



Experiencing Events Through User-Generated Media



André Fialho | Lynda Hardman





What are Events?

Events are observable occurrences grouping



People

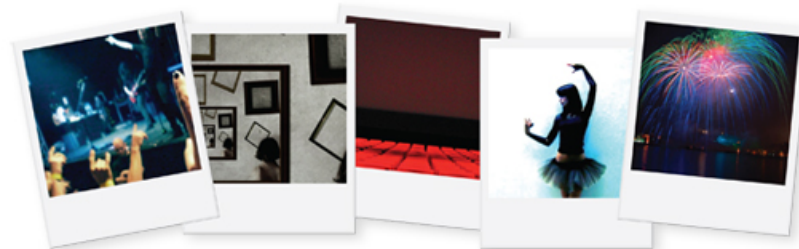


Places



Time

Experiences documented by **Media**



A word cloud of various event types is overlaid on a photograph of a concert. The words are in different sizes and orientations, with 'Music' and 'Concerts' being the largest. The background shows a crowd of people at a concert with stage lights and a band performing.

Music
Concerts
Fundraisers
Kids
Health
Dinner
Birthdays
Campus
Festivals
Acoustic
Rock
Learning
Museums
Theatre
Science
Food
Party
Show
Art
Networking
Literary
Conferences
Nightlife
Politics
Parties
Outdoors
Galleries
Sales
Spirituality
Dance
Sports
Weddings
Exhibitions
Movies
Technology



Searching for an event

eventful

Eindhoven, Netherlands [change](#)



[Home](#)

[Events](#)

[Movies](#)

[Demand it!](#)

[Community](#)

[Sign up!](#)



Search events

[Search](#)

[Promote your event!](#)

[Add event](#)



[Shopping cart](#)

[Sign in](#)

The Arcade Fire

Oct 7, 2010 | Thursday

[Like](#) 5



Venue

The Rambler
Stationsplein 12
Eindhoven, Netherlands

Performer

[The Arcade Fire](#)

Details

Cost: 45.00 to 49.50

Browse events

[All events](#)

[Concerts](#)

[Conferences](#)

[Festivals](#)

[Food](#)

[Family](#)

[Nightlife](#)

[Outdoors](#)

[Sports](#)

[Performing Arts](#)

Browse movies

[Movie times](#)

[Movie trailers](#)

[Movie reviews](#)



Searching for an event

19 Attending 1 Maybe **lost.fm**

NerdJNerdBird electronicwolf BreesusChrist salutemysorts

cursive27 lovelylynn TallGuyCM Clancemasterj

flickr

Photos Groups People

Everyone's Uploads

arcade fire

SEARCH

Full Text | Tags Only
Advanced Search

Showing Creative Commons-licensed content

Sort: Relevant Recent Interesting

View: Small Medium Detail Slideshow



From ProdigyBoy



From Devina...



From margolove



From NRK P3



From scottroberts



From deep_schismi...



Arcade Fire - Wake Up

disastroh

3 videos

Subscribe

YouTube



0:12 / 5:37

disastroh | September 11, 2006
Arcade Fire - Wake Up Directed by Pete Ohs www.directorpeteohs.com

4,180,409 views



The Rambler

Write a review · more info

Stationsplein 12
5611 AB Eindhoven, Nederland
06 52332189
therambler.nl

Directions Search nearby Save to... more

The Arcade Fire



Arcade Fire at Rock en Seine, August 2007

Background information

Origin Montreal, Quebec, Canada
Genres Indie rock, baroque pop, art rock
Years active 2003–present
Labels Sonovox Merge City Slang Spunk

Associated acts Bell Orchestre Owen Pallett Wild Light^[1]

Realtime results for arcade fire



JCouper My Top 3 Weekly #lastfm artists: Arcade Fire (15) and Fanfarlo (14) #mm <http://bit.ly/cdw600>
less than 20 seconds ago via Tweekly.fm



davestewartfan Best albums 2010 so far are by Eminem and Arcade Fire - still waiting for Annie Lennox's Dave Stewart's solo records #theblackbirdiaries
less than a minute ago via Twitter



ramymaaz RT @tanland06: @ramymaaz mentira!!! Io de Arcade Fire!!/jaja siempre en contra
less than a minute ago via ÜberTwitter



barbosarafael My Top 3 Weekly #lastfm artists: Arcade Fire (20), Lynrd Skynrd (4) and The Cure (3) #lastfm <http://bit.ly/bzAlkN>
1 minute ago via Tweekly.fm



prguy85 What are the best albums you have heard so far this year? Mine are Janelle Monae's latest, Arcade Fire's and Robert Plant's Americana effort
1 minute ago via web



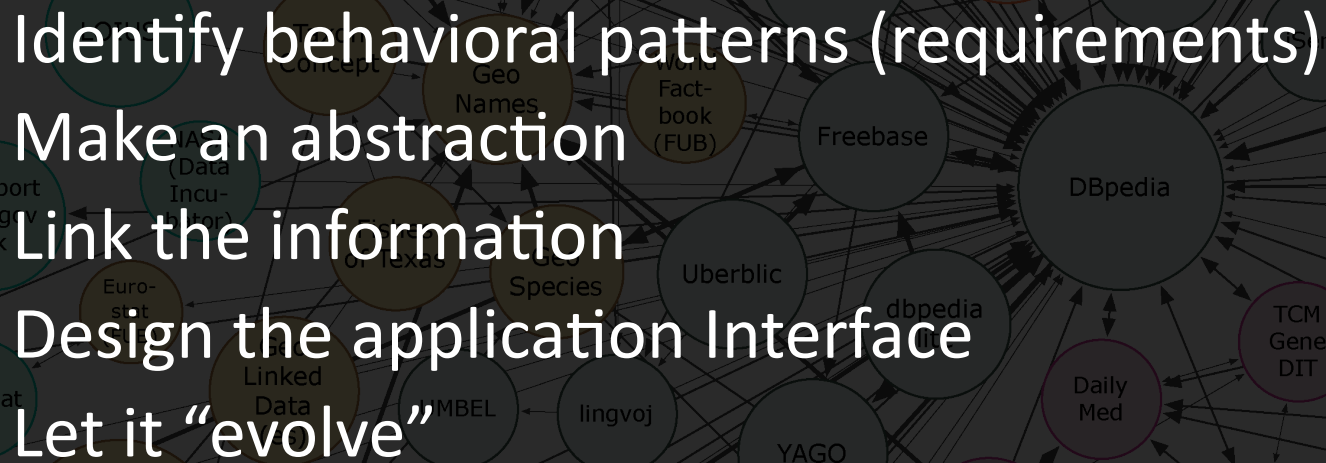
There's a lot of information out there...



