



Multimedia Queries and Indexing



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<http://kmi.open.ac.uk/mmis>

MMIS
Multimedia and Information Systems



Multimedia queries and indexing

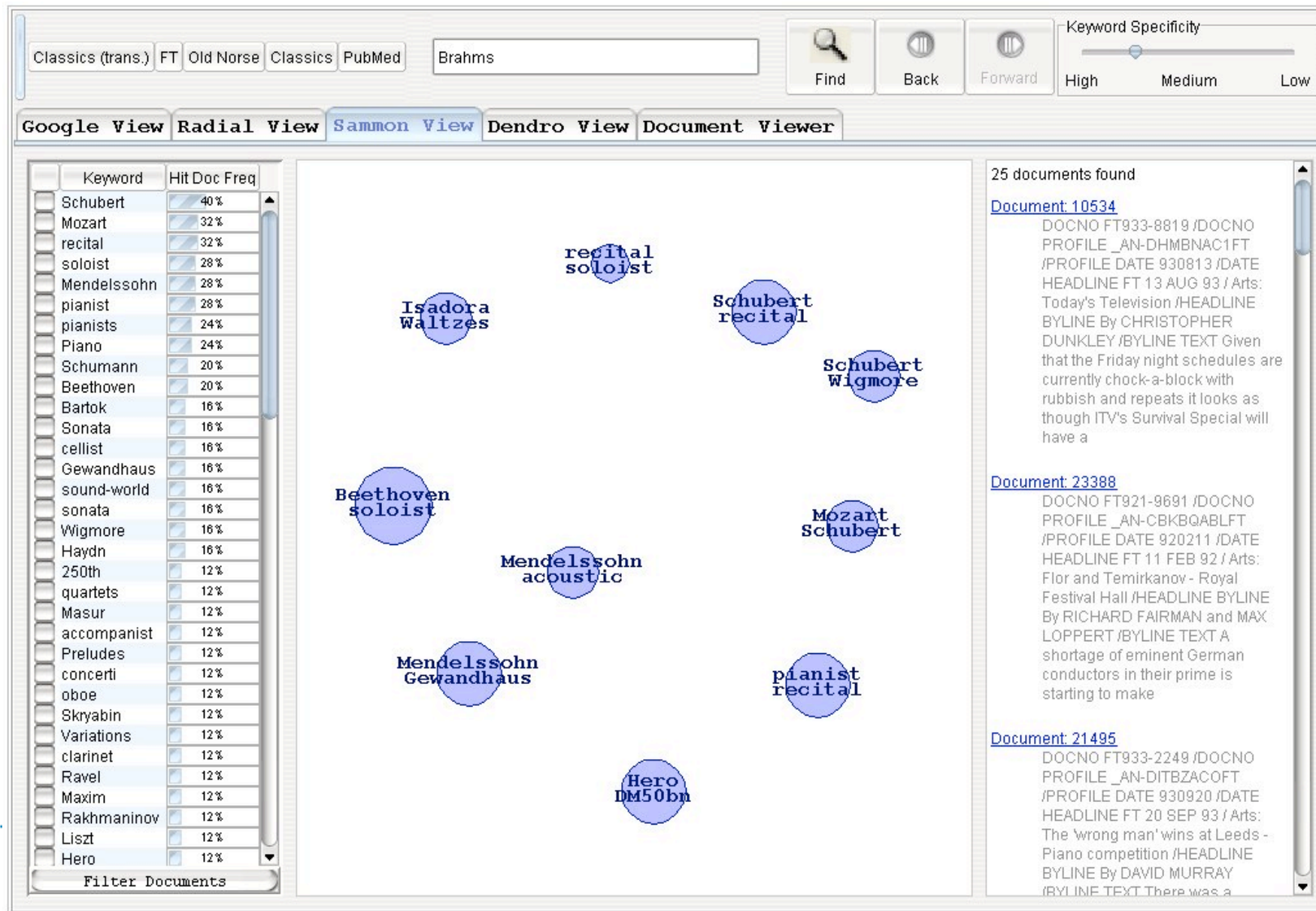
1. What are multimedia queries?
2. Fingerprinting
3. Image search and indexing
4. Evaluation
5. Browsing, search and geography



How else could results be displayed?

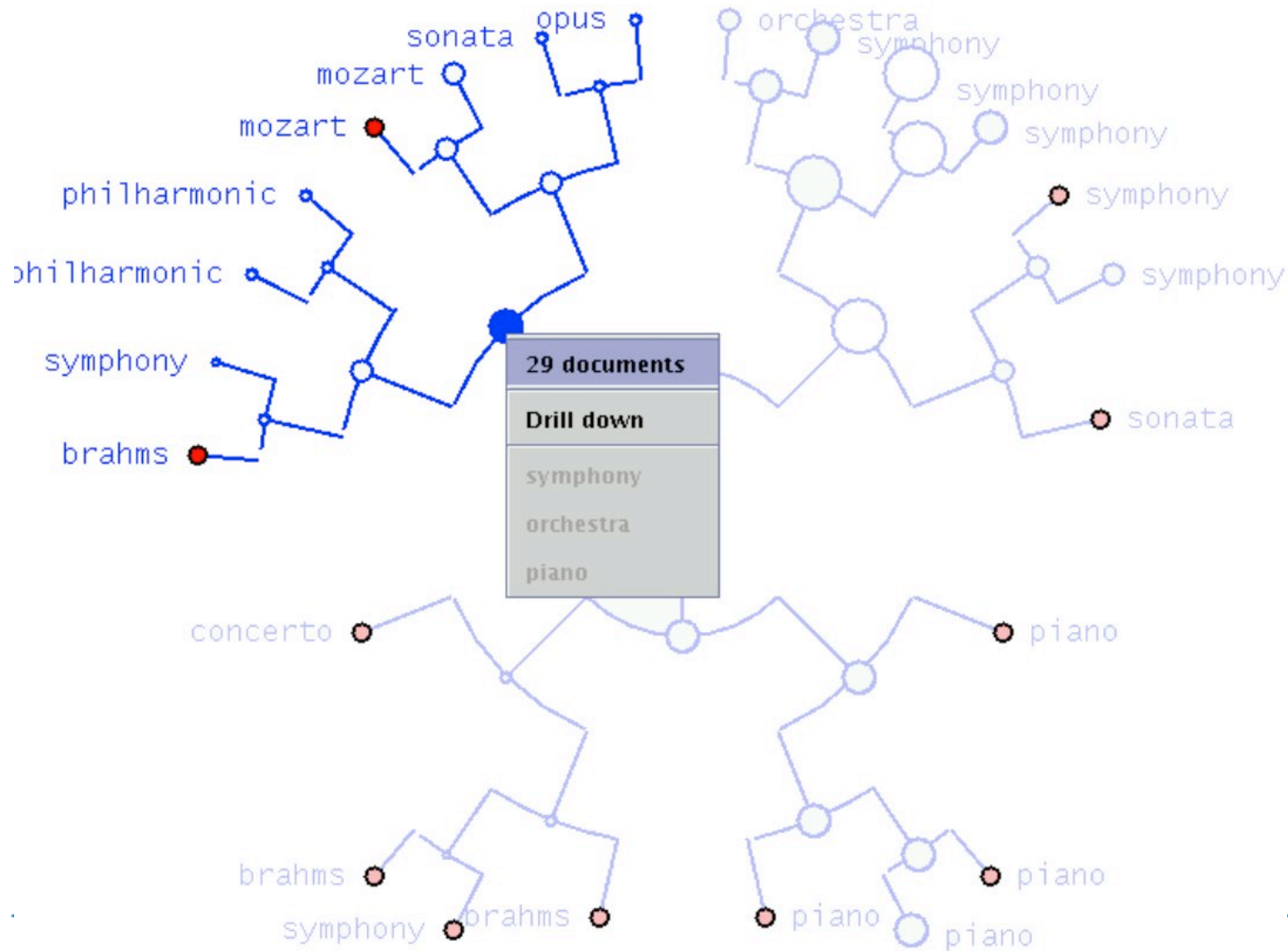


Sammon maps





Dendro map





Radial

Classics FT Classics (trans.) Newton Old Norse PubMed

Find
 Back
 Forward

Keyword Specificity

High

Medium

Low

Google View **Radial View** Sammon View Dendro View Document Viewer

Currently selected Keywords:

- recital
- Brahms
- Schumann
- encore
- Sonata
- Chopin
- pianists

Others:

