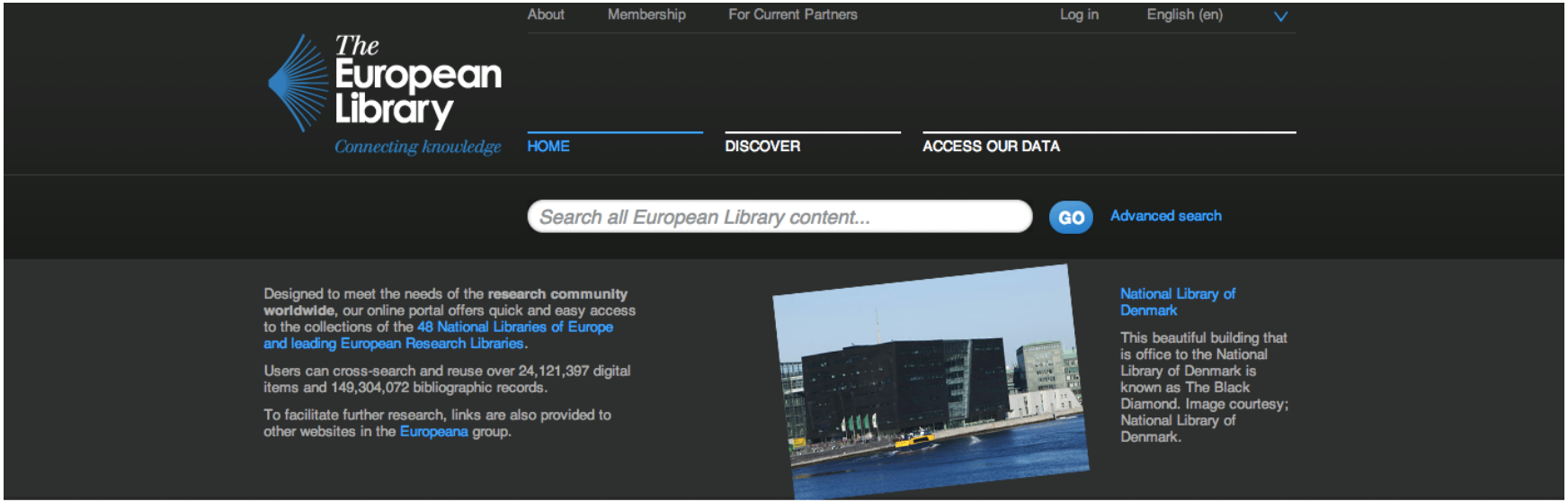
Non - Named Entities

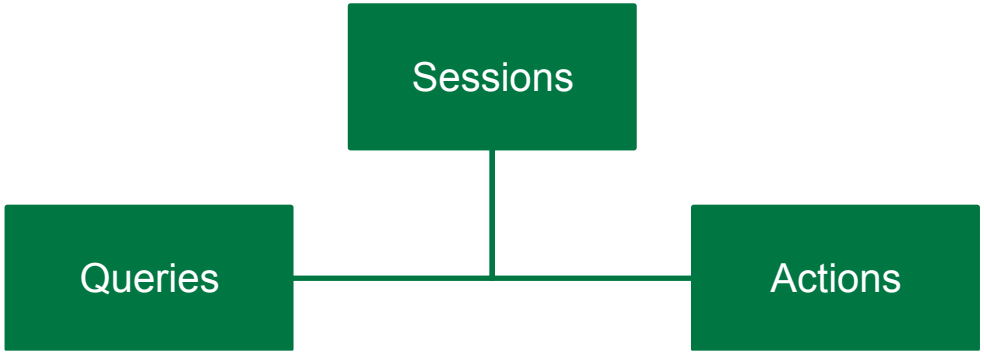
- Topical
- Other

QUERIES IN CONTEXT

“The bigger picture” by krossbow | CC BY 2.0

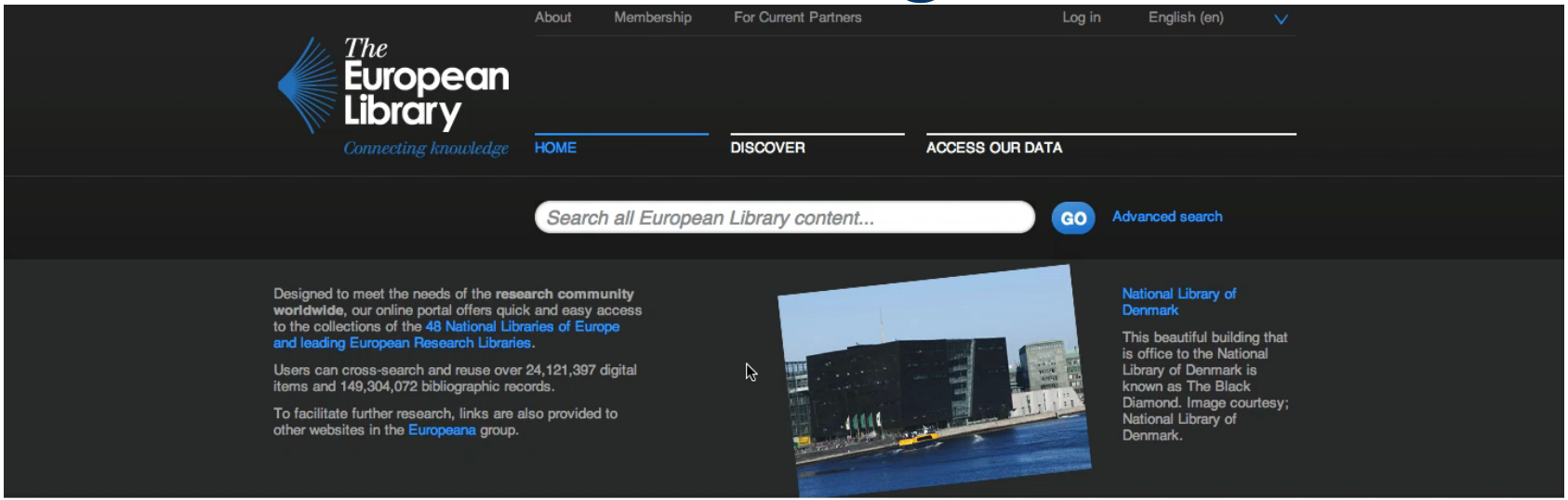