A photograph of a large industrial facility, likely a paper recycling plant. In the foreground, a massive pile of shredded white paper and cardboard fills the lower half of the frame. The background shows the interior of a large hall with a high ceiling, featuring yellow structural beams and skylights. A semi-transparent white banner is overlaid across the upper portion of the image, containing the text "A lot of information...".

A lot of information...

<http://www.flickr.com/photos/mwparenteau/432039783>





1st Collect some opinions...

Online Survey (n=28) + 2 group discussions (n=35)



Past Experiences (Memorable Events)

- Discovery
- Decision making
- Registering & sharing
- Meaningful relationships



Existing Technologies

- Opinions
- Interests
- Suggestions
- Benefits/drawbacks



Scenarios Requirements 1st Design Concept

What's on this evening?
Designing User Support for
Event-based Annotation and
Exploration of Media - EVENTS
2010, Athens, Greece



2nd Look into “real” behaviors...

- Scenario based study (2 sessions, n=15)



Scenarios

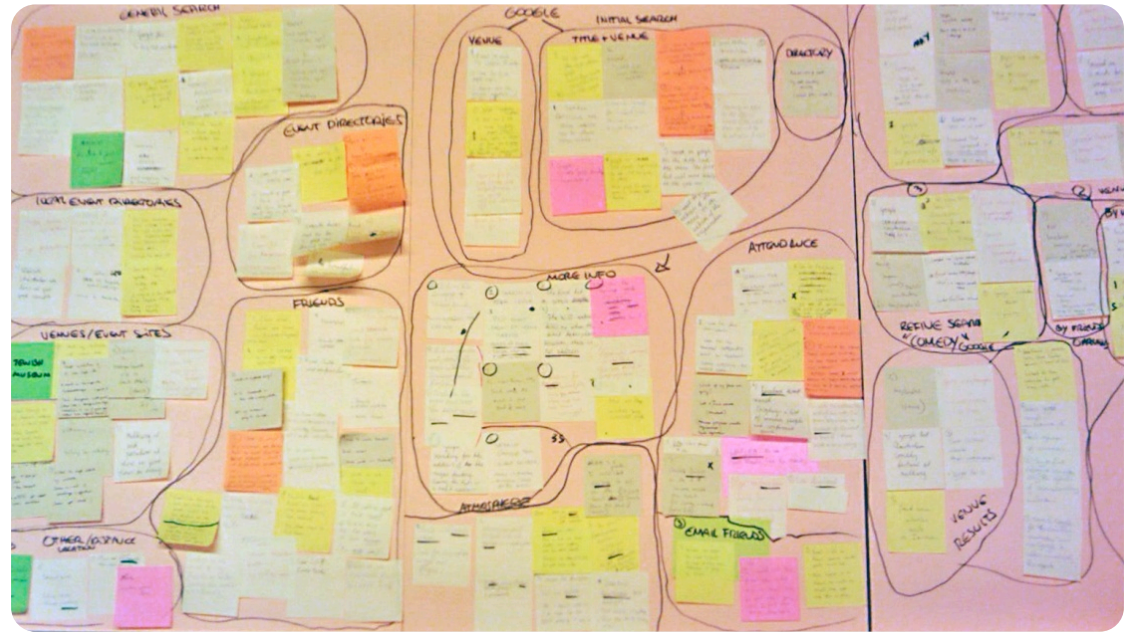


flickr BETA

Reenact



Opinions





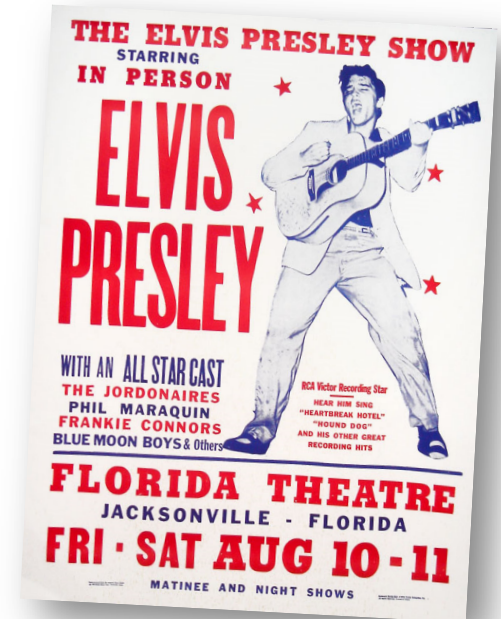
Behavioral Patterns

Discovery

- **Invitations and recommendations**
- **Rely on traditional media**
- **Social networks (facebook - students)**
- **Previously attended events or venues**

Decision Making

- **Who's Joining?**
- **Where, When, How Much? (constraints)**
- **What? (e.g. type, performer, topic)**
- **Subjective factors (fun, atmosphere)**





Behavioral Patterns



Registering and Sharing

- **Communicating** their experience
- **Pictures** and short **videos** (for sharing)
- **Media directories** and **social networks**



