

# exhibit

lightweight structured data publishing

david huynh + david karger + rob miller



MIT COMPUTER SCIENCE AND ARTIFICIAL INTELLIGENCE LABORATORY

Vietnamese Recipes at Epicurious.com

Back Forward Reload Stop Home <http://www.epicurious.com> Search Bookmarks

# epicurious

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recipe search  GO  
advanced search • browse

RECIPES FEATURES COOKING DRINKING RESTAURANTS

recipe collections • slideshows • forums • find a recipe

## browse

search our online database

BON APPÉTIT *Gourmet*  
read • subscribe

SHOP ON EPICURIUS

browsing by: Vietnamese

refine by: [Main Ingredient](#) | [Course](#) | [Dish](#) | [Season/Occasion](#) | [Recipe Category](#) | [Preparation](#) | [Healthy Options](#)

Beans (1)	Fruits (7)	Mushrooms (4)	Pork (5)	Soy (3)
Beef (13)	Garlic (6)	Nuts (3)	Potatoes (1)	Tomatoes (1)
Chicken (8)	Ginger (2)	Onions (4)	Poultry (7)	Vegetables (8)
Citrus (6)	Greens (7)	Pasta (13)	Rice (6)	
Fish (5)	Herbs (10)	Peppers (6)	Shellfish (11)	

55 recipes

sort results **Best Match**

rating at a glance

★★★★	...ED FISH WITH DILL AND ONION	
★★★★	<b>GREEN PAPAYA SALAD WITH BEEF AND LIVER JERKY</b> Epicurious, October 2006	🕒
★★★★	<b>SHAKING BEEF</b> Epicurious, October 2006	
★★★★	<b>HUE NOODLE SOUP</b> Bon Appétit, January 2006	

Done

**search**

**facets**

**query preview**

**sort**

Our Appliance Specialists will help you to select the right appliances.

SHOP NOW

LG Side-by-Side Refrigerator, White

Easily programmable

**BEST BUY**



Link to this page | Save this Search | List Search

Sign in | Create an Account My Favorites | My Searches My Account | List a Place

**ZOOM** + -

Listing Type: All Types Price: Min: \$ 0 Max: \$ 6000+  No Price Specified

Bedrooms:  Studio  1  2  3+

**Points of Interest**

- Public Schools
- Private Schools
- Colleges etc.
- Public Transportation

**AREAS**

- States
- Counties
- Cities
- ZIPs
- Congress
- Show Borders
- Heat Maps

**PROPERTIES**

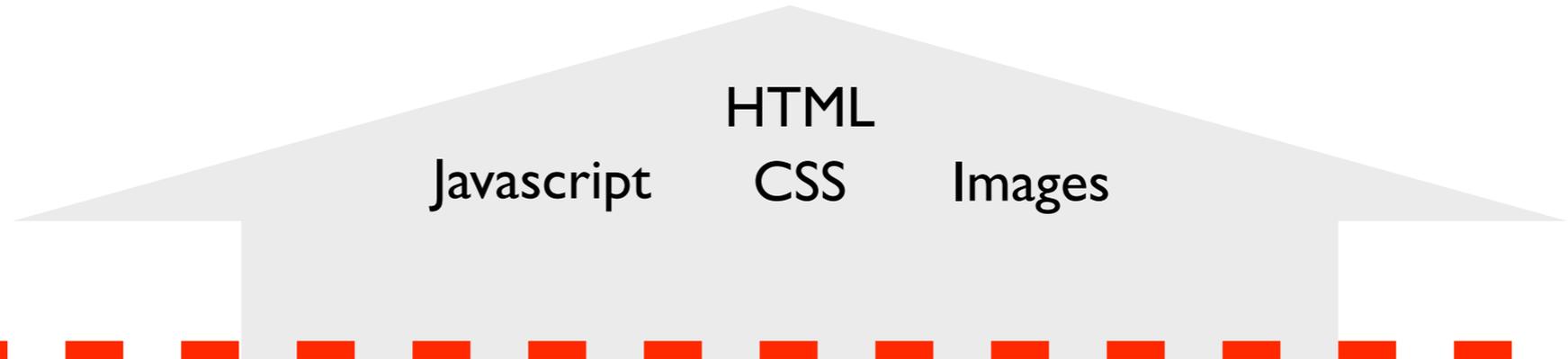
- Show New
- Show Favorites
- Show Viewed
- Ghost Viewed

**MESSAGES**

Transferring data from maptiles.hotpads.com...

**PRESENTATION**

Web Browser



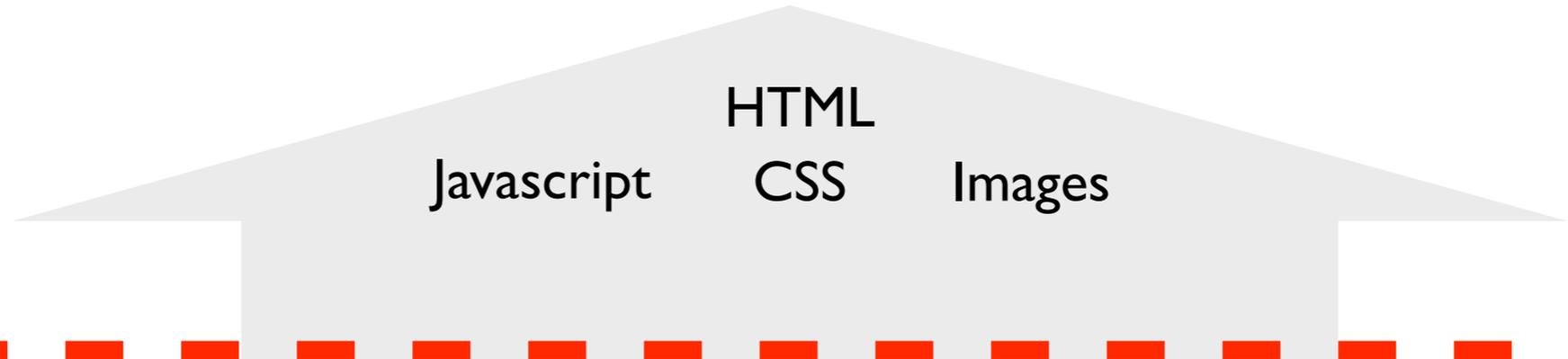
Web Server



File System

**PRESENTATION**

Web Browser



Web Server



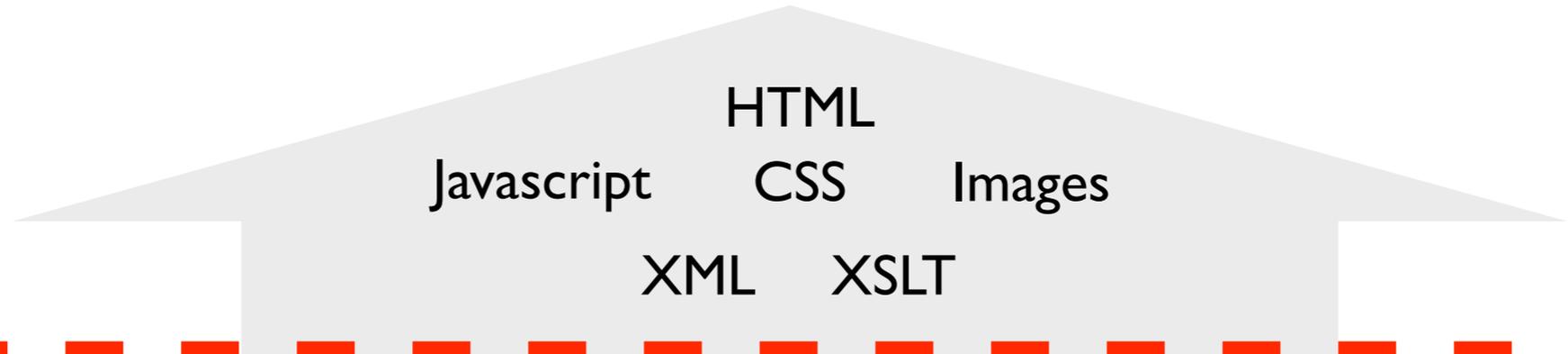
File System

**DATA**



**PRESENTATION**

Web Browser



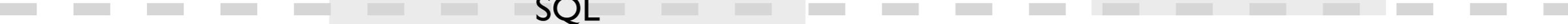
XmlHttp

Application Server

Web Server

**LOGIC**

ASP.NET  
ASP  
CGI  
PHP  
JSP/Java



File System

**DATA**

Database

MySQL / Postgres / Oracle

publishing data is **hard**.

Ivan Herman, Publications [grouped as sorted]

http://homepages.cwi.nl/~ivan/AboutMe/CV/Pres.html

Back Forward Reload Stop Home

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- [Major Presentations](#)
- [R&D Activities](#)
- Professional activities:
  - [Current](#)
  - [Past](#)
- [Computing experiences](#)

## Public Presentations

(An [RDF](#) version of the list are also available.)

46 presentation total Copy All

sorted by: [city](#); then by...  sorted •  show duplicates

country

labels

year

### Amsterdam (2)

1. "Tutorial on Semantic Web Technologies", at "[XTech 2005 Conference](#)", Amsterdam, The Netherlands, 2005-05-24. Slides are [available on-line](#).
2. "RDF/OWL Semantic Technologies", at "[News Standards Summit 2005](#)", Amsterdam, The Netherlands, 2005-05-24. Slides are [available on-line](#).

### Antwerpen (1)

3. "Tutorial on Semantic Web Presentations", Antwerpen, Belgium, 2005-05-24. Slides are [available on-line](#).
6. "Semantic Web Seminarie" (Semantic Web Presentations), Antwerpen, Belgium, 2005-05-24. Slides are [available on-line](#).