The European Library





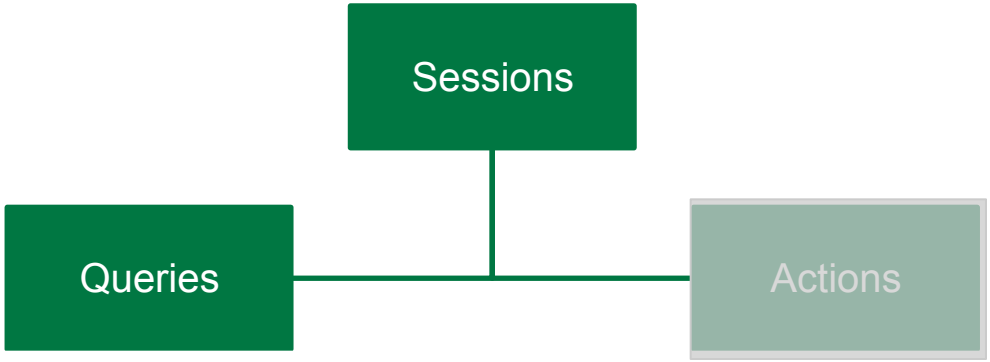
Sessions

How We Are Searching Cultural Heritage



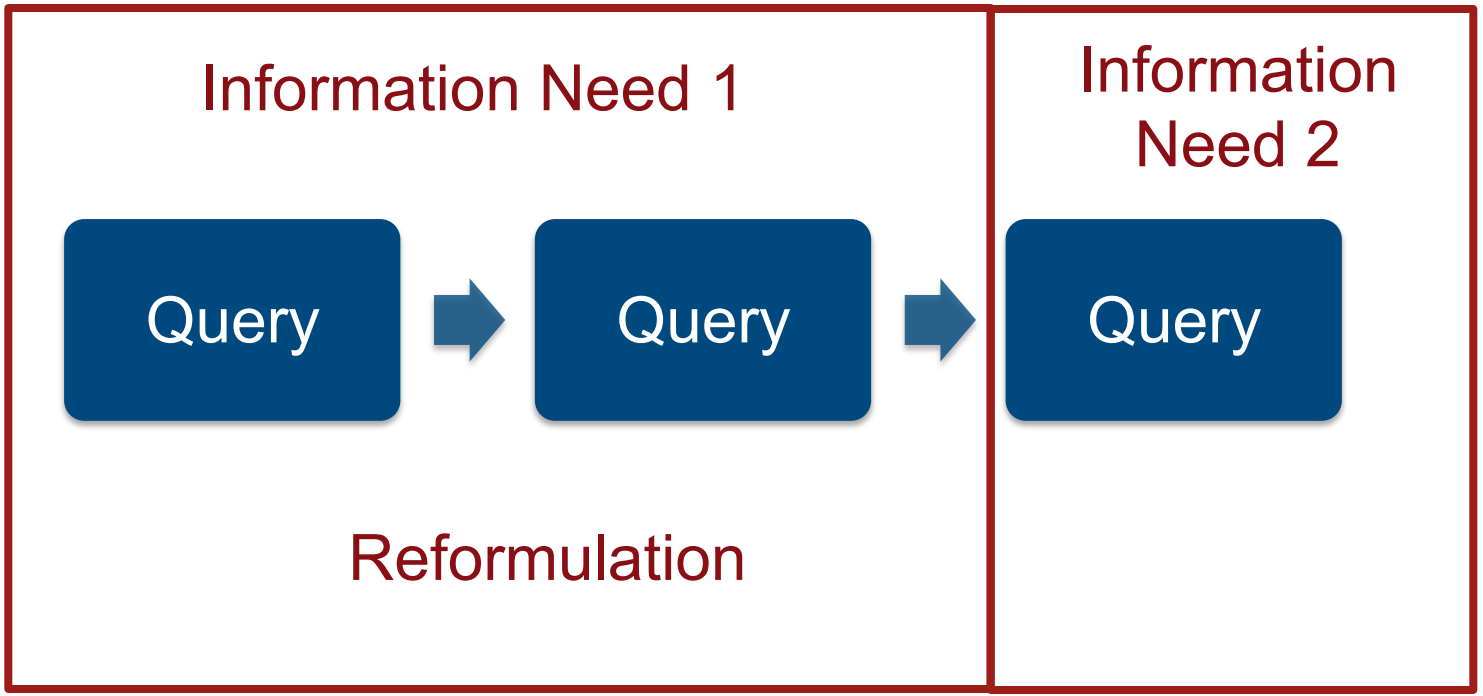
Case Study

http://www.affiliateblog.de/wp-content/uploads/2010/02/Lupe.jpg