Meaningful Relationships

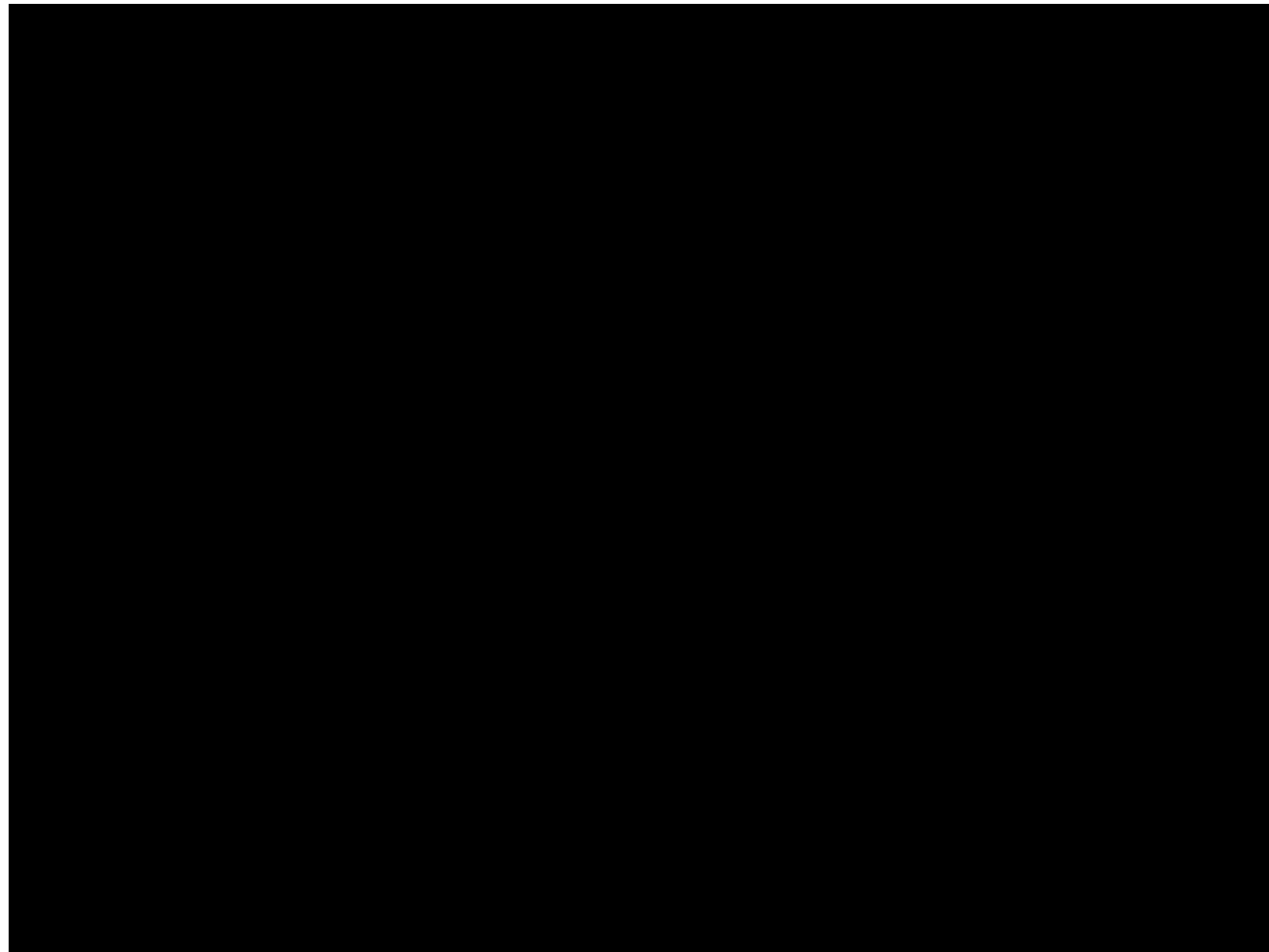
- **Similar categories, attributes and content**
- **User attendance** (similar interests, behaviors)
- **Repeated events** (e.g. annual festivals)



04/05/2010 -

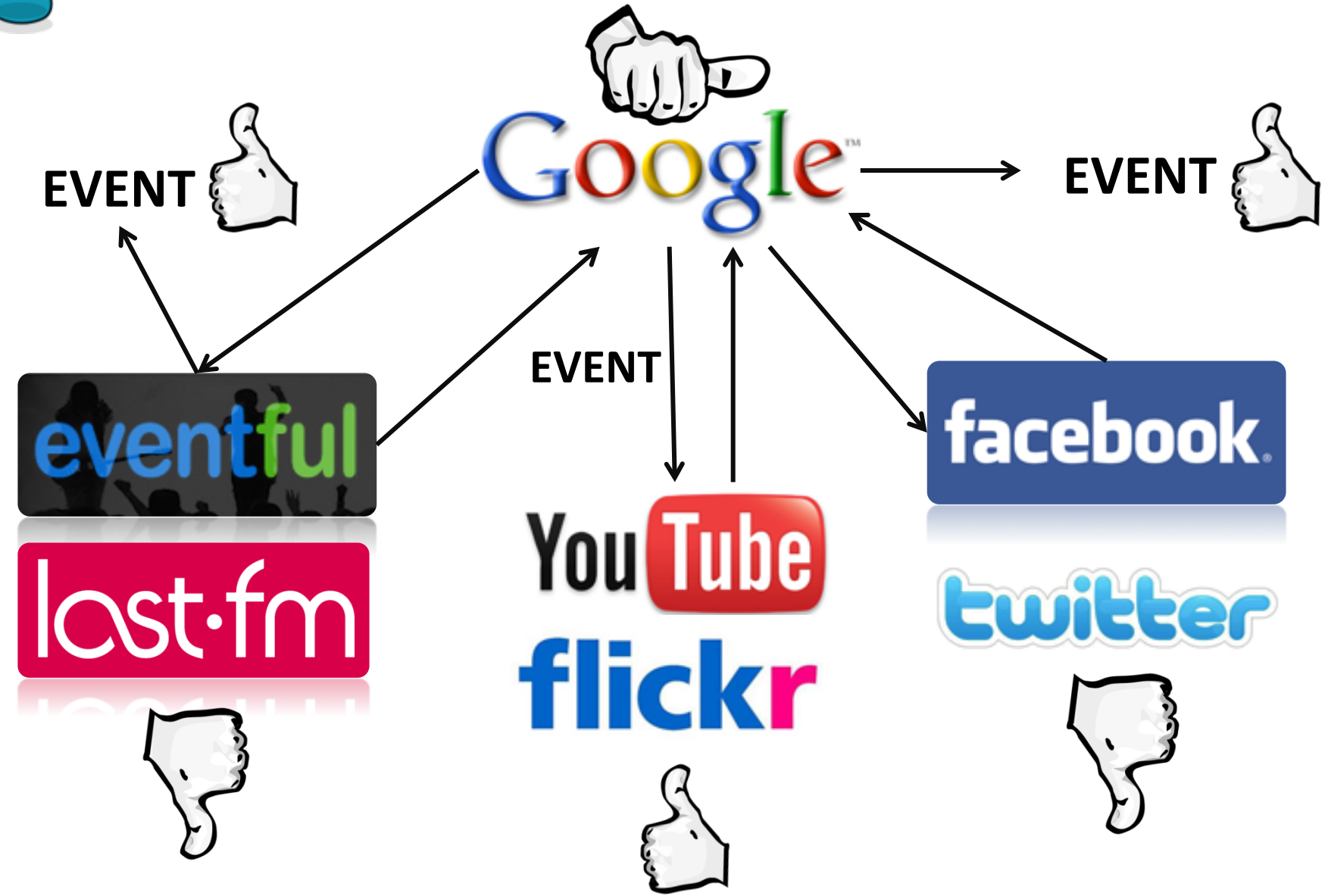


Live karaoke in Mauerpark, Berlin





Behavioral Patterns





Existing Services



- **Single source with overview (?)**
- **Allows opportunistic/serendipitous discovery**
- **Limited exploration/browsing features**
- **Information overload (cluttered, difficult)**
- **Information incompleteness (coverage, decision)**