### Athens, GA (2)

4. "Uncertainty and the Semantic Web", at "[Workshop on Uncertainty Reasoning on the Semantic Web](#)", Athens, GA, USA, 2006-11-05. Slides are [available on-line](#).
5. "Semantic Web @ W3C: Activities, Recommendations and State of Adoption", at "[Industrial 5th International Semantic Web Conference \(ISWC2006\)](#)", Athens, GA, USA, 2006-11-05. Slides are [available on-line](#).

### Noosa Lakes, Queensland (1)

7. "W3C: The Standards that are Important: An overview of W3C, its operation and current technical work", at "[AusWeb06](#)", Australis Noosa Lakes, Queensland, Australia, 2006-07-03. Slides are [available on-line](#).

Search facets:

country

- 2 ✓ Australia
- 1 ✓ Austria
- 3 ✓ Belgium
- 5 ✓ China
- 2 ✓ Finland
- 5 ✓ Germany
- 2 ✓ Hungary
- 6 ✓ India
- 1 ✓ Italy
- 1 ✓ Korea
- 3 ✓ Norway

javascript: ✓

sort

group by city

filter by country

raise your hand...

... if you have  
your own web sites  
listing your publications?

# keep your hands up...

... if your web sites  
support **sorting** and **grouping** by  
by year, author, topic, ...?

# keep your hands up...

... if your sites  
support **filtering** by  
year, author, topic, ...?

keep your hands up...

... if your sites

can export data in structured formats?

publishing data is **hard**.  
can Semantic Web technologies help?

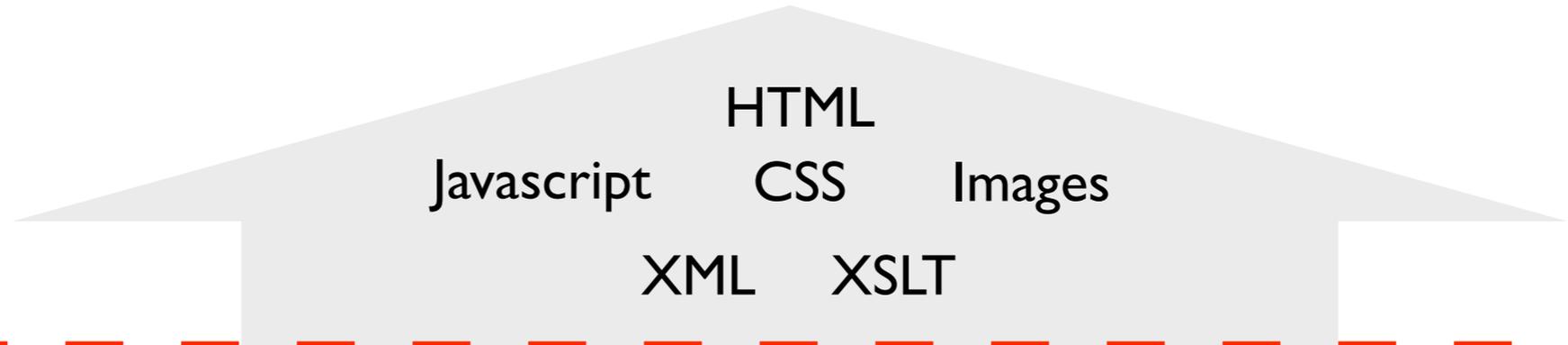
remember back in the early 1990s...

# outline

- ✓ problem: publishing data is too hard
- ✓ demo: using Exhibit to publish data in 10 min
- implementation: how Exhibit works
- real world uses + discussion
- related work
- future work
- conclusion

**PRESENTATION**

Web Browser



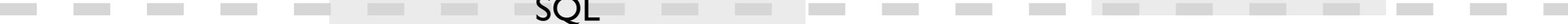
XmlHttp

Application Server

Web Server

**LOGIC**

ASP.NET CGI JSP/Java  
ASP PHP



File Systems

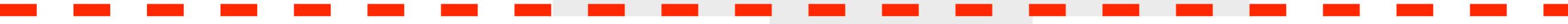
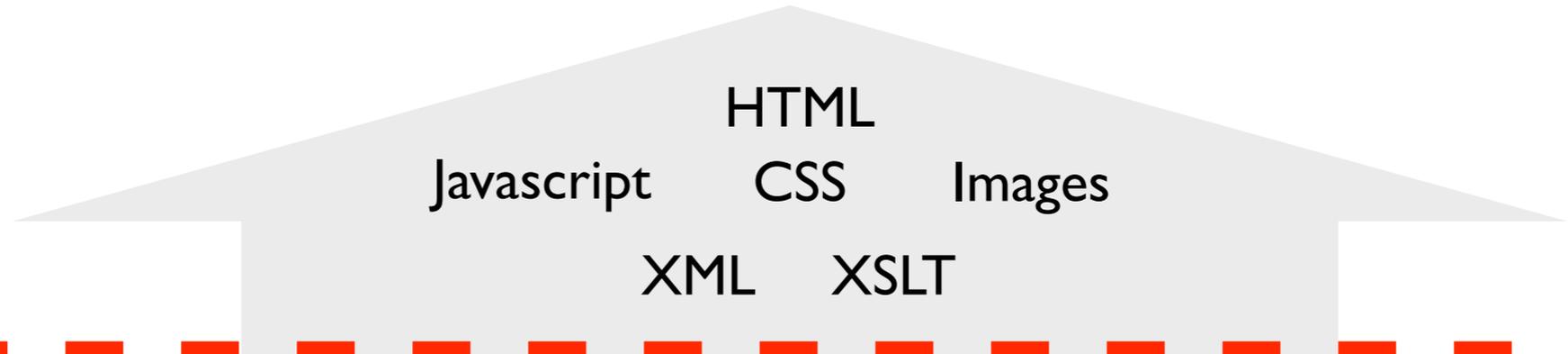
**DATA**