- Scherzo
- Durante
- Preludes
- Viviana
- percussive
- thrillingly
- fugue

Settings

Zoom in Zoom Out

Reset Cluster

☒ Show Rim
☐ Lock Radius

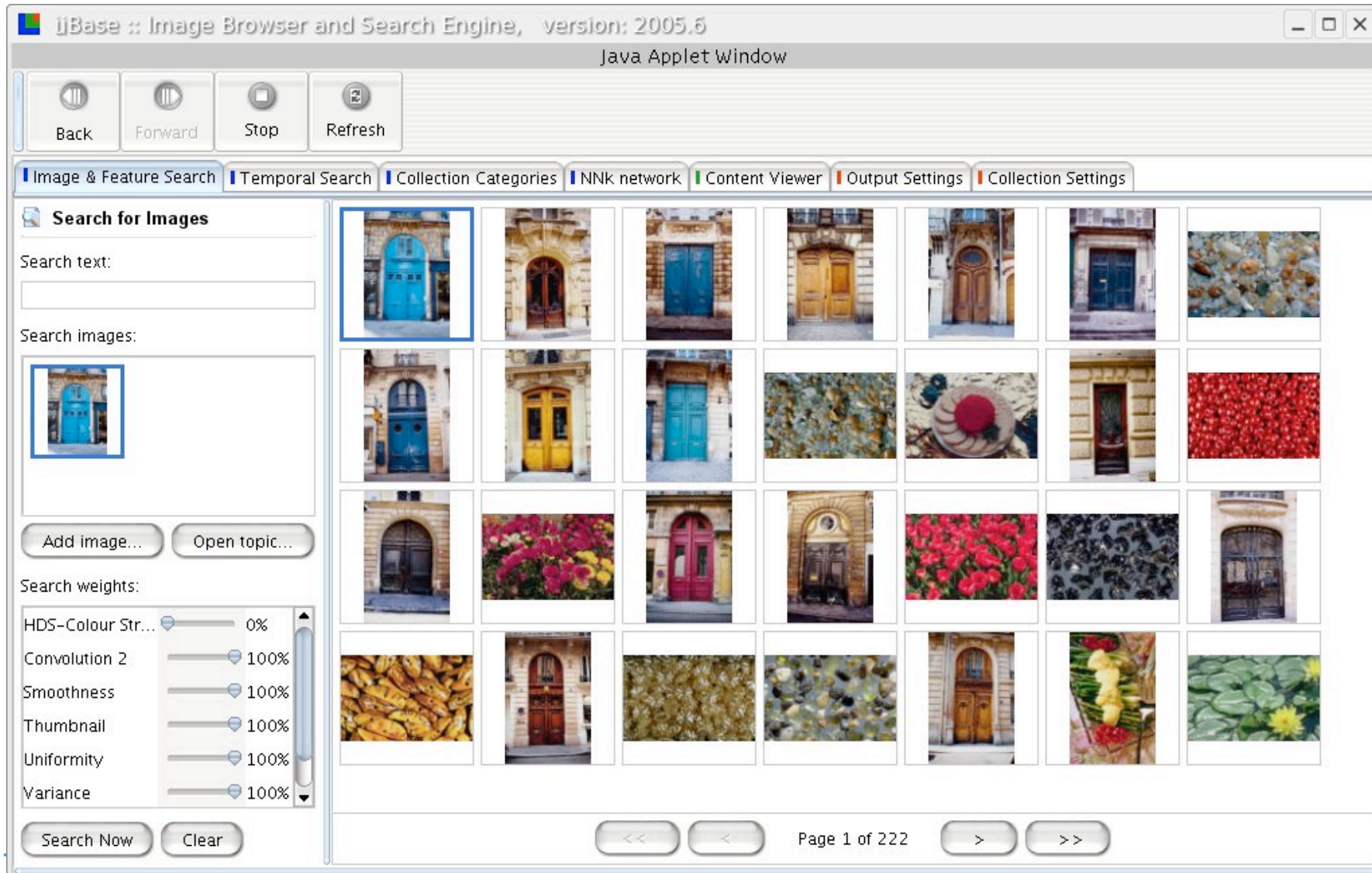
20 documents found

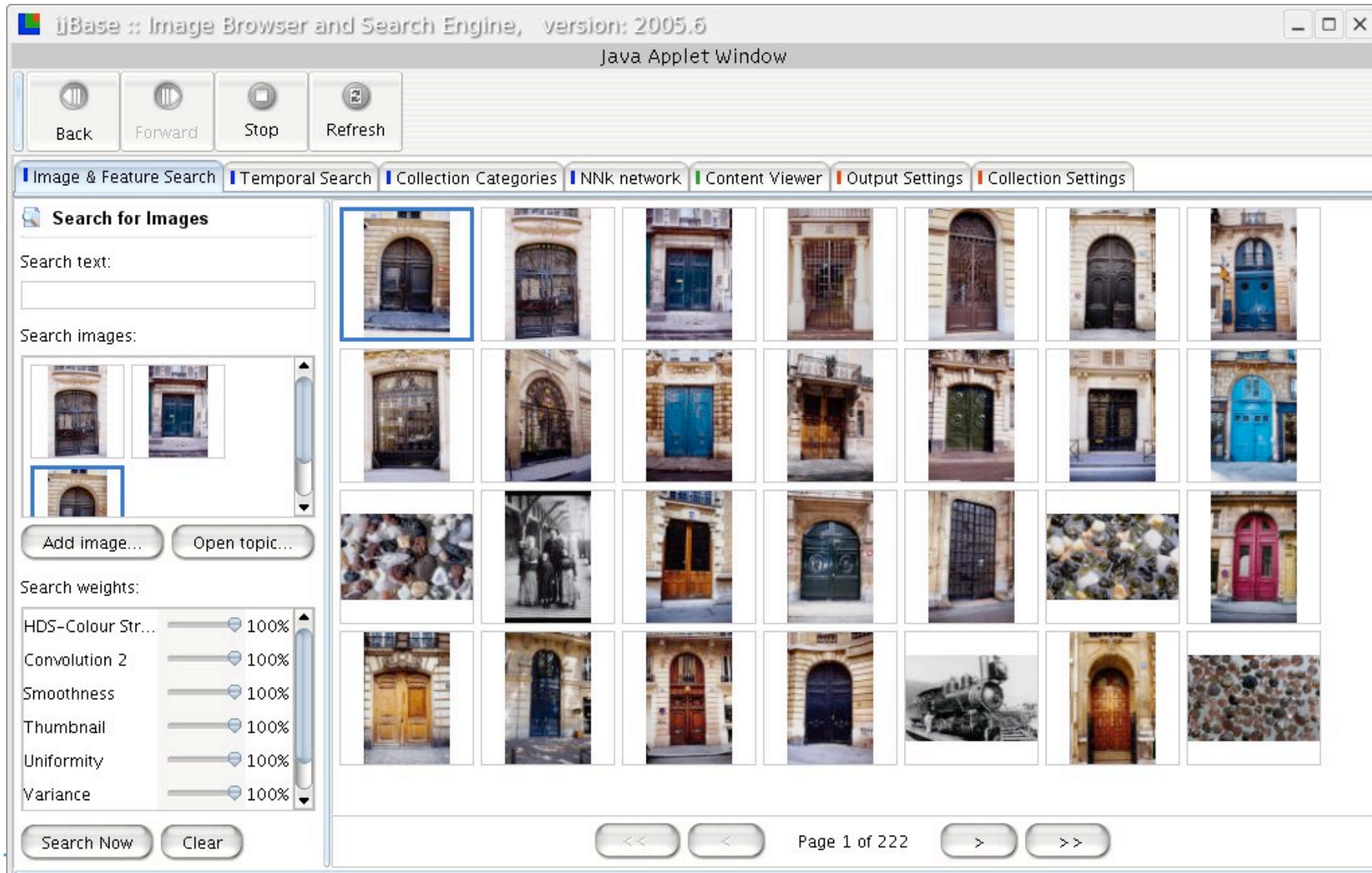
[Document: 48166](#)

DOCNO FT923-10637 /DOCNO PROFILE _AN-CG2ASAETFT /PROFILE DATE 920729 /DATE HEADLINE FT 29 JUL 92 / Observer: Chopin around /HEADLINE TEXT Birdsong, as Observer noted yesterday, may be the order of the day on Classic FM's test transmissions but its potential offerings are being peppered with birdshot. Shostakovich's ninth symphony is deemed OK but his

[Document: 35552](#)

DOCNO FT922-11127 /DOCNO PROFILE _AN-CD1A7AA8FT /PROFILE DATE 920428 /DATE HEADLINE FT 28 APR 92 / Arts: Jon Kimura Parker - London music /HEADLINE BYLINE By DAVID MURRAY /BYLINE TEXT This Canadian pianist (half Japanese by birth) won the Leeds Competition in 1984, against the likes of his compatriot Louis Lortie, but we





Applet

FEATURES DATA

Query Text:

Retrieve



NNK Browser

Simple Search

NNK Search

Applet

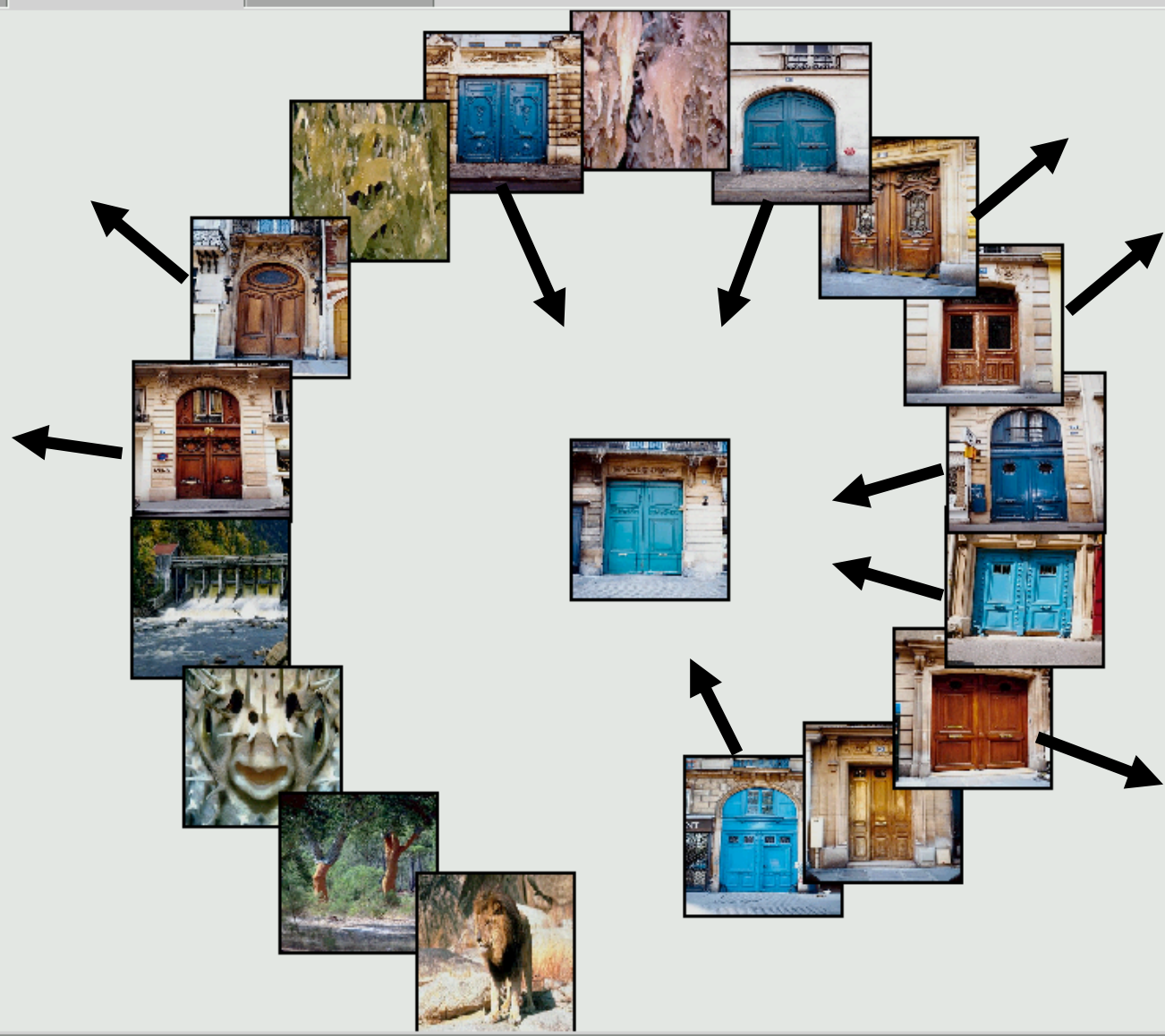
FEATURES DATA

Query Text:

Retrieve



NNK Browser Simple Search NNK Search



Applet

FEATURES DATA

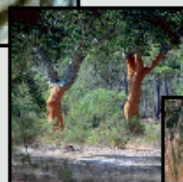
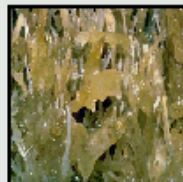
Query Text:

Retrieve

NNK Browser

Simple Search

NNK Search



Applet

FEATURES DATA

Query Text:

[Retrieve](#)

NNK Browser

Simple Search

NNK Search





Connect similar objects

focus



Structure



[with Heesch ECIR 2004, CIVR 2005]
[with Heesch et al ACM MM 2006,
TRECVID 2003-2004]
[PhD thesis Heesch, nominated for
best UK thesis 2005]

Colour



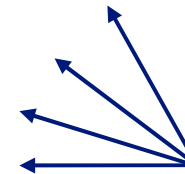
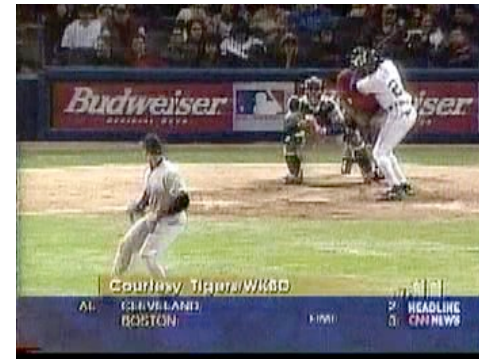
Text





Browsing example

TRECVID topic 102: Find shots from behind the pitcher in a baseball game as he throws a ball that the batter swings at



In your mind



Back



Forward



Stop

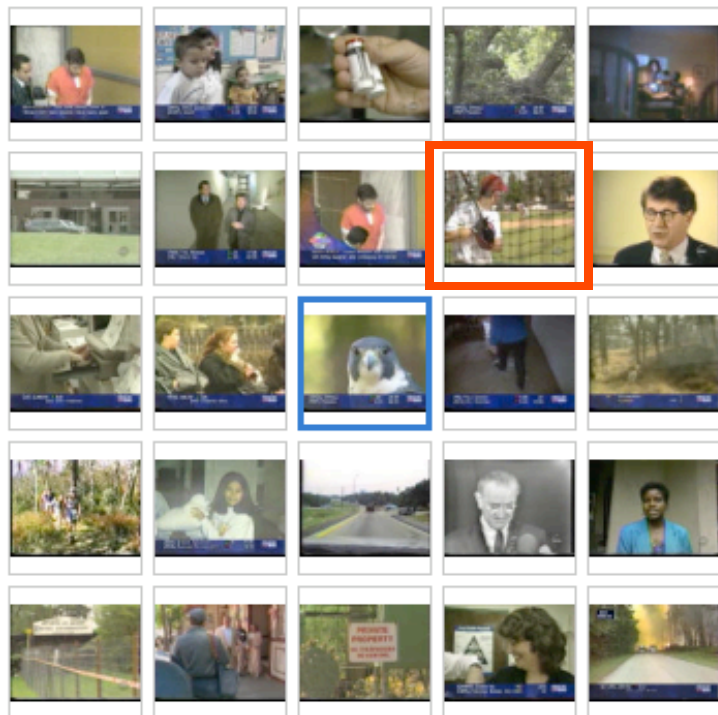


Refresh

Search Categories NNk network Viewer Output Settings

Browse for Images

Nearest neighbours:

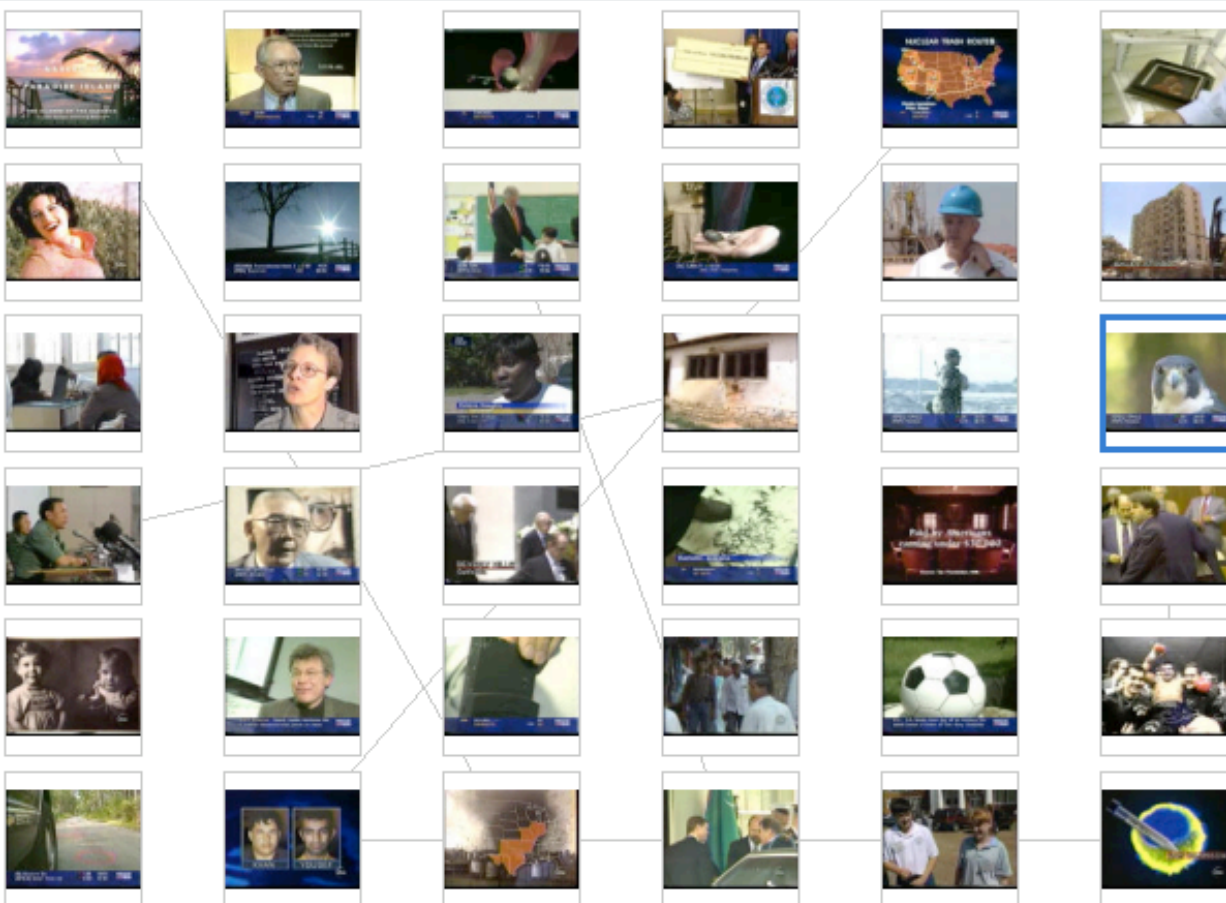


Prune

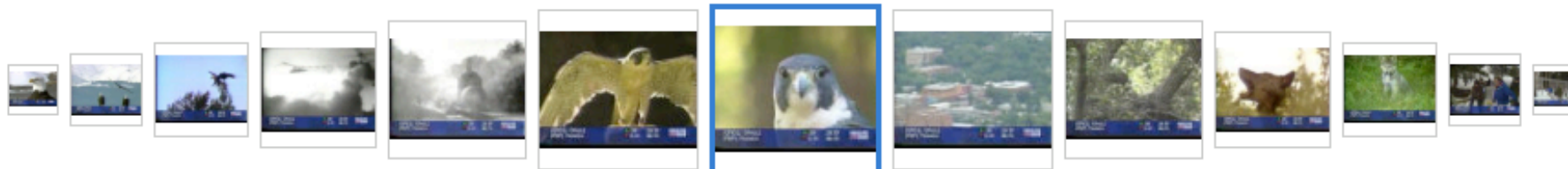
Reset

Hub network

My network



Temporal My selection



(179 remaining) Loading images...