Ontology: Making an abstraction

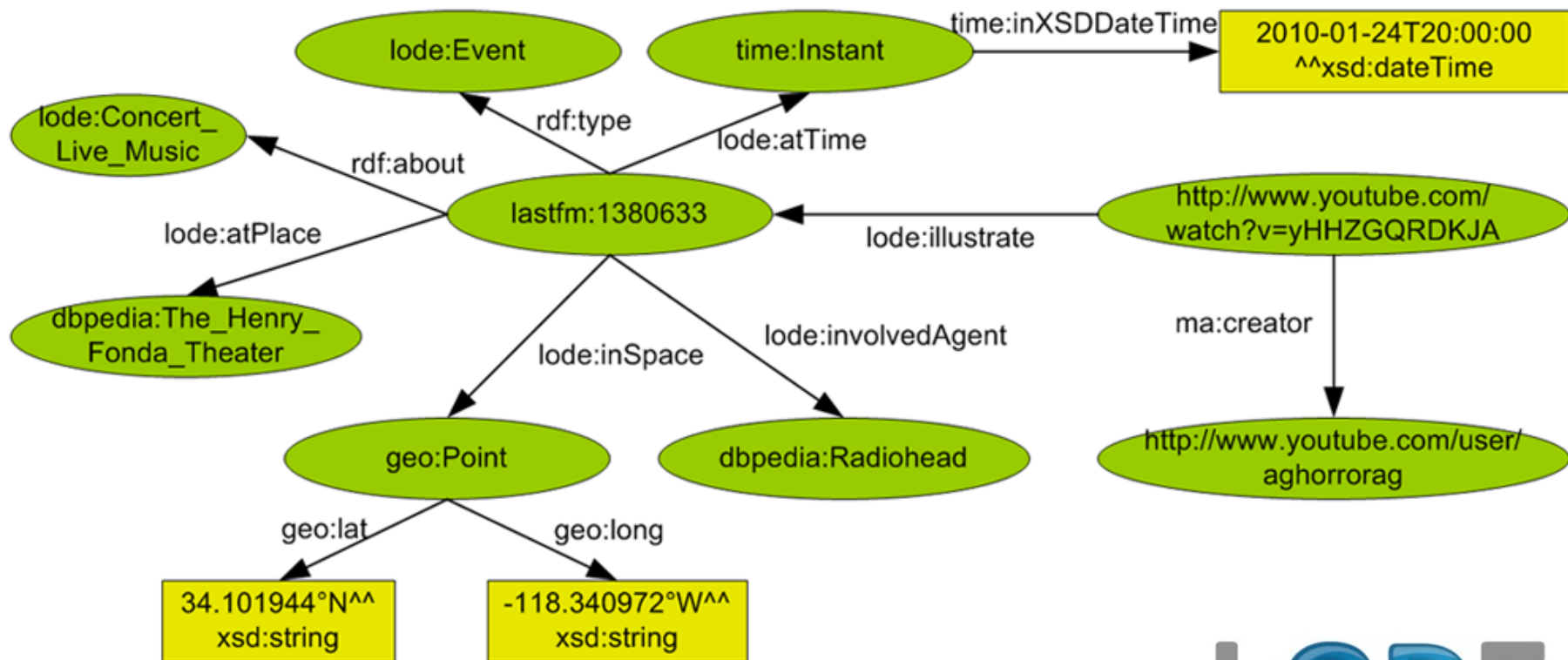


What? Where? When? Who?



Representing Events with LODE

Radiohead Haiti Relief Concert





Reasoning & annotation (metadata)

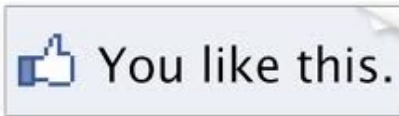
- Time, Location and Attendance



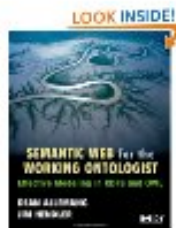


Collaborative Filtering

- Disambiguate and propagate information about attendance
- Identify Interests and provide Recommendations



Customers Who Bought This Item Also Bought



[Semantic Web for the Working Ontologist: Effecti...](#) by Dean Allemang
★★★★☆ (2)
£30.39



[Semantic Web Programming](#) by Mike Dean
£20.14



[Semantic Web For Dummies](#) by Jeffrey T. Pollock
★★★★☆ (1)
£16.99



[Programming the Semantic Web](#) by Toby Segaran
★★★★☆ (1)
£15.53



Linking the Data





Extracting and linking data

NOV
29

Arcade Fire

Share this event

Export event

285 attending | 54 shouts | Added by redredhead

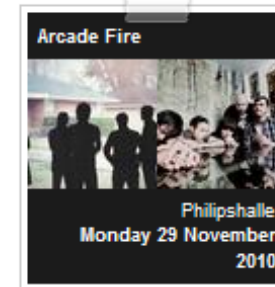
Monday 29 November 2010

Philipshalle

Siegburger Straße 15
40591 Düsseldorf
Germany

Show on Map

Web: www.philipshalle.de/



Upload poster



Tag your photos on Flickr

Showcase your pics for this event by tagging them on flickr.com with this machine tag:

lastfm:event=1598387

flickr



Machine tags
"lastfm:events"



Random sampling filtered by
the tag "music"

APIs



1.7 million images over
108.000 events

+ YouTube





How much data is there?