Database

MySQL / Postgres / Oracle

**PRESENTATION**

Web Browser

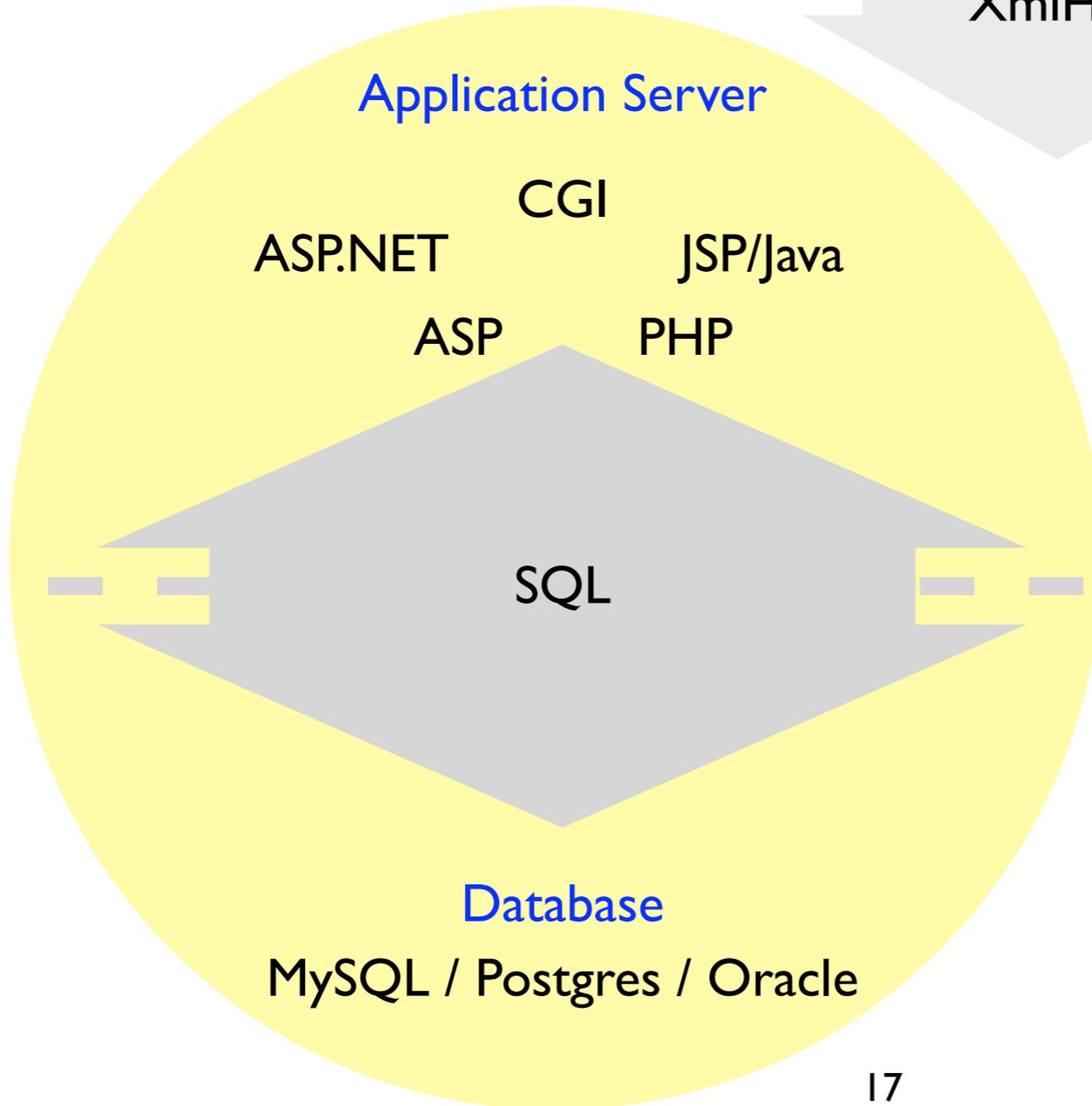


XmlHttp

Application Server

Web Server

**LOGIC**

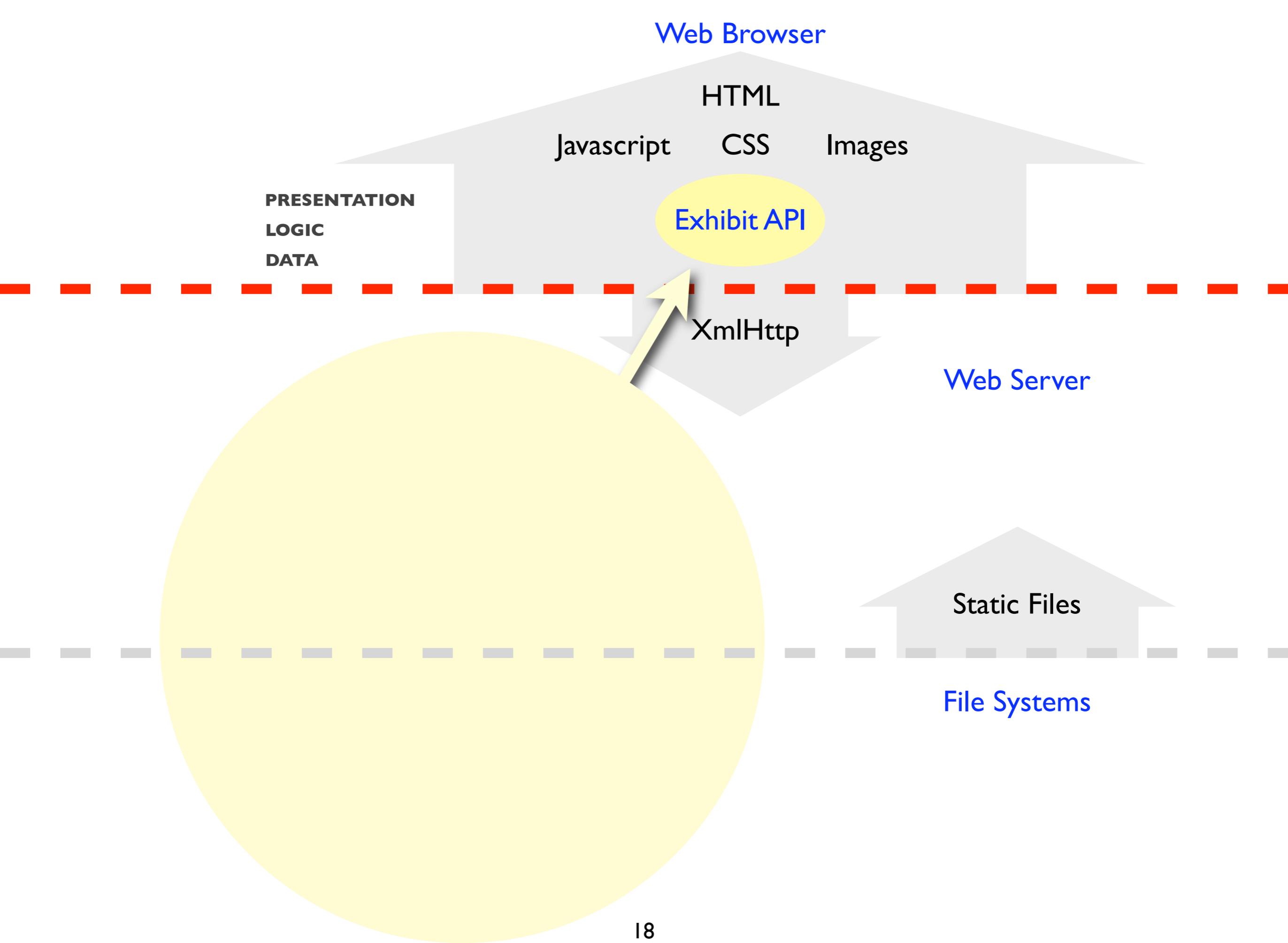


File Systems

**DATA**

Database

MySQL / Postgres / Oracle



web browser

HTML  
+  
Images  
+  
CSS  
+  
JS

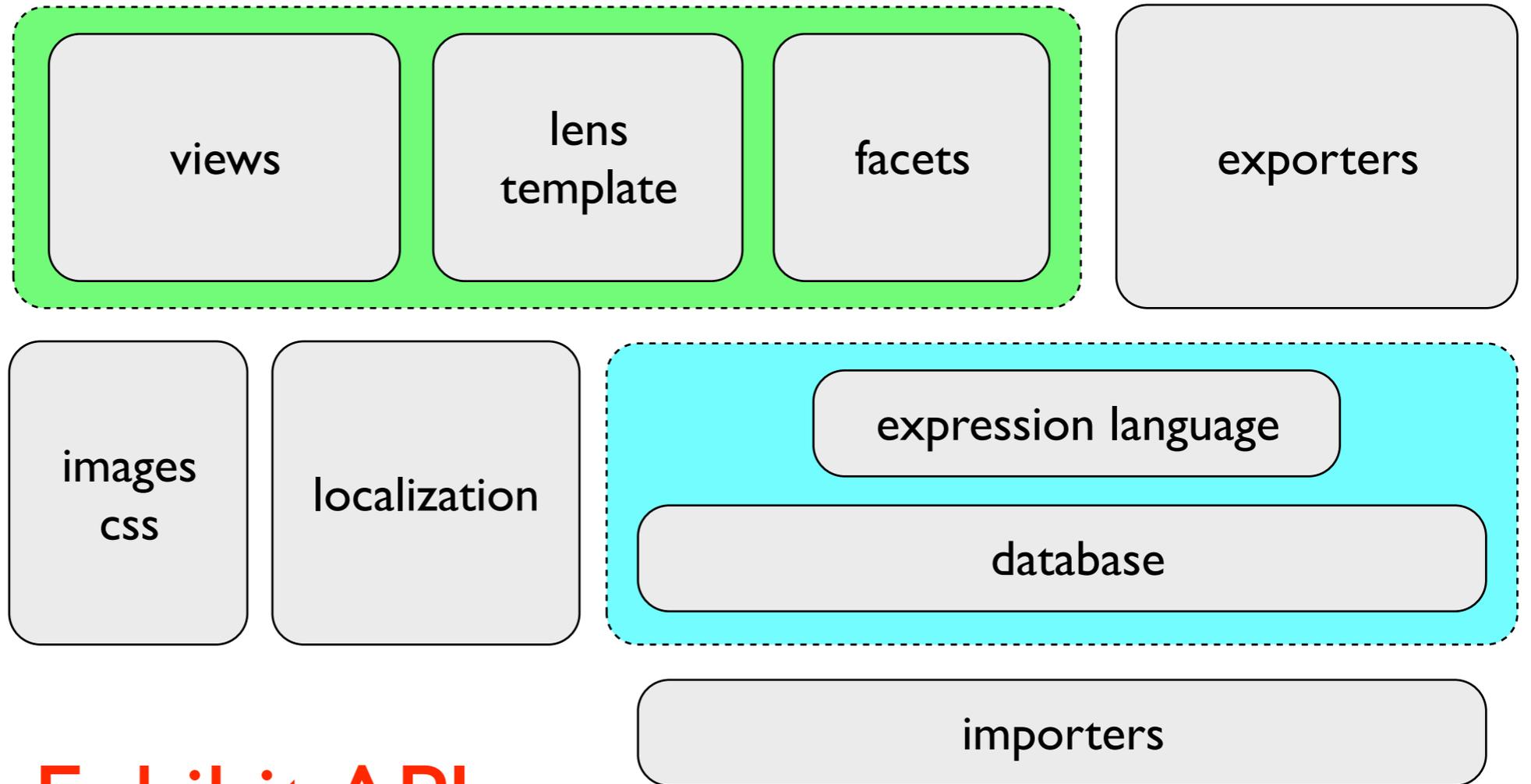
web browser

HTML  
+  
Images  
+  
CSS  
+  
JS

```
<script src= “..... /exhibit-api.js”>  
</script>
```