Back



Forward



Stop



Refresh

Search Categories **NNk network** Viewer Output Settings

Browse for Images

Nearest neighbours:

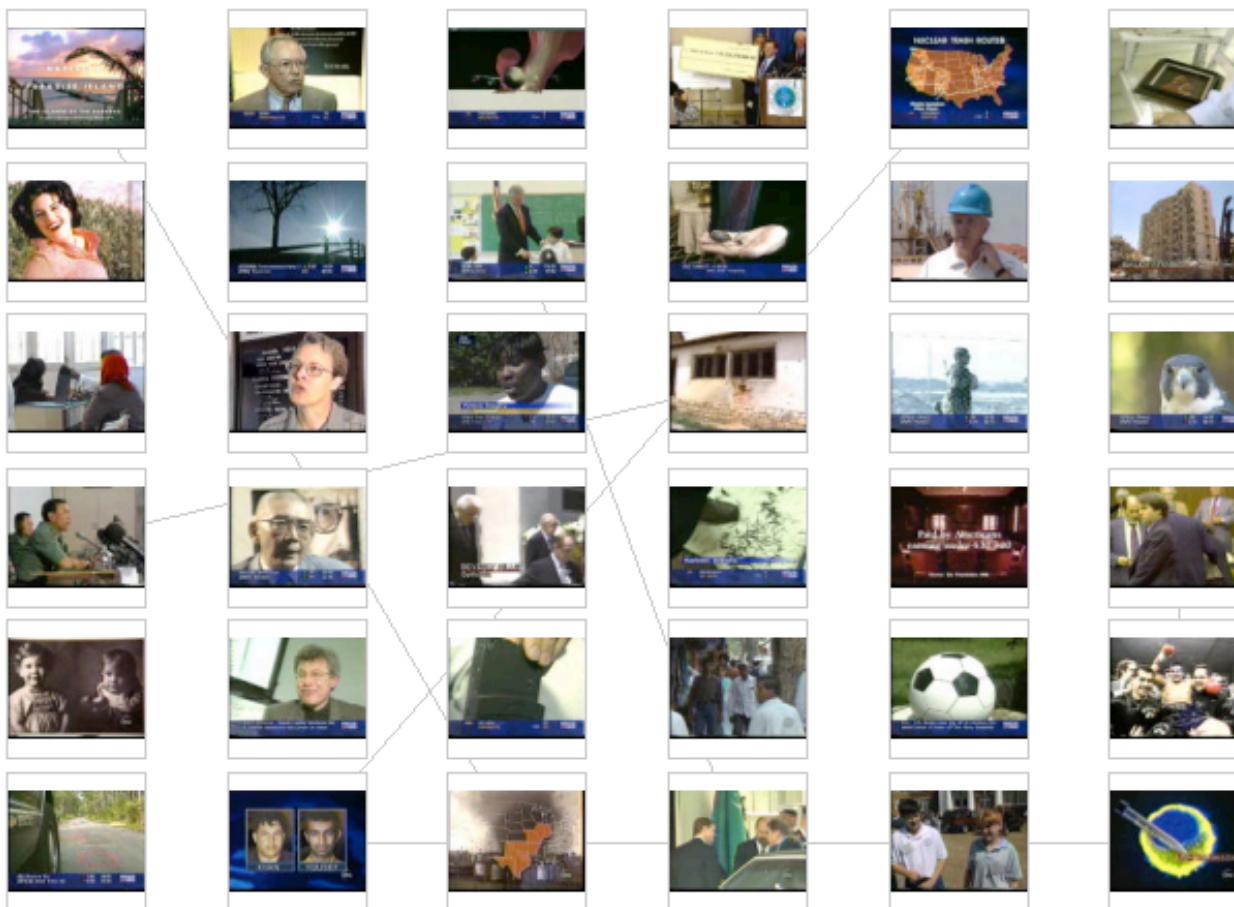


Prune

Reset

Hub network

My network



Temporal My selection

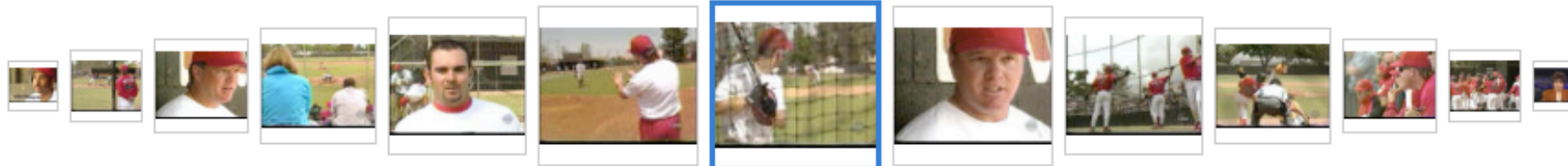


Image ID: 6635 Filename: TRECVID2003_156/shot156_308_RKF.jpg Keywords: THE UNDERDOG FIGHTING TO BE RECOGNIZED OR THE COMMITMENT THEY MADE TO EACH OTH...



Back



Forward



Stop



Refresh

[Search](#) [Categories](#) [NNK network](#) [Viewer](#) [Output](#) [Settings](#)

Image Properties

Image ID: 1263

Collection: Video

Resolution: 352 x 264

Filename: TRECVID2003_138/shot138_210_RKF.jpg

Keywords: FOR ONE WIN OVER THE SHARKS IN THE MAJORS THE BRAVES BEAT THE

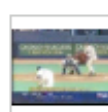
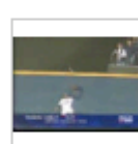
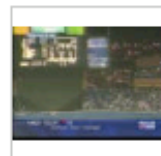
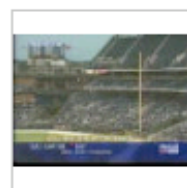
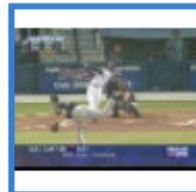
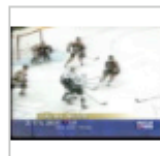
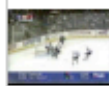
[Temporal](#) [My selection](#)

Image ID: 1263 Filename: TRECVID2003_138/shot138_210_RKF.jpg Keywords: FOR ONE WIN OVER THE SHARKS IN THE MAJORS THE BRAVES BEAT THE



Similar items

Slide to sort by:

Colour Similarity



Shape Similarity



Now Showing: 1 - 18 out of 34,486

[Previous](#) | [Next](#)



Patrizia Pepe

Closed-toe slip-ons

£98.00

NOW £69.00

VISIT STORE

YOOX.COM

▶ PRODUCT DESCRIPTION



£69

RAS



£135

Marc Jacobs



£150

Missoni



£59

GREY MER



£125

LUCA VALENTINI



£69

SWISH



£50

Poetic Licence



£245

Celine



£45

SWISH



£98

Patrizia Pepe



£69

Patrizia Pepe



£165

CASADEI



feedback



Similar items

Slide to sort by:

Colour Similarity



Shape Similarity



Now Showing: 1 - 18 out of 34,486

[Previous](#) | [Next](#)