	Event	Agent	Location	Media	User
Last.fm	57,258	50,150	16,471	1,425,318	18,542
Upcoming	13,114	0	7,330	347,959	4,518
Eventful	37,647	6,543	14,576	0	0
Total	108,019	56,693	38,377	1,773,277	23,060

Event Title	Venue	City	Date	Photos	Video
Primavera Sound 2010	Parc del Forum	Barcelona	2010-05-28/30	2458	1730
Coachella Valley Music and Arts Festival	Empire Polo Grounds	Indio	2008-04-25/27	2311	434
Lollapalooza Festival	Grant Park	Chicago	2009-08-07/09	2220	1100
SXSW Music 2008	Convention Center	Austin	2008-03-12/16	2153	1890
Sziget Festival	Obudai-Sziget	Budapest	2008-08-12/18	2072	4620

1,248,021 geo-tagged photos by propagating information from events!



More on Interlinking

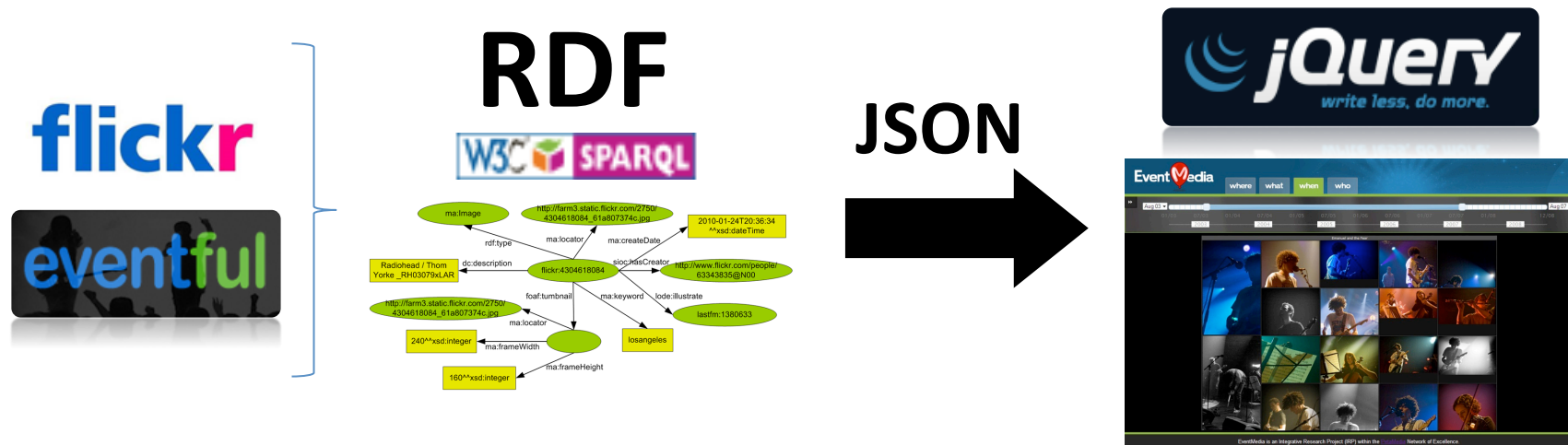
- **Linking Agents with**
 - Freebase, Dbpedia, MusicBrainz
- **Linking Venues with**
 - Geonames, Dbpedia, Foursquare (via Uberblic)
- **Linking Events with**
 - Last.fm, Upcoming, Eventful
- **Linking Categories with**
 - Facebook, Eventful, Upcoming, Zevents, LinkedIn, Eventbrite, TicketMaster
- **Linking Users with**
 - Social Graph API





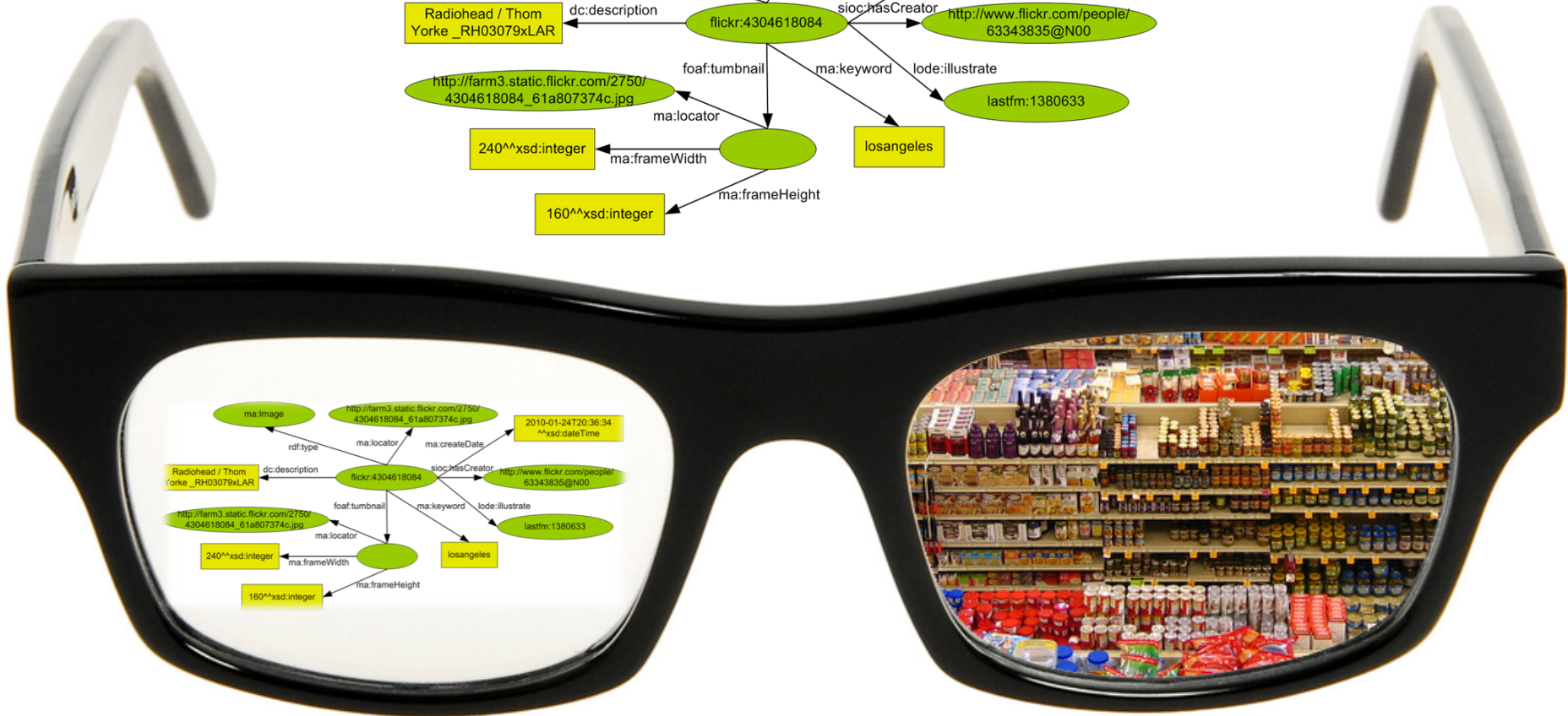
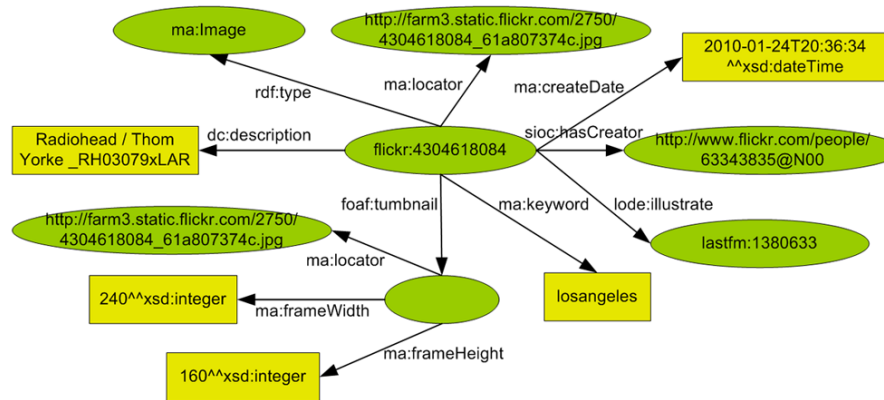
The Back-end