# web browser

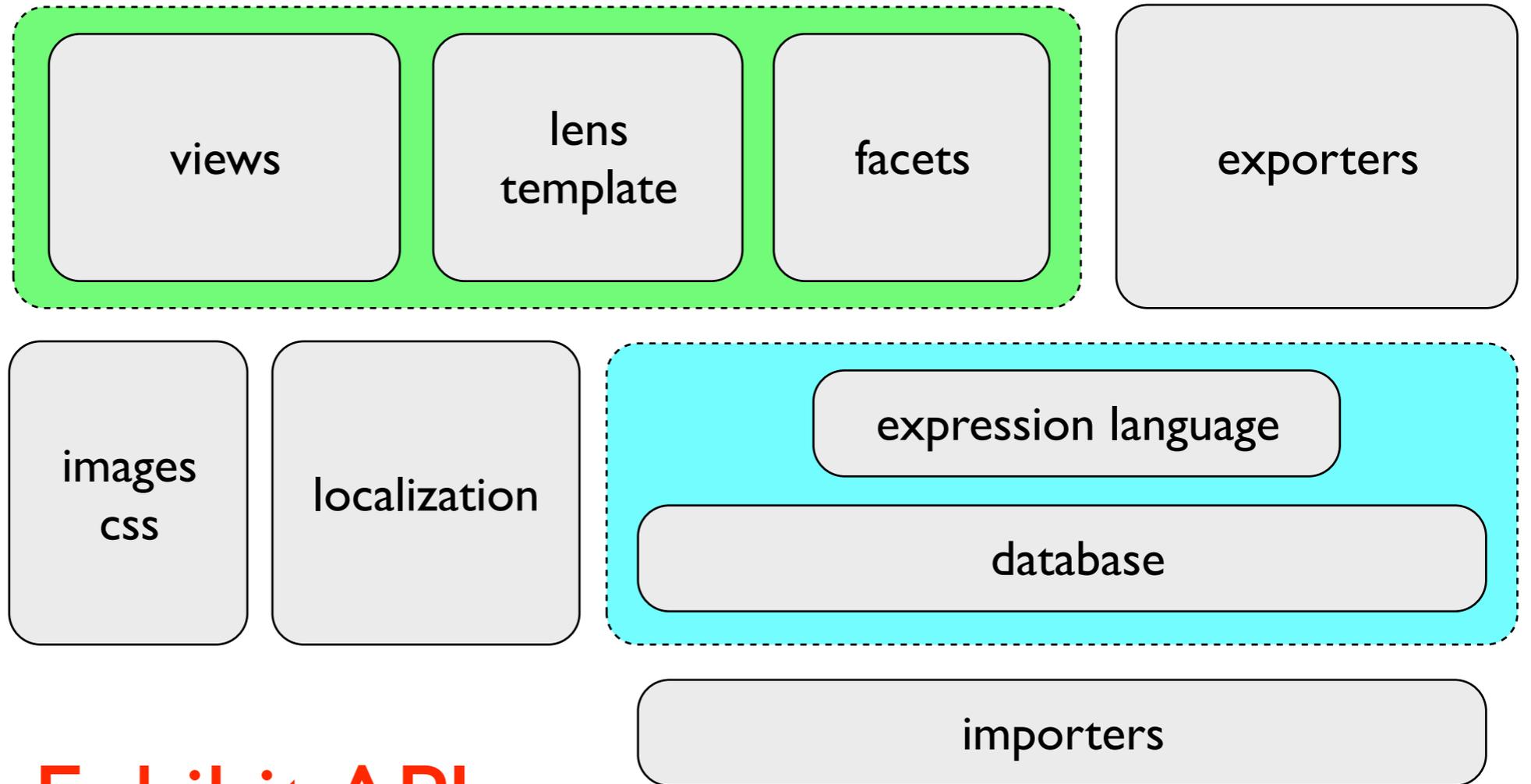
HTML  
+  
Images  
+  
CSS  
+  
JS



## Exhibit API

# web browser

HTML  
+  
Images  
+  
CSS  
+  
JS



## Exhibit API

data

# web browser

HTML

HTML  
+  
Images  
+  
CSS  
+  
JS

views

lens  
template

facets

exporters

images  
css

localization

expression language

database

importers

Exhibit API

data

# web browser

HTML

JS

HTML  
+  
Images  
+  
CSS  
+  
JS

views

lens  
template

facets

exporters

images  
css

localization

expression language

database

importers

Exhibit API

data

# web browser

DOM

HTML

JS

HTML  
+  
Images  
+  
CSS  
+  
JS

views

lens  
template

facets

exporters

images  
css

localization

expression language

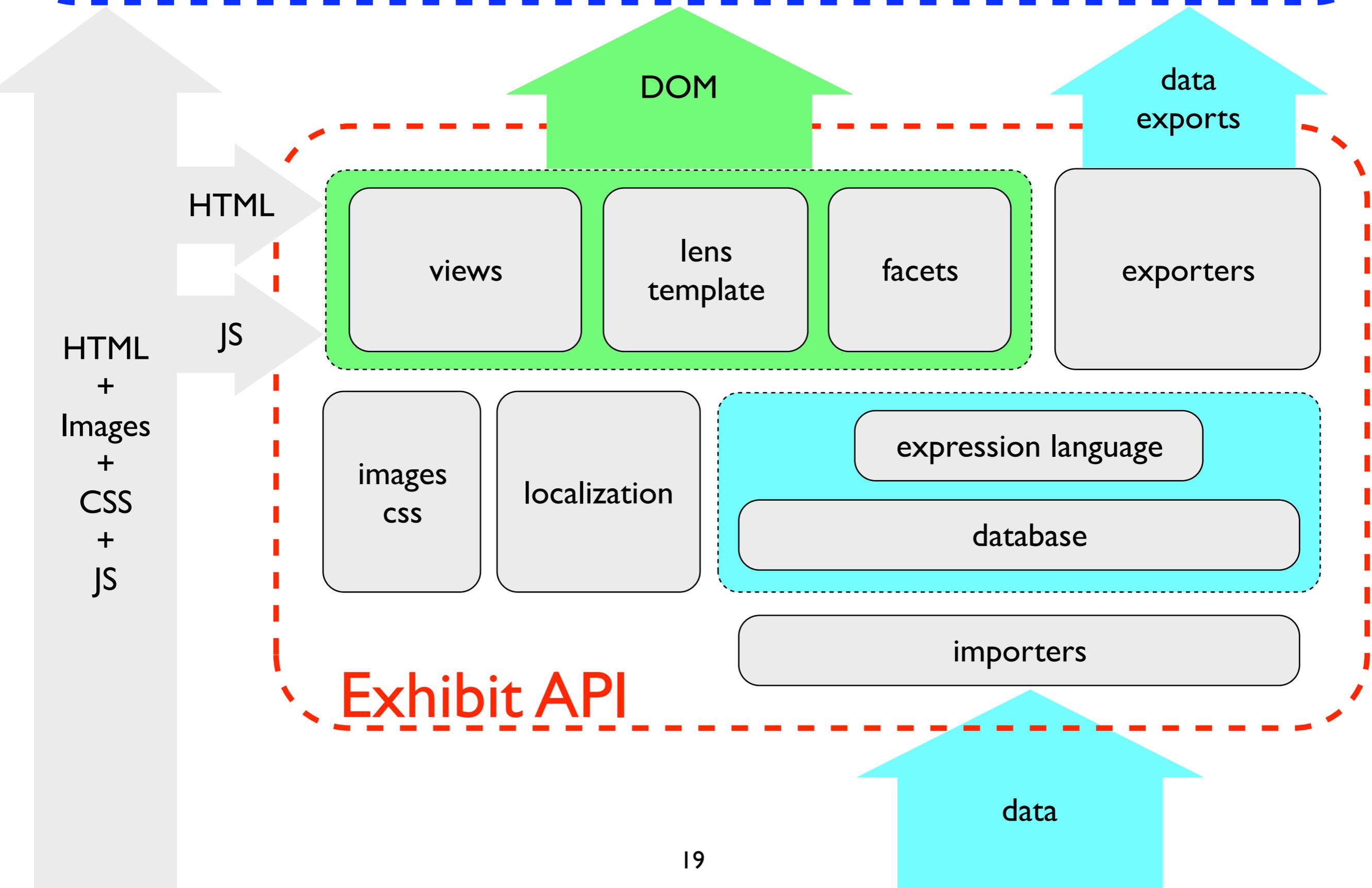
database

importers

Exhibit API

data

# web browser



web browser

web browser

Exhibit API

web browser

Exhibit API

presentation

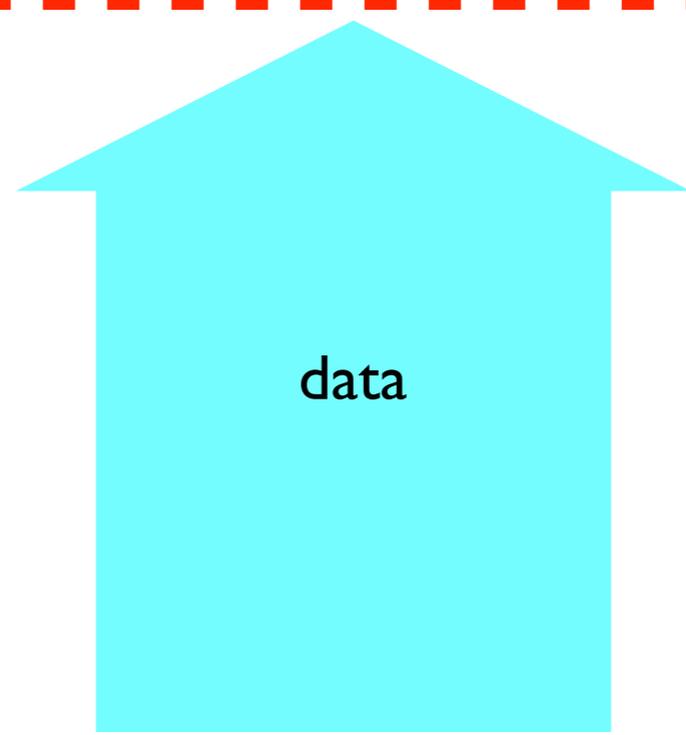
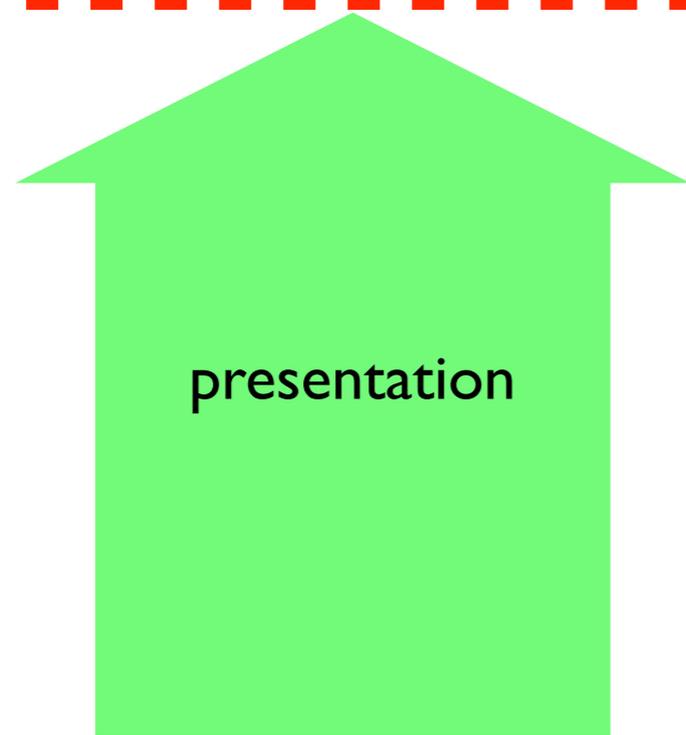
web browser