Patrizia Pepe

Closed-toe slip-ons

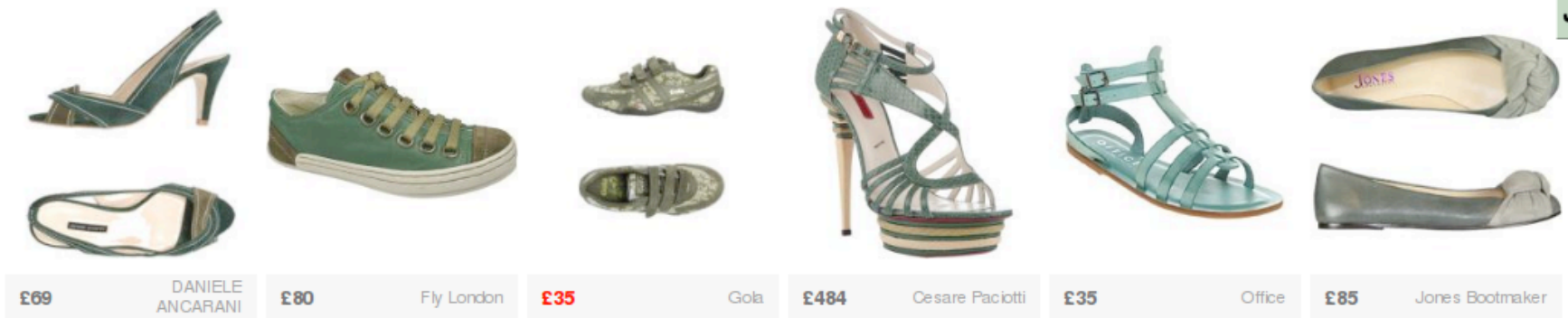
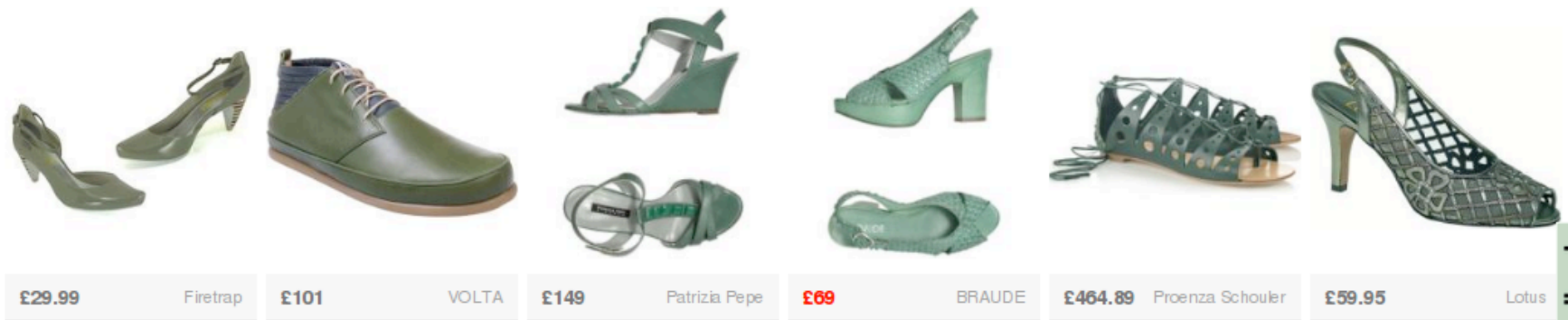
£98.00

NOW £69.00

VISIT STORE

YOOX.COM

► PRODUCT DESCRIPTION



feedback

Geotemporal search

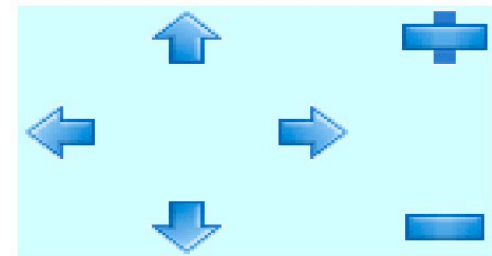
Geographical, Temporal & Keyword Browsing

[Arlington](#)
[British](#)

Election

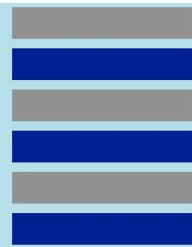
search

>0



Dates

[1976](#) (1 Story)
[1987](#) (1 Story)
[1988](#) (1 Story)
[1989](#) (4 Stories)
[1990](#) (6 Stories)
[1991](#) (1 Story)



Temporal Distribution

Viewable events
from:1976-1991



608

JAPAN

RUSSIA

PACIFIC

OCEAN

LAS VEGAS

NEBRASKA

KANSAS CITY

JERSEY

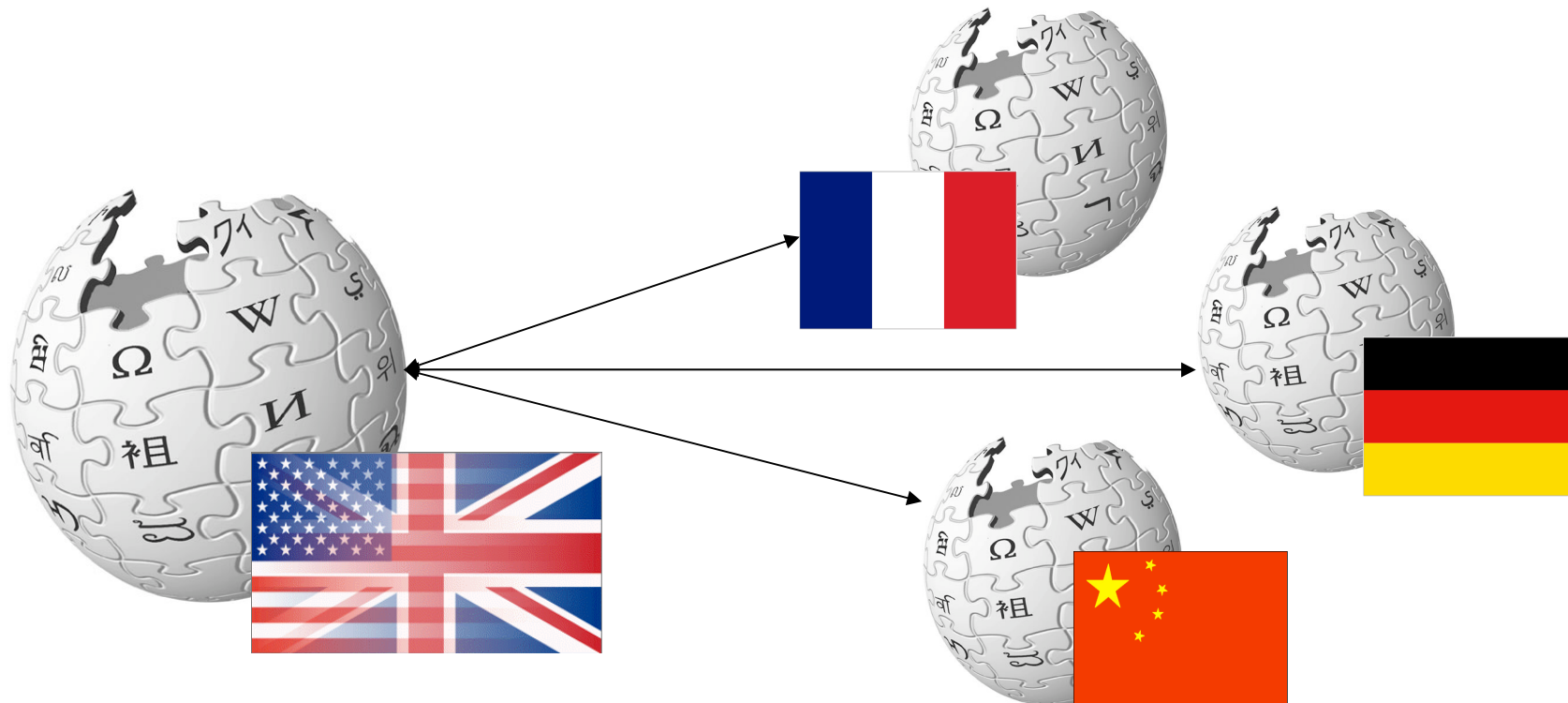
HUDSON

RIVER



The Open
University

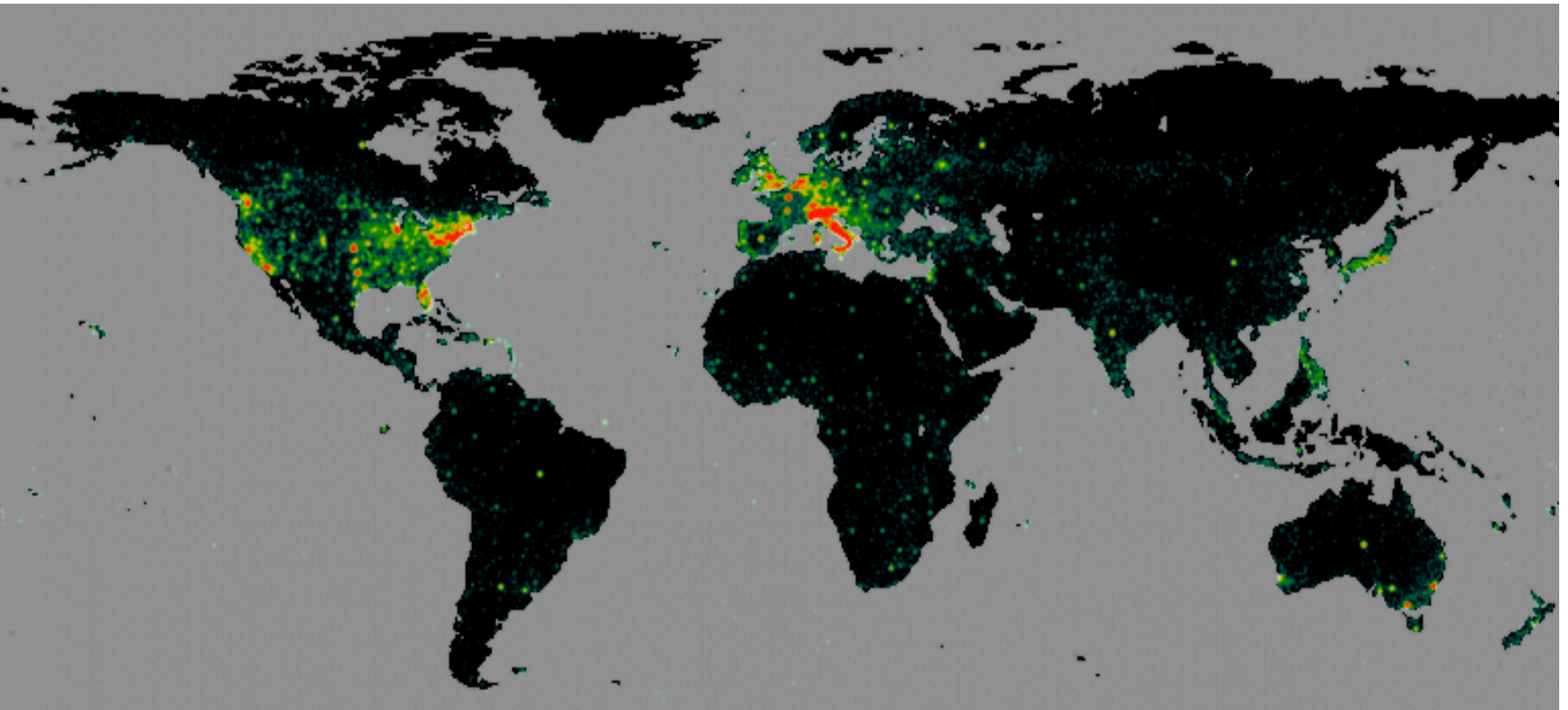
Wikipedia



[Logo trademark and © by Wikimedia Foundation, Inc]