- RDF Repository on a web server with:
 - Sesame2 SPARQL endpoint with a distributed query engine.
 - A RESTful API that provides different methods and JSON representations of resources available in the dataset.



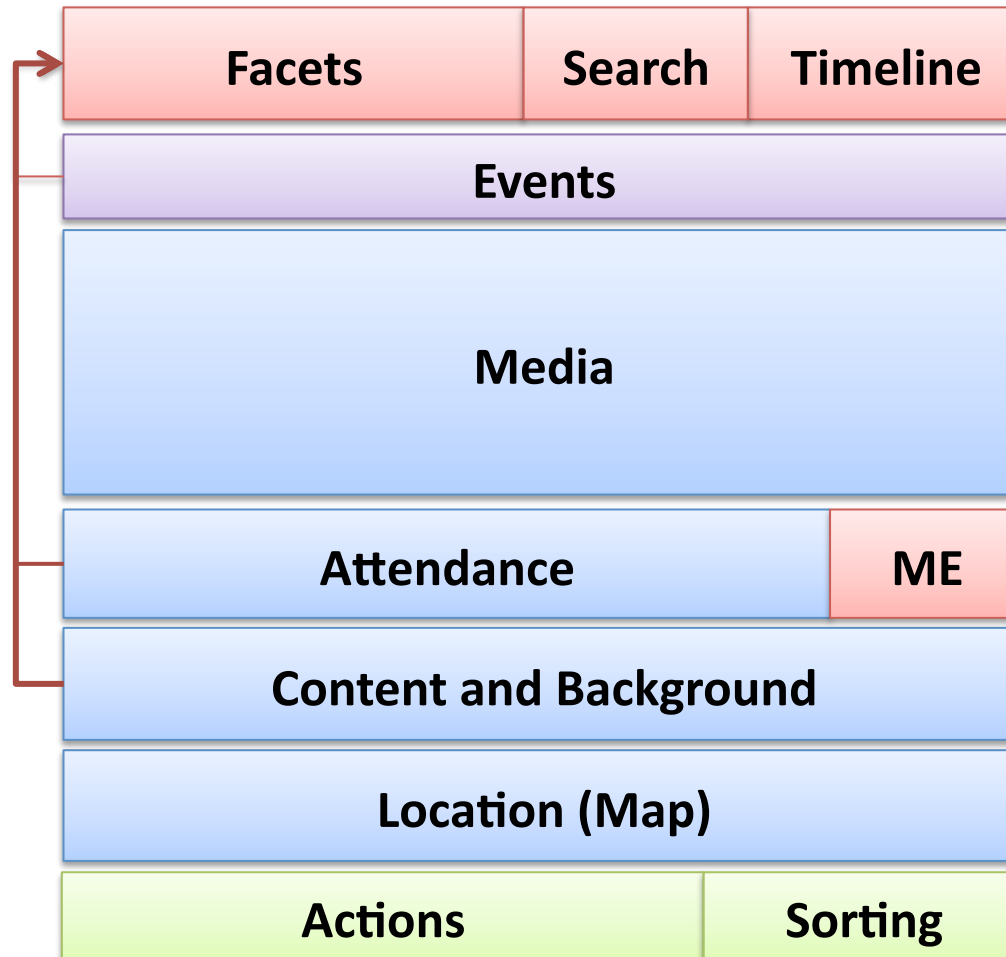


Translating the Ontology





Interface elements



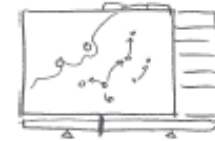


Interfaces

■ Perspectives

- What: Event/Media Centric
- Who: Social Network Visualization
- When: Time centric
- Where: Location Centric

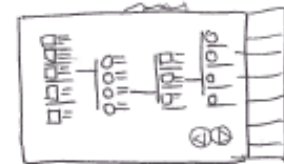
Location
-centric



Media
-centric



Relative
-centric



Time-
centric



Perspective: WHAT?

Amsterdam

Festivals

Category?

Add

Rock (55), Pop (30), Jazz (22), Electronic (12), Techno (11), Dance (9), More...

Order: Relvance ▼

Events

Radiohead

Dali Exhibition

Beer festival

...

Prev

Next



What's on this evening? Designing User
Support for Event-based Annotation and
Exploration of Media - EVENTS 2010,
Athens, Greece

Perspective: WHEN?