Exhibit API

presentation

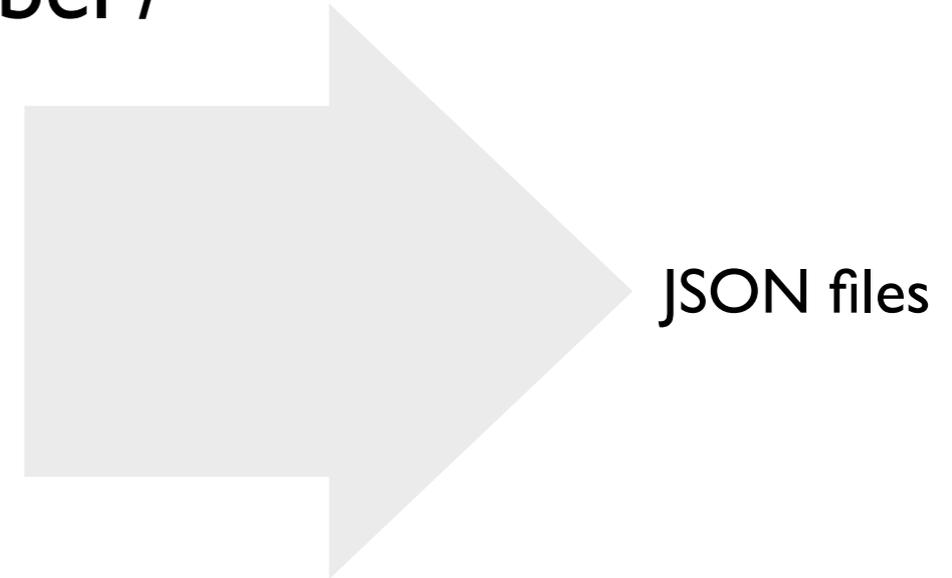
data

my users



# data formats

- JSON as default format
- [http:// simile . mit . edu / babel /](http://simile.mit.edu/babel/)
  - Bibtex
  - Excel spreadsheets
  - Tab separated values
  - RDF/XML, N3
- Dynamic importers



	A	B	C	D	E
1	{label}	{type}	{genre}	{plot:single}	{rating:number}
2	Lord of the Rings: The Return of the King	Movie	Drama; Epic	The former Fellowship of the Ring prepare for the final battle for Middle Earth, while Frodo & Sam approach Mount Doom to destroy the One Ring.	4
3	Fight Club	Movie	Crime; Drama; Thriller	An office employee and a soap salesman build a global organization to help vent male aggression.	5
4	Memento	Movie	Crime; Mystery; Thriller	A man, suffering from short-term memory loss, uses notes and tattoos to hunt for the man he thinks killed his wife.	5
5	Enemy at The Gates	Movie	Action; Drama; History; Thriller; War	Two Russian and German snipers play a game of cat-and-mouse during the Battle of Stalingrad.	4
6	King Kong	Movie	Drama		3
7	Casino Royal	Movie	Action		
8	The Shining	Movie	Action	dkfljasd	4
9	Babel	Movie	Action; Drama	ksdjf	5
10					
11					
12					
13					
14					
15					
16					

**Publish this spreadsheet**

**Published at:**  
<http://spreadsheets.google.com/pub?key=pLvsUS-CftHo21r-0xjKvVA>  
 published Feb 12, 2007 8:24:52 AM PST

**Automatically update every 5 minutes?**  
 Yes  
 No, only publish manually

**What parts?**  
 All sheets

Re-publish Stop publishing

Subscribe

[More publishing options](#)

# JSONP data feed

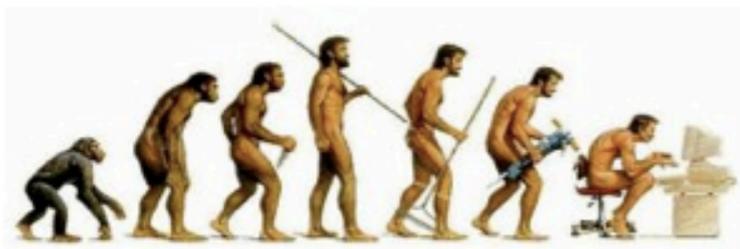
```
gdata.io.handleScriptLoaded({
  ...
  "entry": [
    { "id": {
      "$t": "http://spreadsheets.google.com/feeds/list/.../od6/public/basic/cokwr"
    },
      "updated": { "$t": "2007-04-16T18:41:56.378Z" },
      "category": [
        { "scheme": "http://schemas.google.com/spreadsheets/2006",
          "term": "http://schemas.google.com/spreadsheets/2006#list"
        }
      ],
      "title": {
        "type": "text",
        "$t": "Lord of the Rings: The Return of the King"
      },
      "content": {
        "type": "text",
        "$t": "{type}: Movie, {genre}: Drama; Epic, {plot:single}: The former Fellowship
of the Ring prepare for the final battle for Middle Earth, while Frodo \u0026 Sam
approach Mount Doom to destroy the One Ring., {rating:number}: 4"
      },
      ...
    },
    ...
  ]
})
```

# scalability

- Javascript is slow, not designed for implementing DBs
- Recommended for < 500 items
- Some people have been brave: 2733 items or more
- Not a limitation per se
- Exhibit is intended for small data sets

# outline

- ✓ problem: publishing data is too hard
- ✓ demo: using Exhibit to publish data in 10 min
- ✓ implementation: how Exhibit works
- real world uses + discussion
- related work
- future work
- conclusion



# AI<sup>3</sup> Adaptive Information Adaptive Innovation Adaptive Infrastructure

**a-dap-tive** *adj.* Showing or having a capacity to make fit for new or special situations; flexible; a successful adjustment.

Blogasbörd by  
Michael K. Bergman

## Main Links

- [Home](#)
- [SweetSearch](#)
- [Sweet Tools \(Sem Web\)](#)
- [Pro Blogging Guide](#)
- [Chronological Listing](#)
- [Acronyms & Glossary](#)
- [This Blogasbörd](#)
- [About Mike](#)

## Sweet Tools (Sem Web)



### AI3's Comprehensive Listing of Semantic Web and Related Tools

**NOTE:** This posting of **Sweet Tools** — semantic Web and related tools — is now in version **8**, with **500 tools**, an addition of 80 newly listed tools since the previous version. It was last updated on **3/11/07**. It is presented via the **Exhibit database** design (see explanation here). New tools or update suggestions are welcomed.

Last Updated 3/11/07

## Thanks & Credits

**XML**

WP WORDPRESS

Technorati Profile

SITE METER

DUB BLOGLINES

CC SOME RIGHTS RESERVED

W3C XHTML 1.0

500 Items total

[Copy All](#)

sorted by: [labels](#) and [Category](#); then by... •  grouped as sorted •  show duplicates

1. **3store**  
 A core C library that uses MySQL to store its raw RDF data and caches, forming an important part of the infrastructure required to support a range of knowledgeable services  
**Category:** Database/Datastore **Primary Language:** C / C++  
**FOSS?:** Yes **Listed:** 8/12/2006 **Updated:** 3/12/2007  
**URL:** <http://www.aktors.org/technologies/3store/>

2. **4Suite 4RDF**  
 The 4Suite 4RDF an open-source platform for XML and RDF processing implemented in Python with C extensions  
**Category:** Programming Environment **Primary Language:** Python  
**FOSS?:** Yes **Listed:** 8/12/2006 **Updated:** 3/12/2007  
**URL:** <http://4suite.org/>


**Category**

- 26 ✓ Annotator
- 23 ✓ Browser (RDF, OWL or semantic)
- 29 ✓ Composite App/Framework
- 8 ✓ Data Language
- 29 ✓ Database/Datastore
- 3 ✓ Description or Formal Logics

**Language**

- 26 ✓ C / C++
- 7 ✓ C#
- 9 ✓ Definition / Specification
- 4 ✓ Don't Know
- 5 ✓ Haskell
- 223 ✓ Java
- 59 ✓ JavaScript