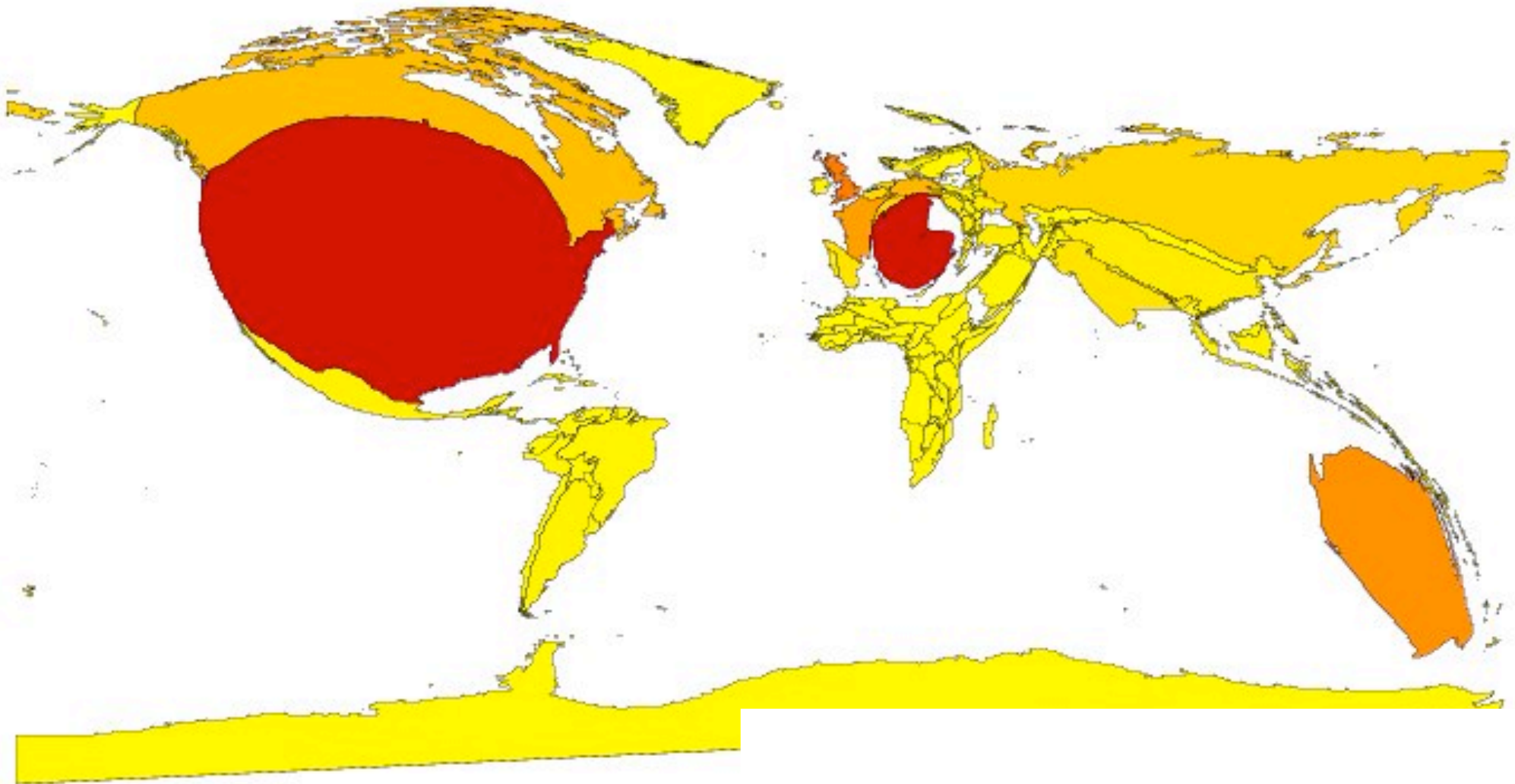


English language



[with Overell, GIR 2007; MMKM 2008]