Amsterdam

Festivals

Category?

Add

Rock (55), Pop (30), Jazz (22), Electronic (12), Techno (11), Dance (9), More...

Order: When

Events

Radiohead

Dali Exhibition

Beer festival

...

Prev

Next



01/03/10 -



What's on this evening? Designing User
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Athens, Greece

March



28/03/10



30



Perspective: WHERE?

Amsterdam

Festivals

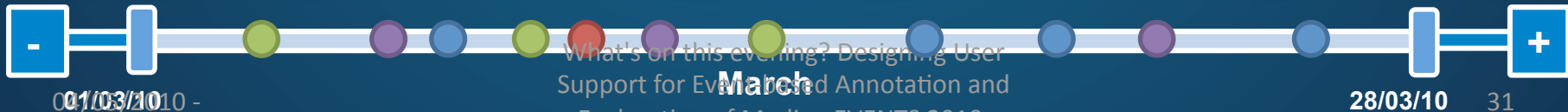
Category?

Add

Rock (55), Pop (30), Jazz (22), Electronic (12), Techno (11), Dance (9), More...

Order: Relvance

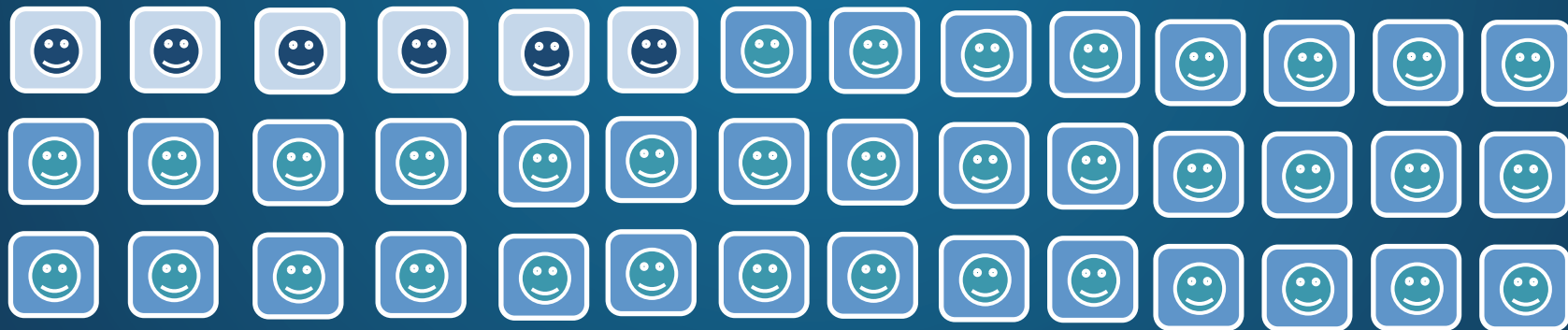
Events
Radiohead
Dali Exhibition
Beer festival
...
Prev Next



What's on this evening? Designing User
Support for Event-based Annotation and
Exploration of Media - EVENTS 2010,
Athens, Greece

March

Perspective: WHO?



Top Interests

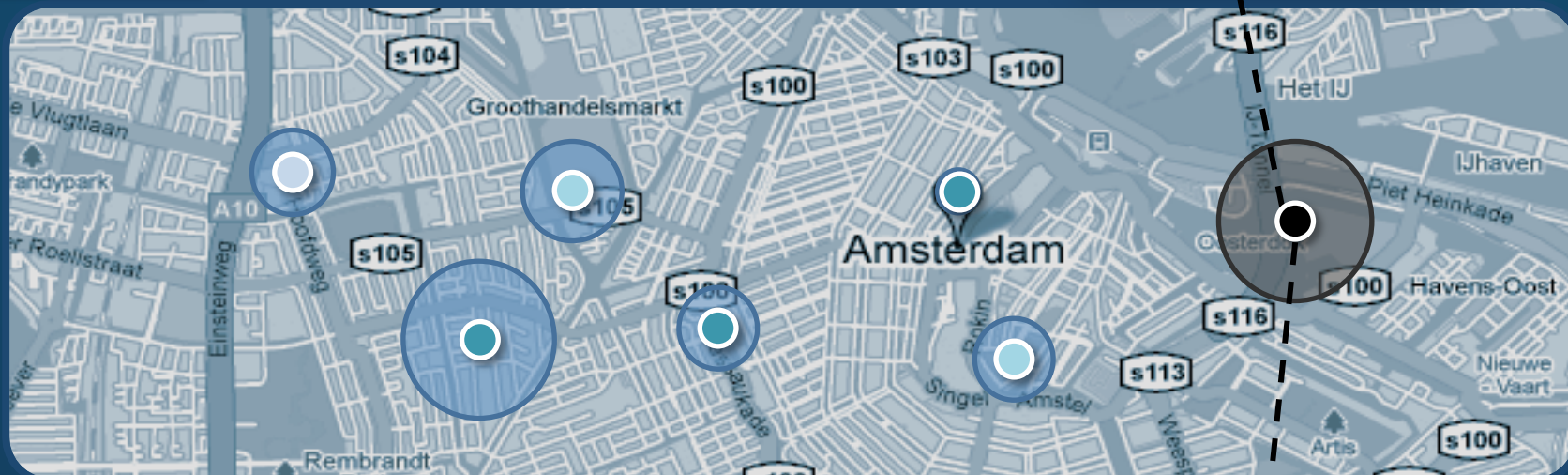
Jazz Concerts, Jazz House, Amstel Neighborhood, Luis Armstrong

◀
PREV
(28)

▶
NEXT
(113)



WHO and WHERE?



- Faceted browsing (recognition and the pokay-yoke)
- Semantic Autocompletion

Amsterdam

Festivals, Concerts

Category?

Ra

Rock (55), Pop (30), Jazz (22), Electronic (12), Techno (11),

Order: Relvance ▼

Genre:

Rap

Artist:

Radio Head

Rammstein

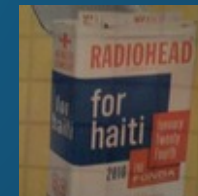
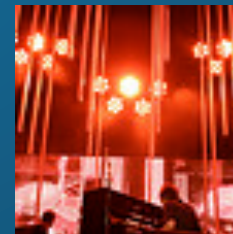
Ray Charles

...