**Posted**

- 26 ✓ 1/22/2007
- 56 ✓ 1/4/2007
- 47 ✓ 1/9/2007

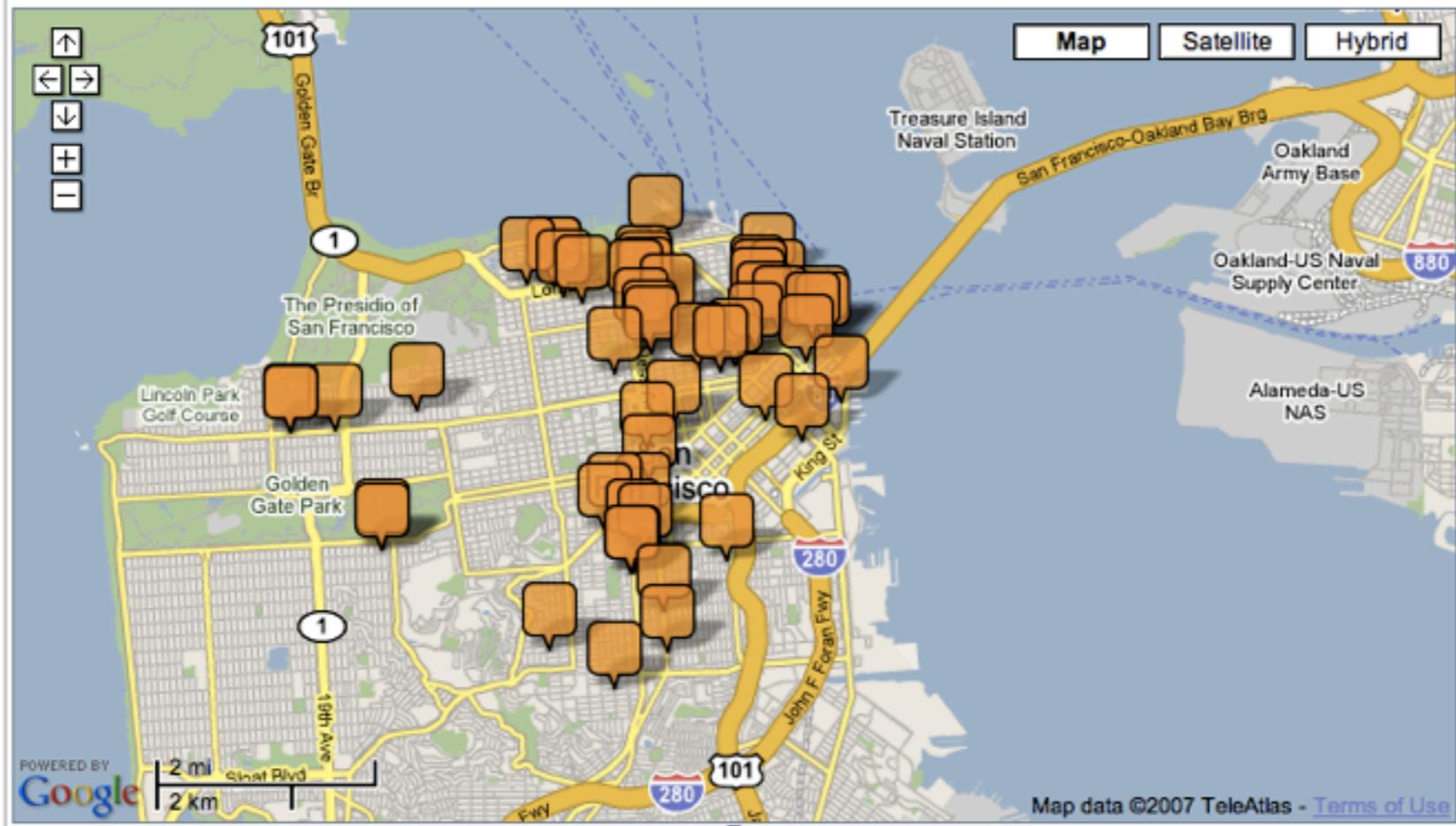
This is based on some RDF data that I had scraped from sfgate's top 100 restaurant list using piggy bank. I can't remember why there are only 97 entries. :)

TILES • TABLE • MAP

97 Restaurants total

Copy All

Only 94 can be plotted on map.



**rating**

4 ✓	2.0
14 ✓	2.5
59 ✓	3.0
11 ✓	3.5
6 ✓	4.0

**cuisine**

1 ✓	African
15 ✓	American
3 ✓	Asian
1 ✓	Bakery
2 ✓	Basque
1 ✓	BBQ
32 ✓	California
4 ✓	Chinese

**price**

7 ✓	1.0
45 ✓	2.0
28 ✓	3.0
17 ✓	4.0

**Color Legend**

Mixed

[<<< BACK TO MYPIPELINE](#)



3 Item total

Copy All

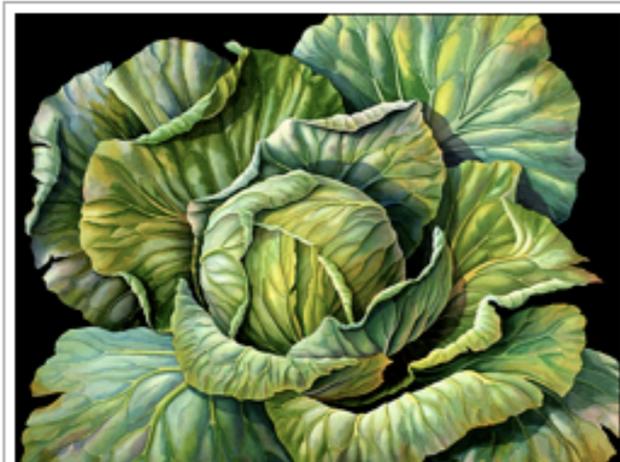
sorted by: [Cuisine](#); [then by...](#) •  grouped as sorted •  show duplicates



#### Smoked Haddock flan

- 200g Smoked Haddock filets
- 2 potatoes
- 600ml milk
- 2 eggs
- pie base

Put the haddock in a saucepan with milk, pepper and thyme. Poach for 10 minutes and leave to cool. Beat the eggs and the fresh cream. Add cooking milk of the cooled haddock. Remove the skin and the stop the haddock. Cut the potatoes into fine rondelles. Place the rondelles of potatoes onto the pie bottom, then add the haddock flakes. Whip the eggs with a touch of milk, then pour the egg on the fish and potatoes. Cook at 180deg C for 40 minutes in the oven.



#### Sweet Sausage and Cabbage Fettucine

- Marks & Spencer Apple and Pork sausages (4)
- Half an onion
- Half a Savoy cabbage
- 200ml pouring cream
- fettucine (250g)

First julienne your vegetables and cut your sausages into small (half-inch) chunks. Boil some water for the fettucine, and depending on whether you have fresh fettucine or not, start to boil the pasta. Then heat up a pan until hot and add the sausages. Cook with the onions until both are crispy and golden. Add the cabbage when the onions and sausage have been cooking about 7 minutes. Finally add the cream when the cabbage begins to soften. Stir in the mixture into the boiled fettucine and serve with a baguette.

#### Cuisine

- 1 ✓ French
- 1 ✓ Italian
- 1 ✓ Swedish

#### Easiness

- 1 ✓ moderate
- 2 ✓ very easy

#### Time

- 1 ✓ 1 hour
- 1 ✓ 20min
- 1 ✓ 30min

# Israel Folk Dance Video Index

[Video Index](#) | [Unprocessed Videos](#) | [Broken videos](#) | [Submit Dances](#)

**What is this?** This is a page indexing the Israeli Folk Dance videos that can be found on various video sharing sites like Youtube and Google Video. This site doesn't hold the videos, but aims to make it easy to find them by letting you search, sort, and visualize the videos according to various useful attributes.

THUMBNAILS • TABLE • DETAILS • TIMELINE

Copy All

170 Videos total

sorted by: [labels](#); [then by...](#) •  grouped as sorted •  show duplicates

choreographers

- 1 ✓ Alberto Zirlinger
- 1 ✓ Amnon Shauli
- 1 ✓ Avi Amsalam
- 6 ✓ Avi Levy
- 4 ✓ Avi Perez
- 1 ✓ Aviv Ben Ishay
- 3 ✓ Avner Naim

years choreographed

- 1 ✓ 1949
- 1 ✓ 1959
- 1 ✓ 1960
- 1 ✓ 1970
- 1 ✓ 1973
- 1 ✓ 1976
- 1 ✓ 1978

form

- 90 ✓ circle
- 66 ✓ couple
- 13 ✓ line
- 2 ✓ solo



[Achdut](#)



[Ad Sof Haolam](#)



[Agadat Hamapuchit](#)



[Ahava Bageshem](#)



[Ahuv Besayeret Charuv](#)



[Ahuv Sheli - Dance](#)

[Ahava Yam Tichonit](#)