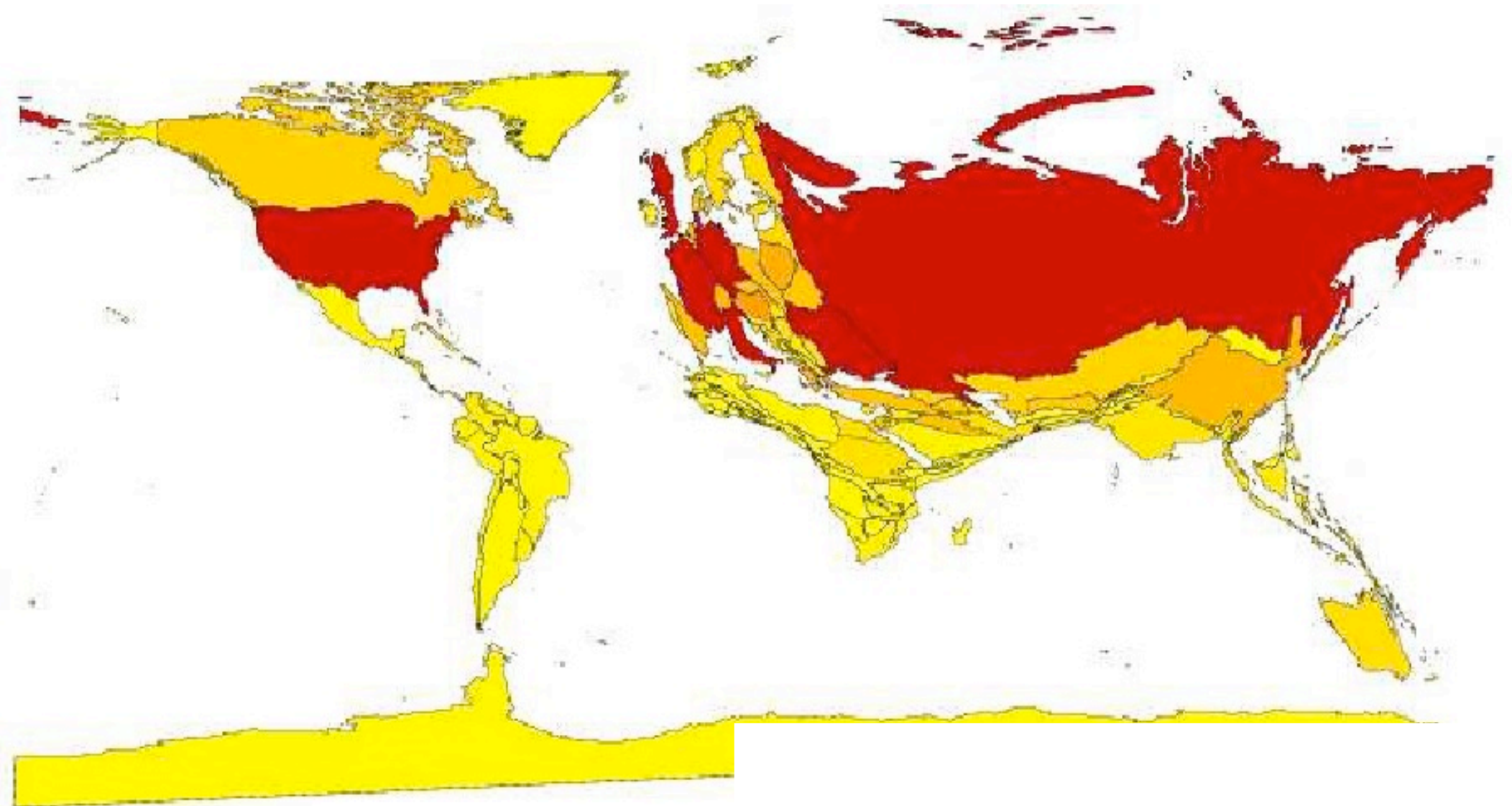




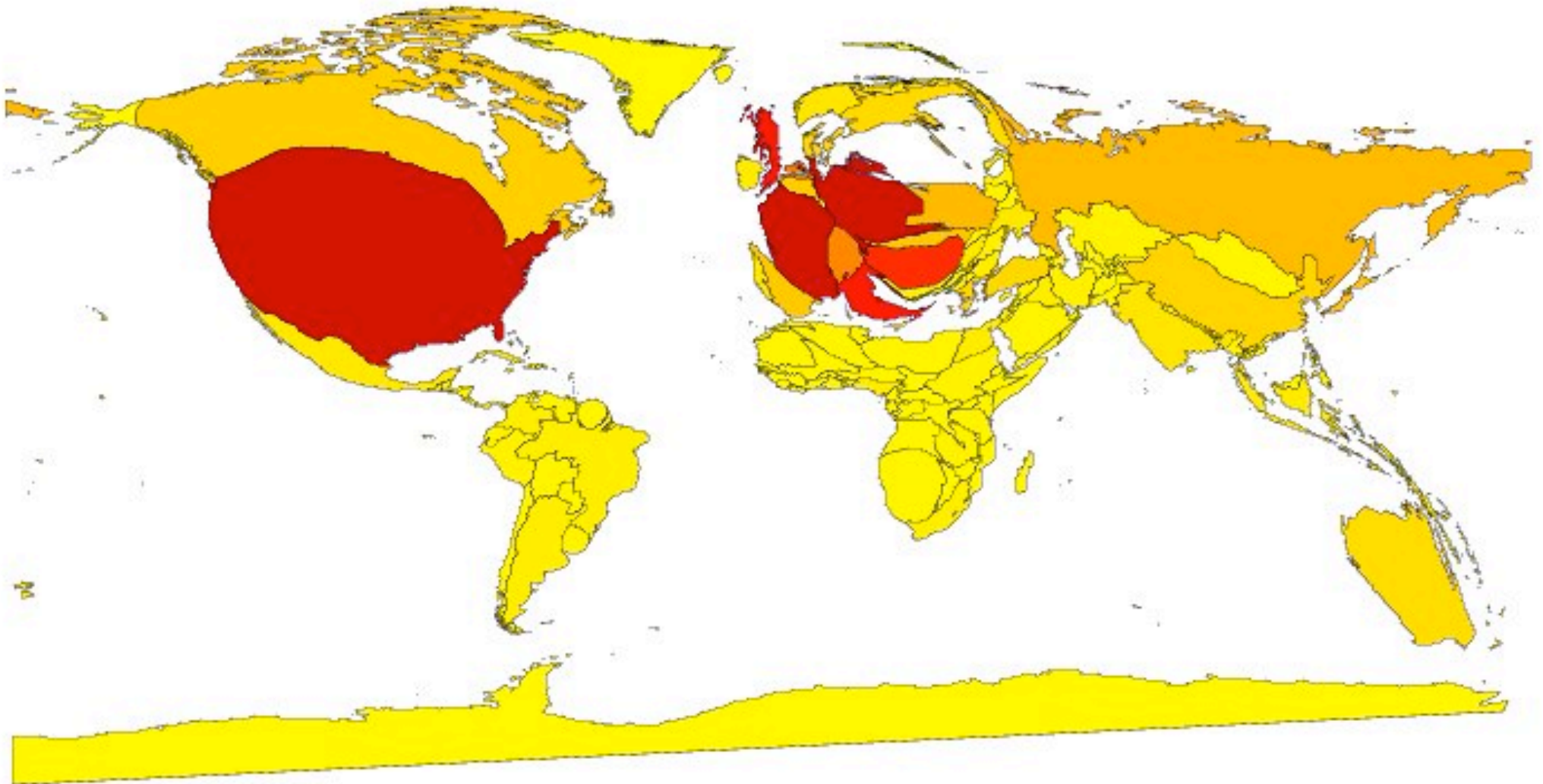
[with Overell, GIR 2007; MMKM 2008]



Russian

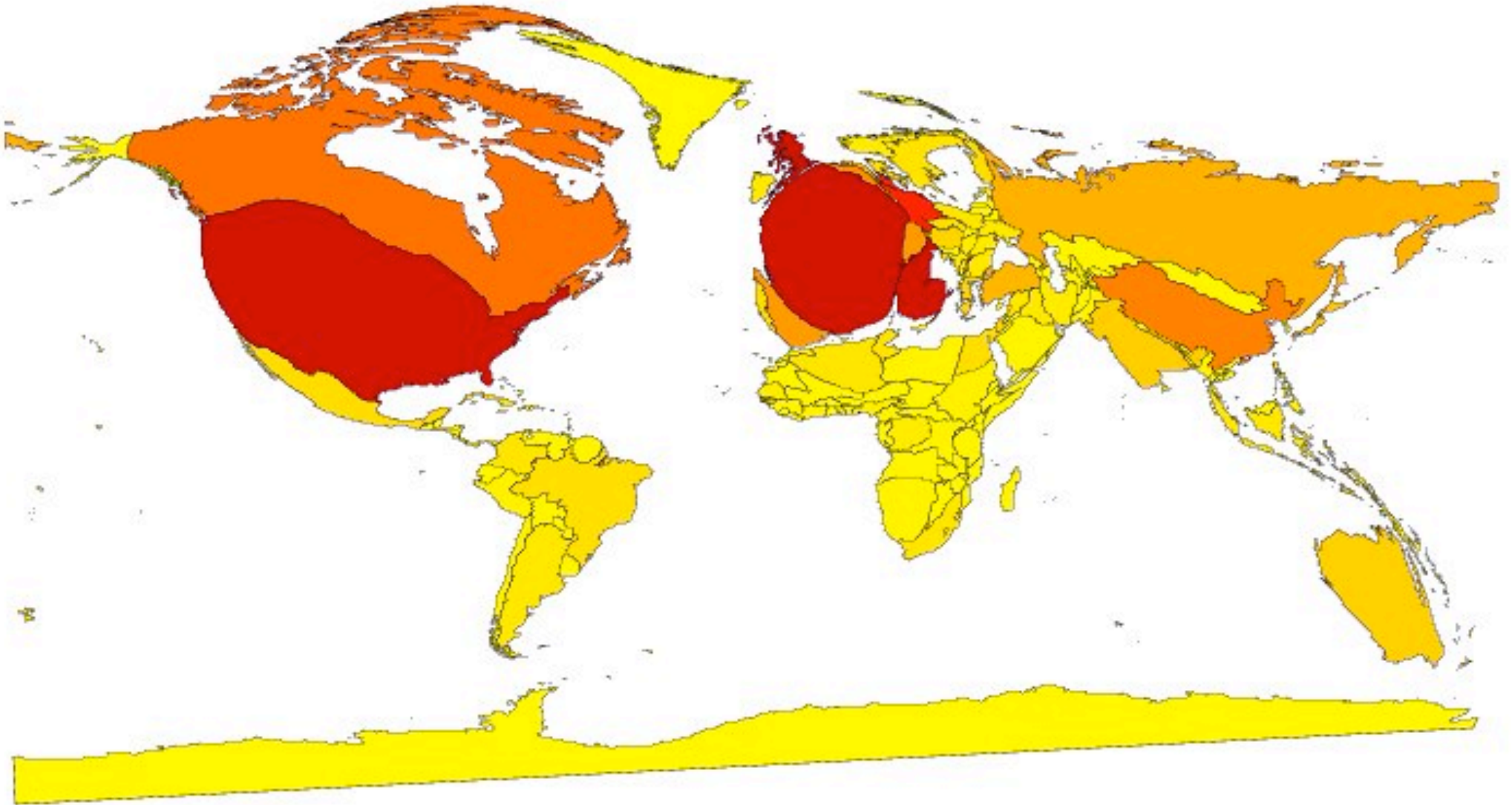


[with Overell, GIR 2007; MMKM 2008]