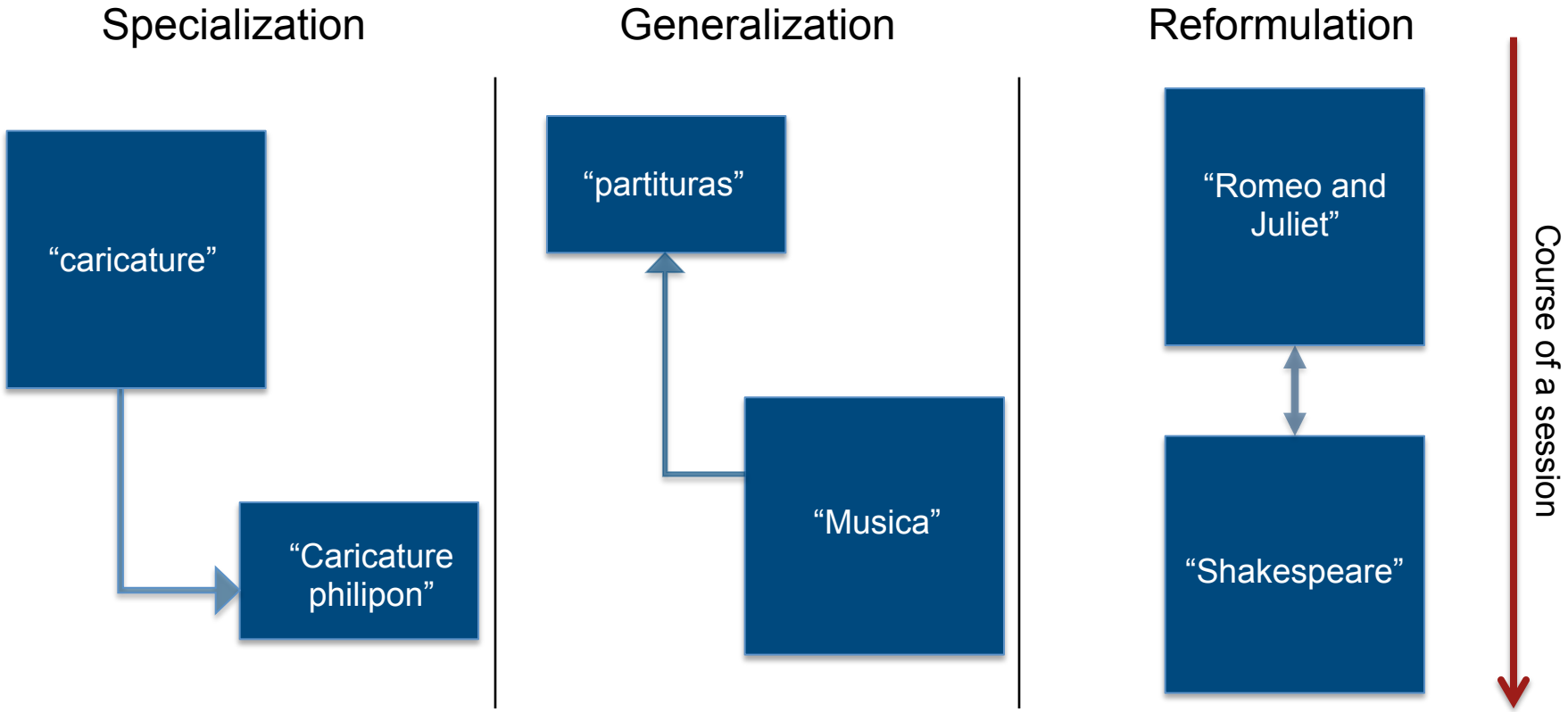


Query Goals

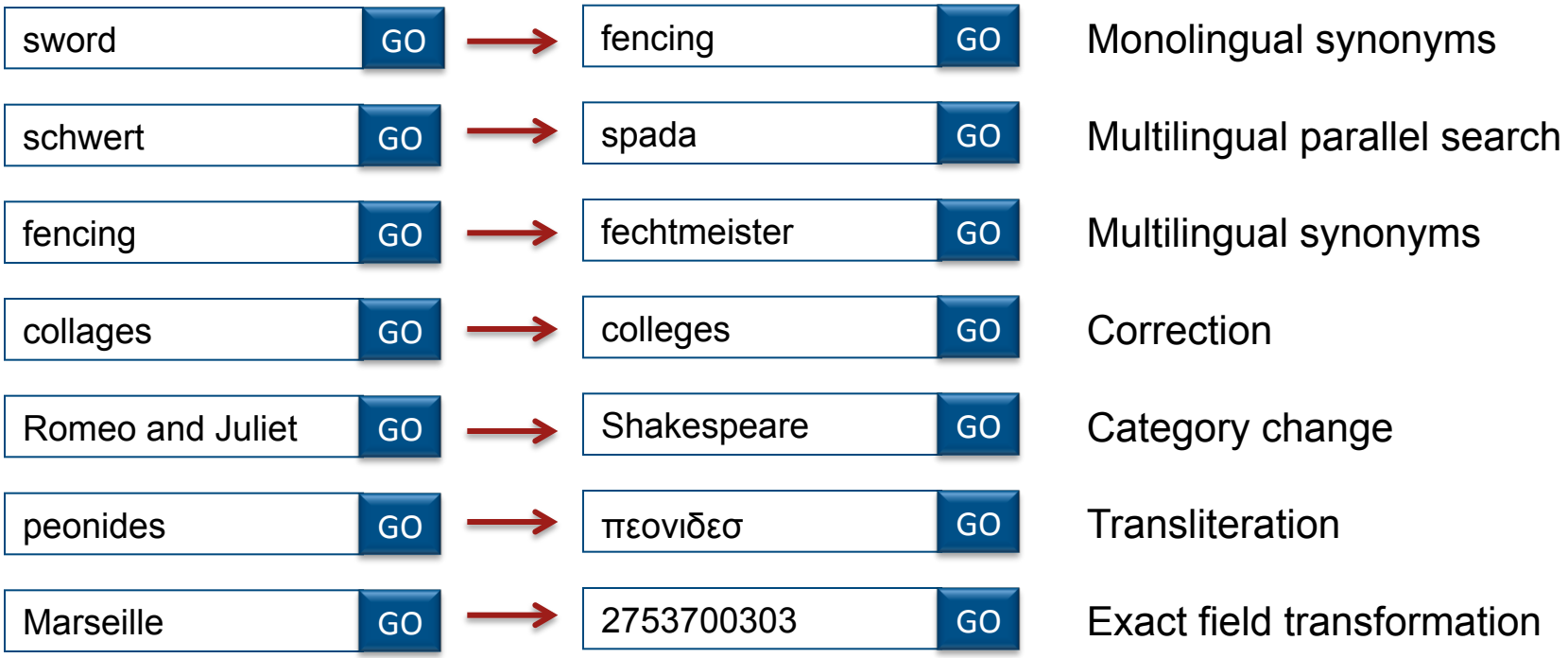
Information Needs & Reformulations

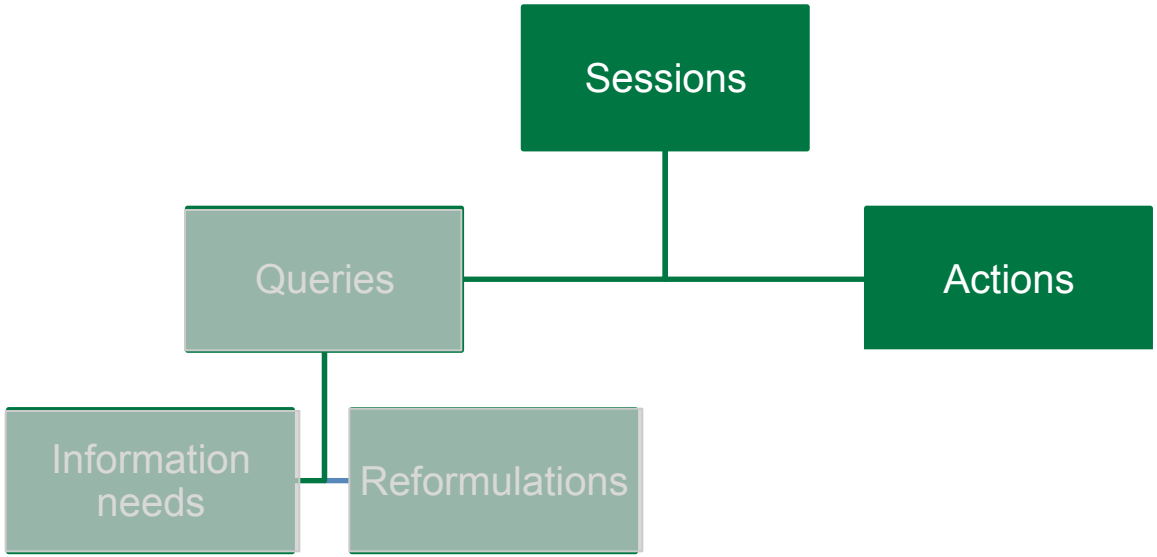


Query Reformulation Patterns



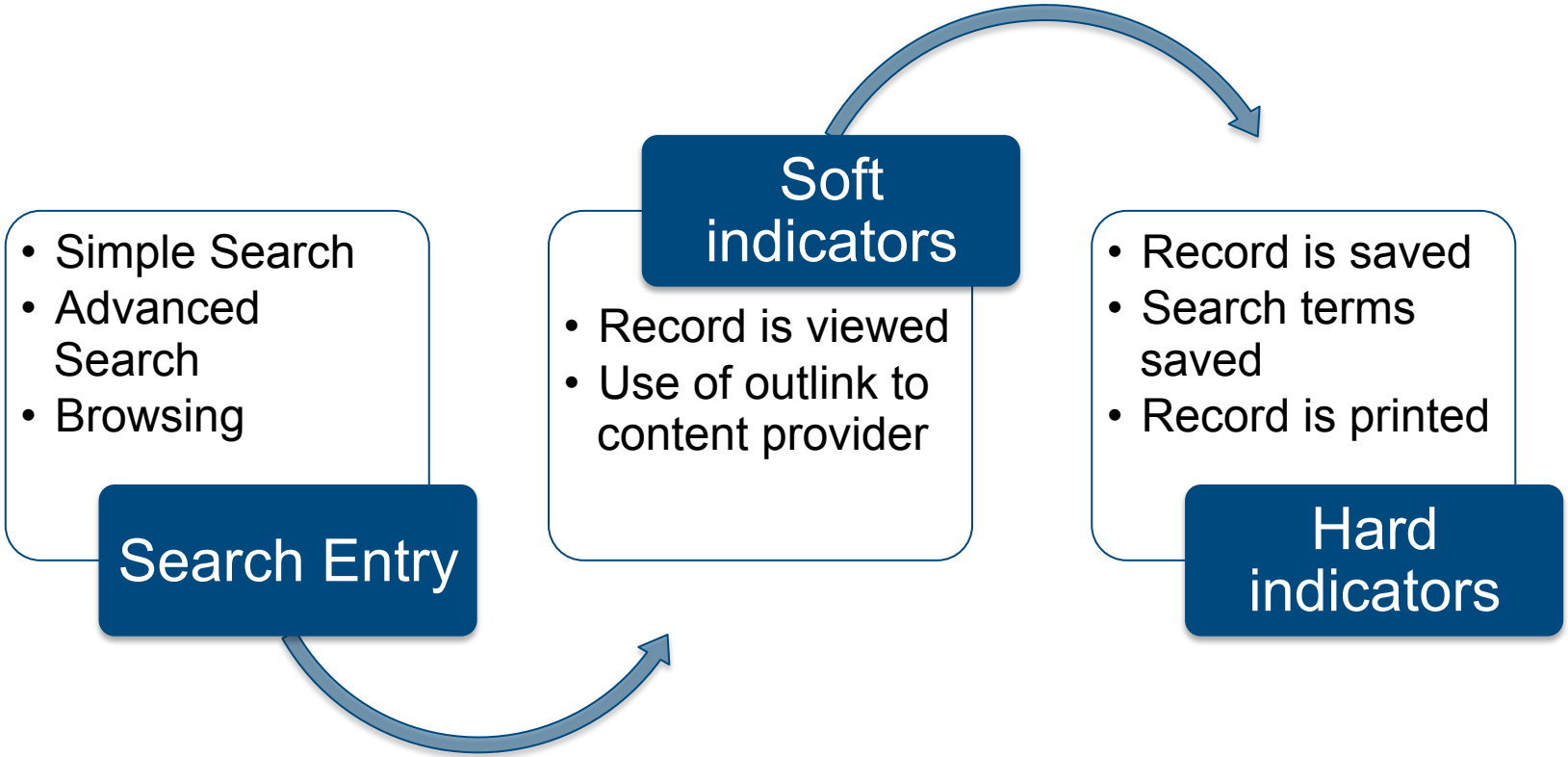
Reformulations in Digital Libraries





Session Success

Successful Sessions



Success Rate

45%

of sessions are successful

Sessions with **multiple queries** are **more successful** than the ones with only one query

Success and Reformulations

Multilingual Parallel Search
Monolingual synonyms
Broader queries
Category Change
Narrower query
Spelling variants / corrections
Simple to fielded search
Transliteration
Query reduction

1. Likely to increase the amount of retrieved objects

2. Likely to show more of the content of the DL

3. Likely to show content from different angles

Implications for Design

- Support user with query translation & query suggestion
- Match queries to vocabulary terms in query suggestion