# Your Artists Albums

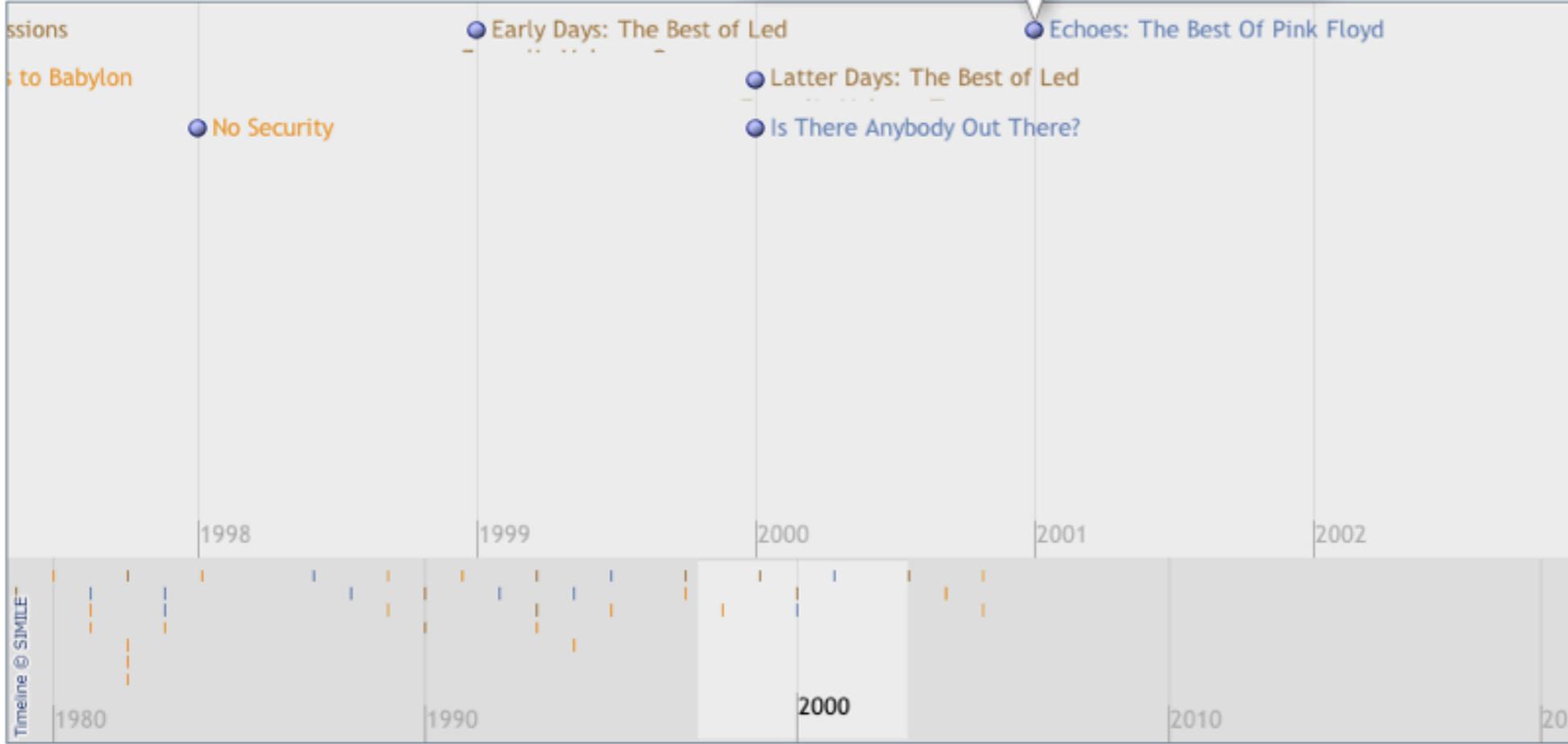
THUMBNAILS • LIST • RELEASE

90 Items total



Echoes: The Best Of Pink Floyd  
Release: , 2001  
Charts: ( weeks)  
[Buy Album](#)

Copy All



- artist**
- 18 ✓ Led Zeppelin
  - 21 ✓ Pink Floyd
  - 51 ✓ Rolling Stones

- year**
- 2 ✓ 1964
  - 4 ✓ 1965
  - 4 ✓ 1966
  - 4 ✓ 1967
  - 2 ✓ 1968
  - 5 ✓ 1969
  - 3 ✓ 1970
  - 7 ✓ 1971

Re-Layout



[BACK TO MYPIPELINE HOME](#)

## Car Finder

This page aims to show a prototype of a Research A Car filtering engine. It uses MIT Simile Project's Exhibit JSON engine to filter results from an external javascript file, so it's not as robust as a database-driven site. But it's also quicker, and lighterweight. :)

Here is the [Exhibit JSON data file](#).

CATEGORY	MANUFACTURER	RATING	PRICEBAND
38 ✓ Affordable Sports 51 ✓ Exotic Sports	4 ✓ Alfa Romeo 1 ✓ Ariel 4 ✓ Aston Martin 3 ✓ Audi 1 ✓ Bentley Motors 10 ✓ BMW 1 ✓ Bristol	1 ✓ 1 1 ✓ 1.5 4 ✓ 2 11 ✓ 2.5 15 ✓ 3 12 ✓ 3.5 23 ✓ 4	16 ✓ 100,000-150,000 21 ✓ 15,000-30,000 33 ✓ 30,000-70,000 17 ✓ 70,000-100,000

[THUMBNAILS](#) • [TIMELINE](#)

89 Item total

[Copy All](#)

sorted by: [CATEGORY](#); then by... •  grouped as sorted •  show duplicates

### Affordable Sports (38)



**BMW 3 Series Coupe**  
Model Year: 1999-  
4Car Rating: 3.5  
Price Band: 15,000-30,000  
[View Road Test](#)



**Honda Civic Coupe**  
Model Year: 1996-2001  
4Car Rating: 2  
Price Band: 15,000-30,000  
[View Road Test](#)



**BMW 3-Series Coupe**  
Model Year: 2006-  
4Car Rating: 4.5  
Price Band: 30,000-70,000  
[View Road Test](#)



**Mitsubishi Lancer Evo IX**  
Model Year: 2005-  
4Car Rating: 4  
Price Band: 30,000-70,000  
[View Road Test](#)



Installed Fonts

Back Forward Reload Stop Home <http://exhibit.ecmanaut.googlepages.com> Search Bookmarks

# Installed Fonts

This page is another visualization of Lalit Patel's [CSS/Javascript font detector](#). It tests the length of the string *mmmmmmmmmmml* at 24px, and measures the width and height of the rendered versions, comparing those against the width of the default font. Go ahead and probe for other fonts, and play around with the filter facets and views!

Font name:

FONTS • TABLE 

48 Fonts total.

sorted by: [kind](#) and [labels](#); [then by...](#) •  grouped as sorted

## alias (6)

<i>cursive</i>	default	<i>fantasy</i>
monospace	sans-serif	serif

## named (42)

<i>Apple Chancery</i>	Arial	<b>Arial Black</b>
Arial Narrow	<b>Arial Rounded MT Bold</b>	Ayuthaya
BANK GOTHIC	Baskerville	Bookman Old Style
Bradley Hand ITC	Century	Century Gothic

**Installed**

10 ✓ false

38 ✓ true

---

**Type**

6 ✓ alias

42 ✓ named

---

**Height**

16 ✓ 20 - 25

22 ✓ 25 - 30

5 ✓ 30 - 35

4 ✓ 35 - 40

1 ✓ 80 - 85

---

**Width**

1 ✓ 120 - 130

5 ✓ 150 - 160

1 ✓ 160 - 170

3 ✓ 170 - 180

10 ✓ 190 - 200

16 ✓ 200 - 210

7 ✓ 210 - 220

1 ✓ 220 - 230

3 ✓ 230 - 240

1 ✓ 240 - 250



Done 

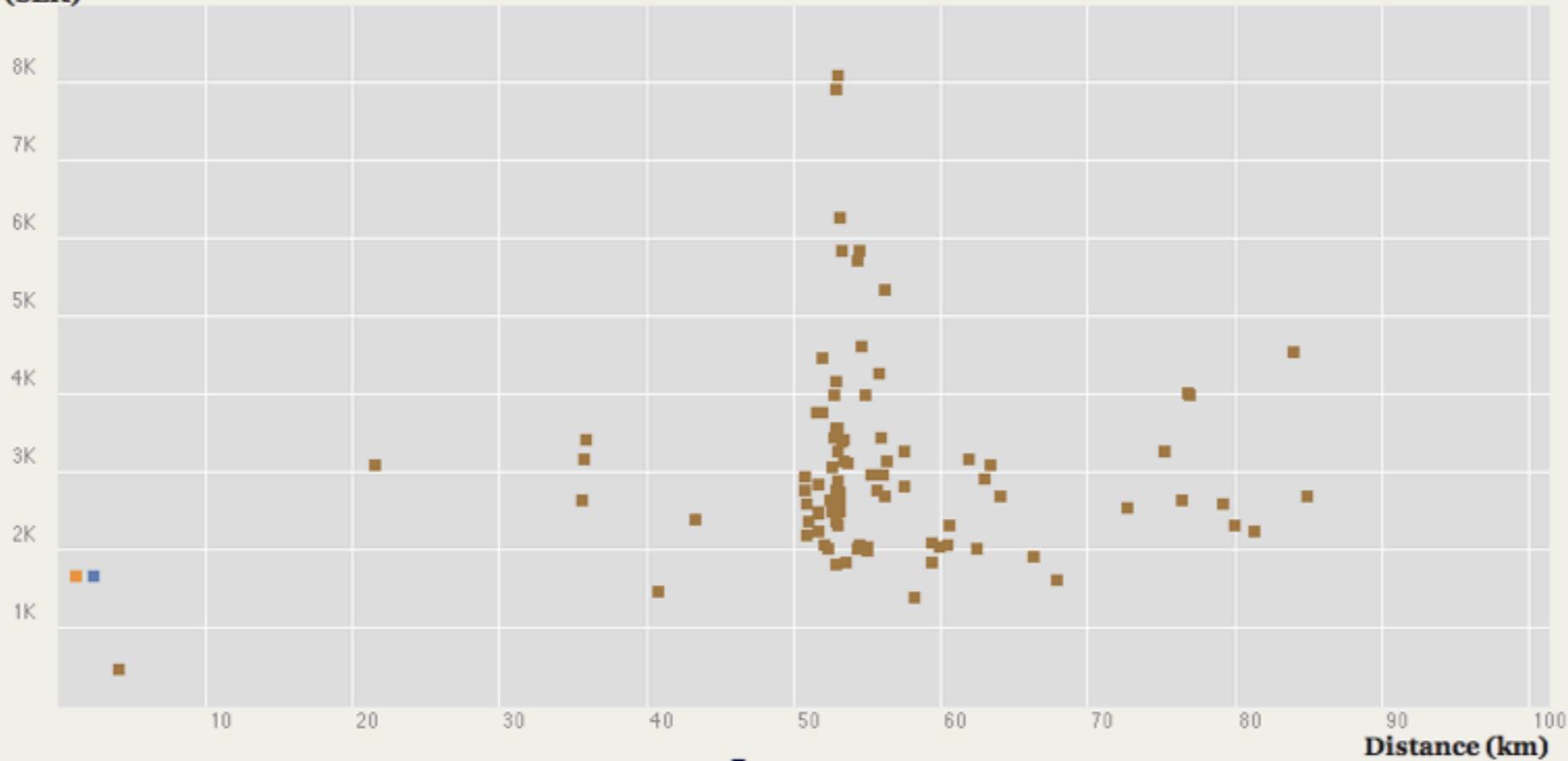
# Double/twin rooms near Boogie-Bären, Landsberg am Lech, Germany, May 25-28 2007

TABLE • DISTANCE / PRICE • MAP

243 Items total.

[146 results](#) out of 243 cannot be plotted.