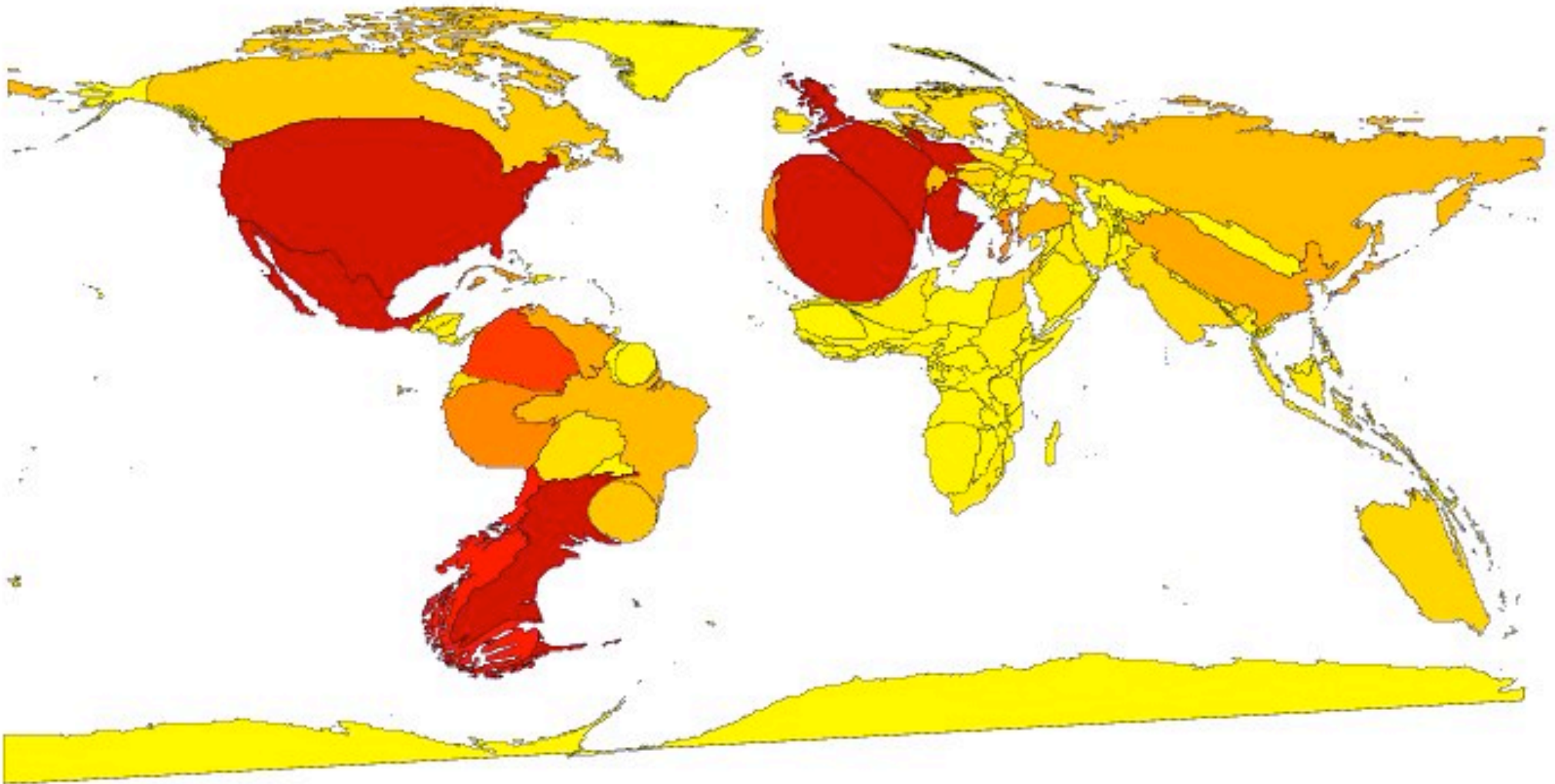


French



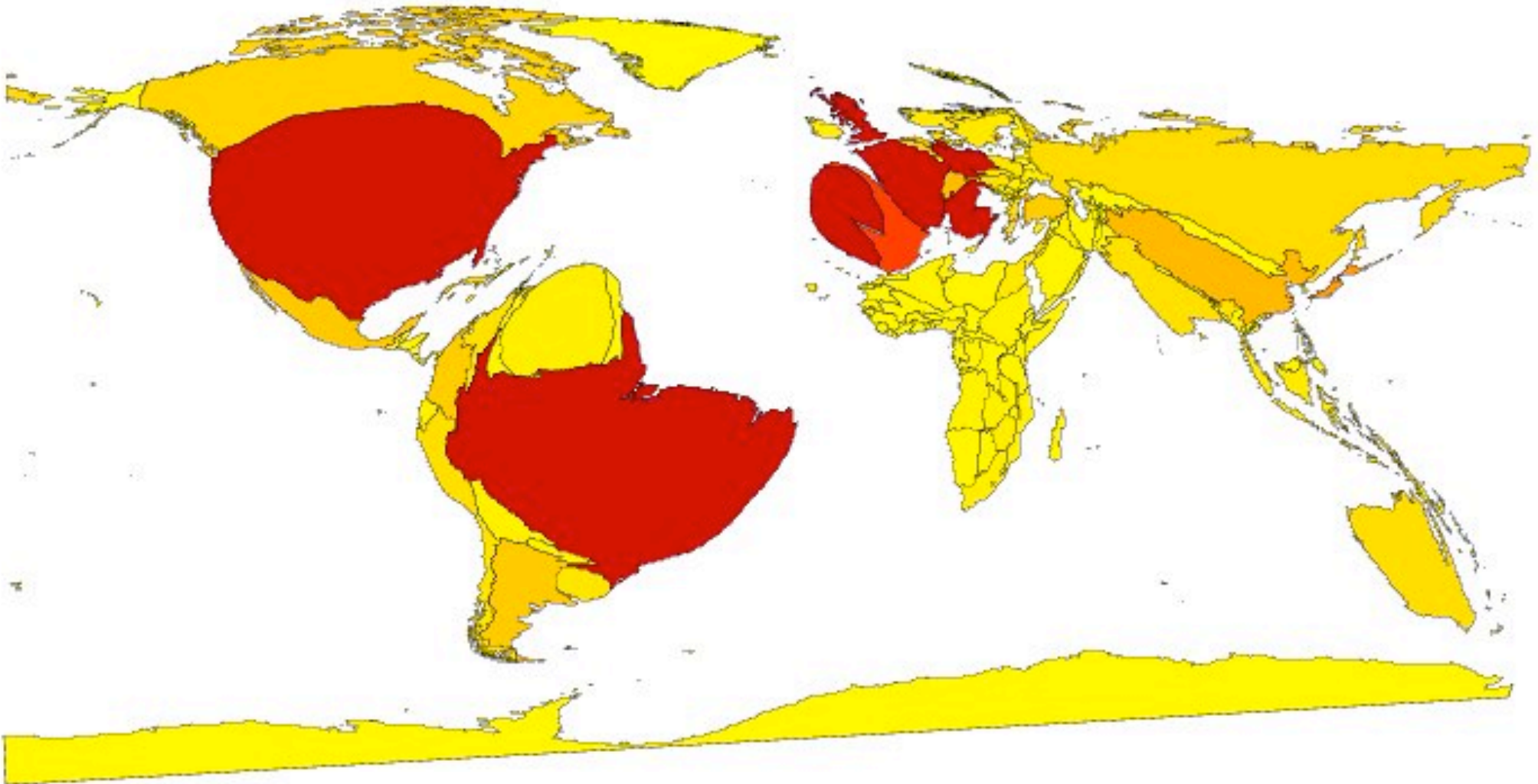


Spanish





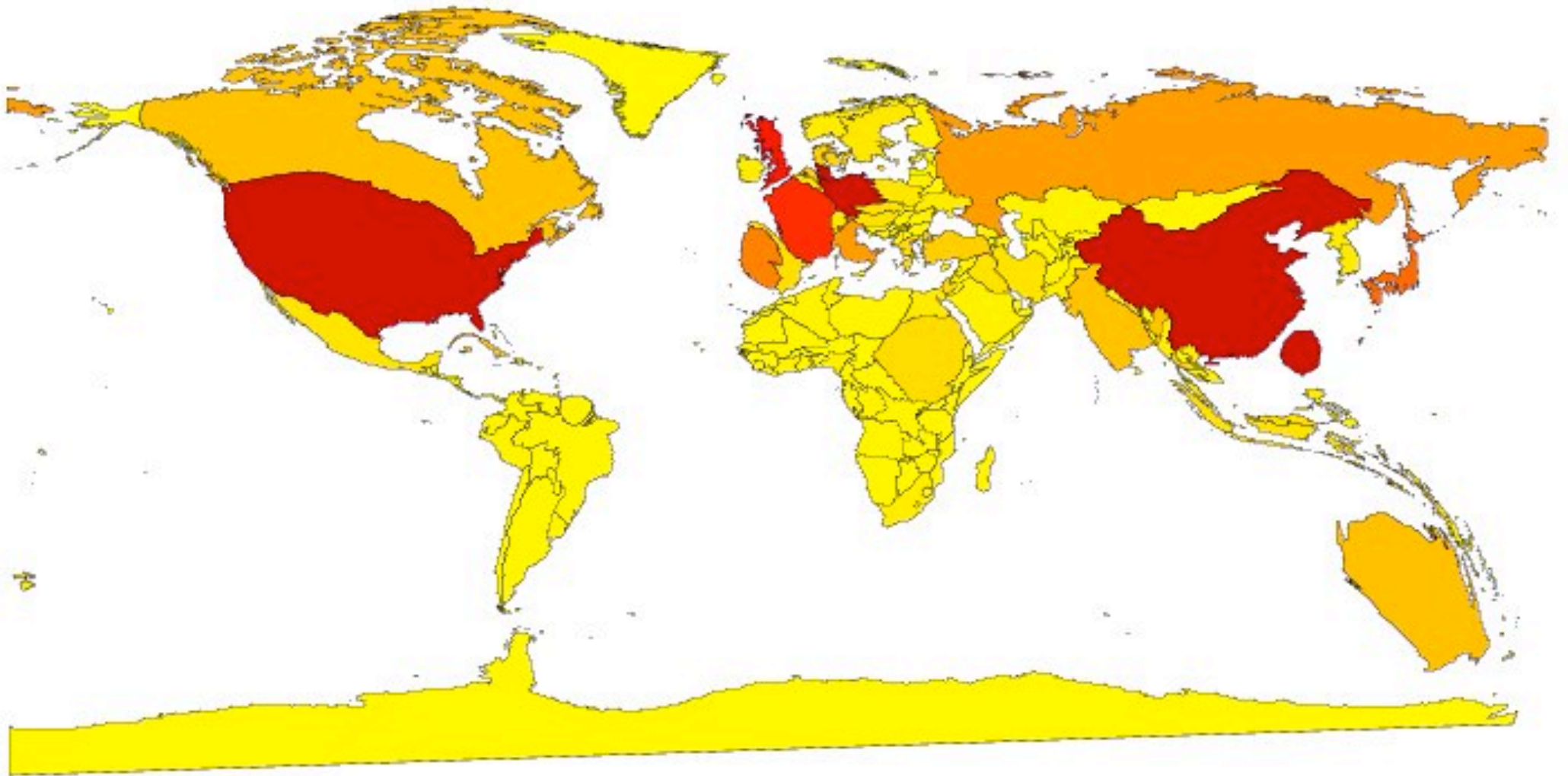
Portuguese



[with Overell, GIR 2007; MMKM 2008]



Chinese





Recap: Multimedia queries and indexing

1. What are multimedia queries?
2. Fingerprinting
3. Image search and indexing
4. Evaluation
5. Browsing, search and geography



Feedback

- Please fill in the feedback form
- I want to know what worked (and what didn't!)