Venue:

Radio House

Rattle Snake



- Image analysis for summarization task (representative images)



I will go

Maybe I'll go

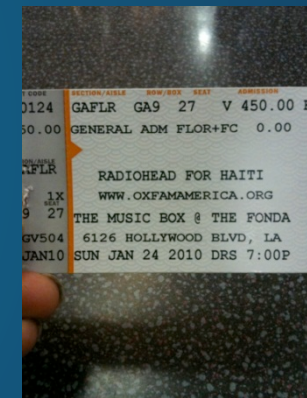
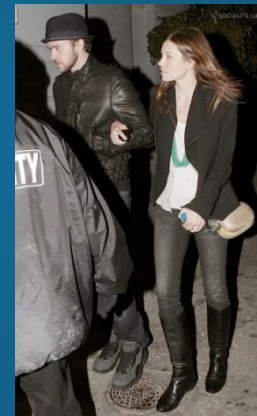
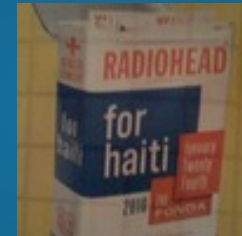
Share

Invite

Radiohead Haiti Relief 24/01
Music Box Fonda Theatre, Los Angeles, CA

<http://radiohead.com/tour>

America's relief efforts for victims of the Haiti earthquake. Oxfam America is an international relief and development organization that creates lasting solutions to poverty, hunger and injustice.



Comments & Ratings



America's relief efforts for victims of the Haiti earthquake. Oxfam



America is an international relief and development organization that creates

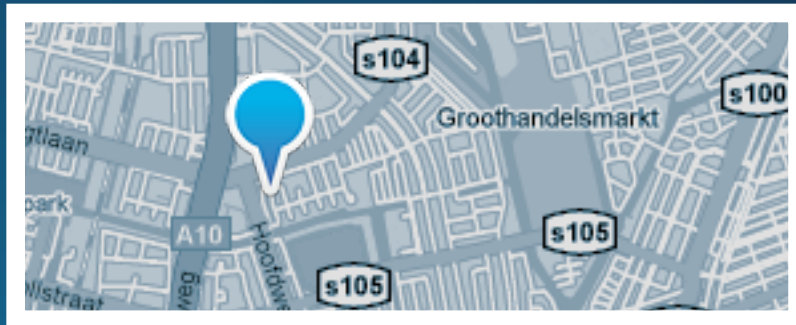


lasting solutions to poverty, hunger and injustice.



America's relief efforts for victims of the Haiti earthquake. Oxfam

Location



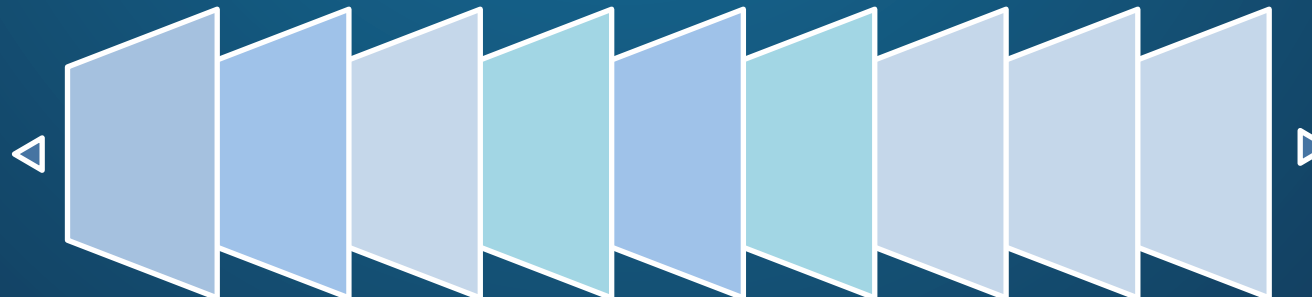
Friends(5)



Other (250)



Related Events



- Ordering (time, interest, popularity)
- Surrogate (Poster, most viewed or most depicted)
- Size of Image (Popularity: Number of attendants)





where

what

when

who



Aug 03 ▾

01/03

07/03

01/04

07/04

01/05

07/05

01/06

07/06

01/07

07/07

01/08

12/08

2003

2004

2005

2006

2007

2008

Aug 07 ▾

Emanuel and the Fear



EventMedia is an Integrative Research Project (IRP) within the [PetaMedia](#) Network of Excellence.

Conclusions

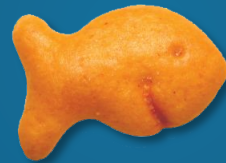
- We look into patterns to build something that will allow Identifying other patterns
- The approach allows the application to “evolve”
- It’s Open – open is good!
- UX can help semantics, semantics can help UX



References

- Raphaël Troncy, André Fialho , Lynda Hardman, Carsten Saathoff, Experiencing Events through User-Generated Media, COLD 2010 – ISWC , 9th International *Semantic* Web Conference, Shanghai, China
- Raphaël Troncy, Bartosz Malocha, André Fialho, Linking Events with Media -Triplification Challenge, I-SEMANTICS 2010, Graz, Austria
- André Fialho, Raphaël Troncy, Lynda Hardman, Carsten Saathoff & Ansgar Scherp. **What's on this evening? Designing User Support for Event-based Annotation and Exploration of Media.** 1st International Workshop "EVENTS 2010 - Recognising and tracking events on the Web and in real life" at SETN 2010, Athens, Greece, May 2010. ([slides](#))
- Ryan Shaw, Raphaël Troncy & Lynda Hardman. **LODE: Linking Open Descriptions of Events.** 4th Asian Semantic Web Conference (ASWC'2009). Shanghai, China, December 2009. ([slides](#))
- Ansgar Scherp , Thomas Franz , Carsten Saathoff & Steffen Staab. **F--a model of events based on the foundational ontology dolce+DnS ultralight.** Proceedings of the fifth international conference on Knowledge capture (K-CAP), California, USA 2009.
- Ansgar Scherp & Carsten Saathoff. **Unlocking the Semantics of Multimedia Presentations in the Web with the Multimedia Metadata Ontology.** International World Wide Web Conference, Raleigh, NC, USA, April, 2010. ([slides](#))

Thank you!



UI Ideas? (what, where, when, who)