Dominant and prevailing
search paradigm

Diving into Cultural Heritage

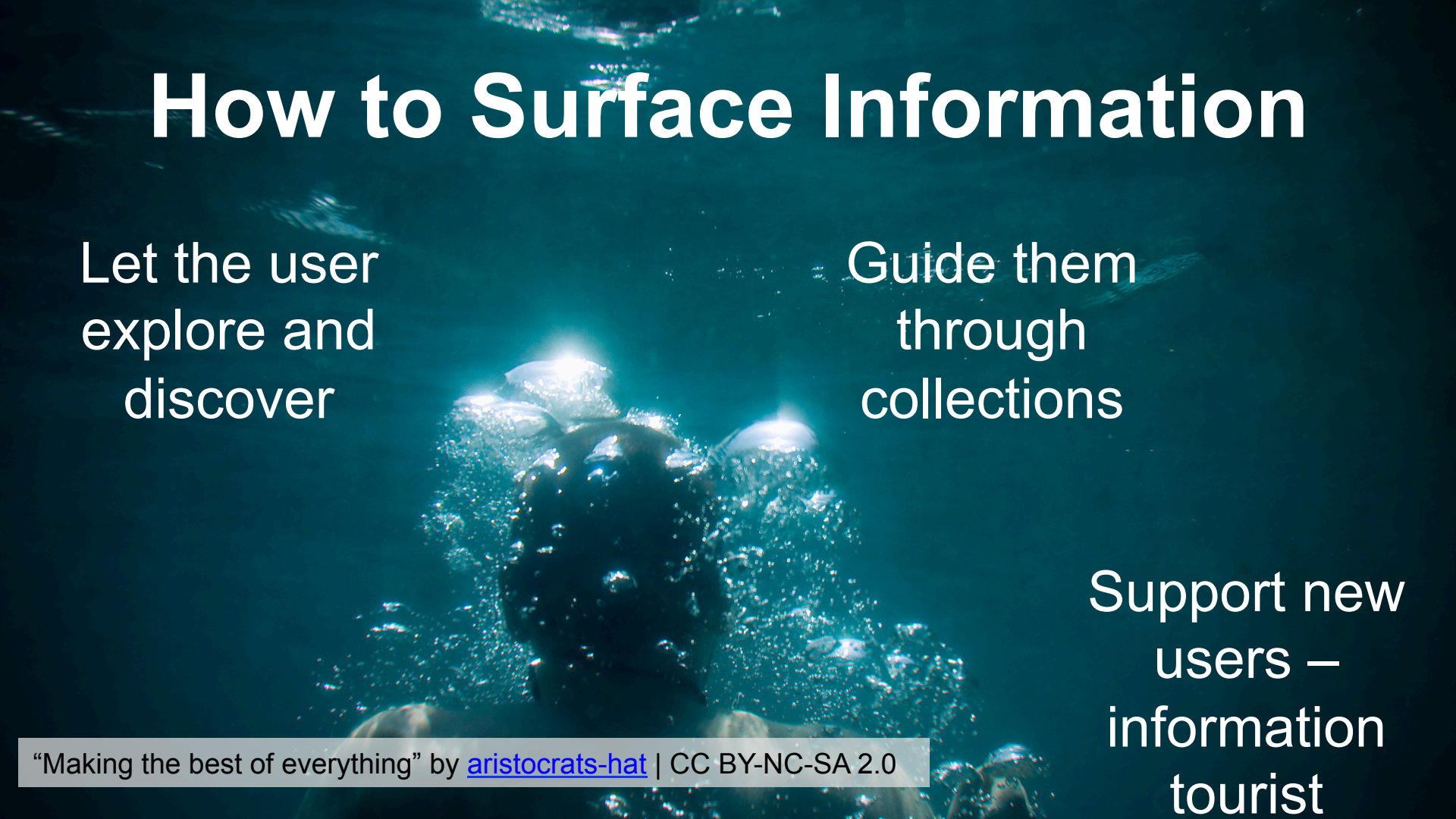
Extent of collections is often elusive

User needs are hardly researched

Majority of content stays hidden

Ein perfekter Kopfsprung by klaus.ottes | CC BY-NC-SA 2.0

How to Surface Information



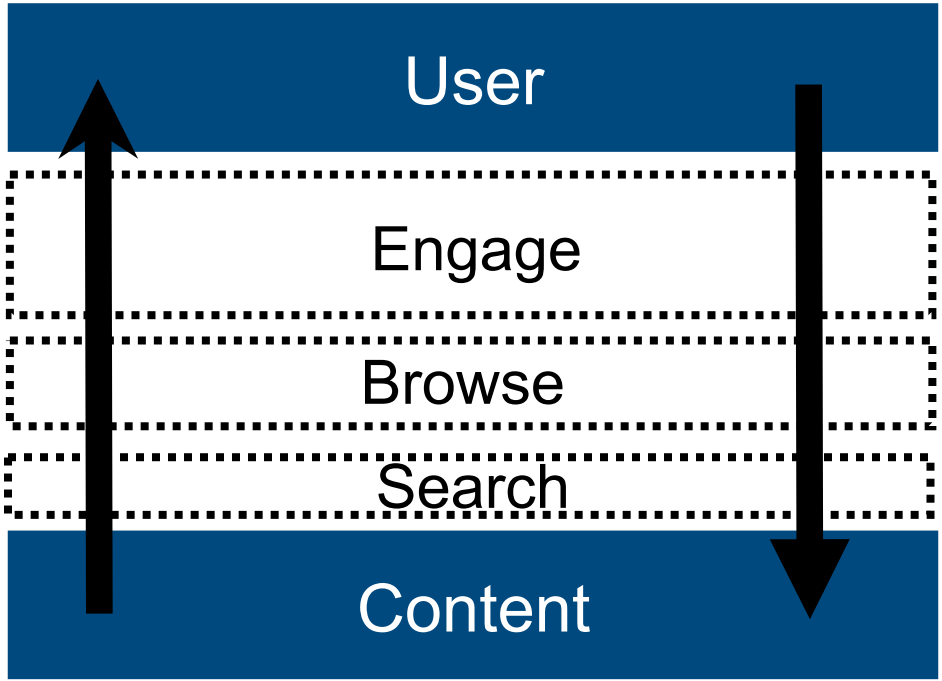
Let the user explore and discover

Guide them through collections

Support new users – information tourist

“Making the best of everything” by aristocrats-hat | CC BY-NC-SA 2.0

How We Are Searching Experiencing Cultural Heritage!



Thank you

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