Price (SEK)



orange square false brown square true

### Available double rooms

16 ✓ false

95 ✓ true

Distance (km)

Price (in SEK)

1 ✓ 0 - 500

2 ✓ 1000 - 1500

13 ✓ 1500 - 2000

19 ✓ 2000 - 2500

22 ✓ 2500 - 3000

18 ✓ 3000 - 3500

8 ✓ 3500 - 4000

4 ✓ 4000 - 4500

2 ✓ 4500 - 5000

2 ✓ 5000 - 5500



Photo: [Rory Turnbull](#)

# MIT Nobel Prize Winners

234 Dog total

Copy All

name	ragom ID	photo	adopted	birthdate	high medical
Zoey	07-147		yes	2007-01-25	no
Zoe	07-078		yes	2002-02-21	no
Zeta	07-077		yes	2005-09-14	no
Xena	07-098		no	2000-03-09	no

oops!

adopted

145 ✓ no  
89 ✓ yes

high\_medical

234 ✓ no



# Lego sets

2733 Items total

Copy All

sorted by: [year](#) and [cat](#); [then by...](#) •  grouped as sorted •  show duplicates

1.



**Outrigger Construction Crane**  
4 Juniors, 2004, 4668

2.



**Harry Hardtack and Monkey**  
4 Juniors, 2004, 7081

3.



**Pirate Dock**  
4 Juniors, 2004, 7073

cat

- 13 ✓ 4 Juniors
- 31 ✓ Adventure
- 29 ✓ Alpha Team
- 9 ✓ Aqua Nauts
- 3 ✓ Aqua Raiders
- 6 ✓ Aqua Sharks
- 9 ✓ Aquazone

year

- 3 ✓ 1958
- 4 ✓ 1960
- 1 ✓ 1961
- 1 ✓ 1962
- 2 ✓ 1965
- 10 ✓ 1966
- 5 ✓ 1967
- 21 ✓ 1969



# Primitivism: Rites of Spring

The information within this page has been retrieved from all over. Here is the [Exhibit JSON data file](#).

### performance

- 61 ✓ Kirov reconstruction
- 3 ✓ Massine
- 7 ✓ World Premier

### company

- 7 ✓ Ballet Russes
- 3 ✓ Massine
- 61 ✓ The Kirov Ballet

### date

- 7 ✓ 1913
- 3 ✓ 1944
- 61 ✓ 1996

### artist

- 58 ✓ Millicent Hodson
- 9 ✓ Nicholas Roerich
- 3 ✓ Sketch by Millicent Hodson &copy;
- 1 ✓ Unattributed

### type

- 1 audio
- 5 company
- 71 ✓ costume
- 11 performance
- 4 photo
- 5 production
- 1 set

DETAILS • THUMBNAILS

71 costume filtered from 112 originally ([reset](#))

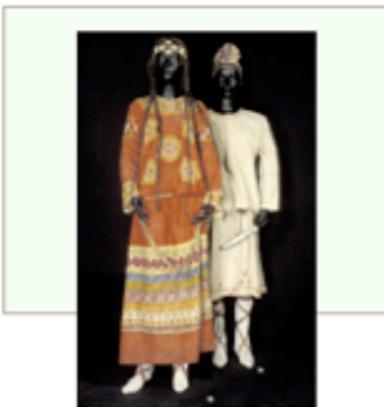
Copy All

sorted by: [performance](#); [then by...](#) •  grouped as sorted •  show duplicates

## World Premier (7)



Maidens  
World Premier, *Ballet Russes*  
1913



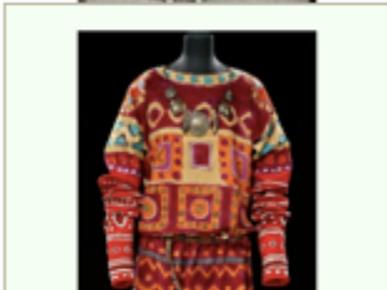
Maiden and Elder Costumes  
World Premier, *Ballet Russes*  
1913



Sketch: a girl  
World Premier, *Ballet Russes*  
1913



Women's Costume for the first

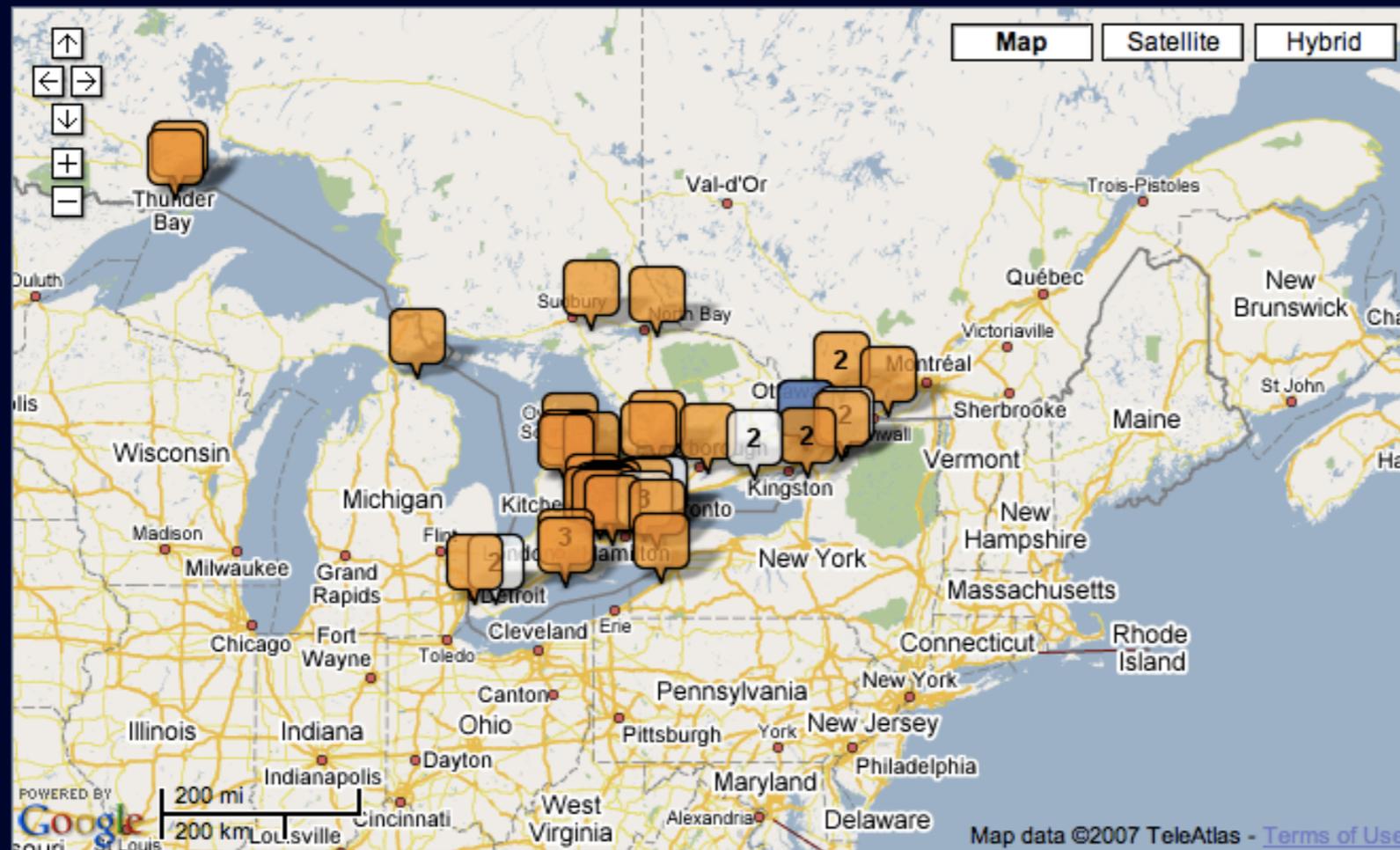


# Breweries and Distilleries in Ontario 1914-15

TILES • MAP

55 Brewery and Distillery total

Copy All



### Location

- 1 ✓ Barrie
- 2 ✓ Belleville
- 1 ✓ Berlin
- 1 ✓ Brantford
- 1 ✓ Brockville
- 1 ✓ Carlsruhe
- 1 ✓ Cornwall
- 1 ✓ Formosa

### type

- 46 ✓ Brewery
- 9 ✓ Distillery

### Color Legend

- Brewery
- Distillery
- Mixed



[Interview Questions \(Spreadsheet\)](#) [Clips \(Spreadsheet\)](#) [Interviewees \(Spreadsheet\)](#)

120 Clip, Interviewee, and Question total.

sorted by: [QuestionID](#); then by... •  grouped as sorted

1.



01. 何才か (How old are you?)	
Difficulty:	1 Interviewee
Degree of Kansai-ben	1
	タカシ (Takashi)(M) under 10 Nephew Student Shiga

2.



01. 何才か (How old are you?)	
Difficulty:	1 Interviewee
Degree of Kansai-ben	2
	アキラ (Akira)(M) 30s-3.late Brother Architect and Teacher Shiga and Osaka

## Type

46✓ Clip  
36✓ Interviewee  
38✓ Question

## Interview Question

16✓ 01. 何才か (How old are you?)  
3✓ 02. 学校が好きか (Do you like school?)  
2✓ 03. 好きな/嫌いな科目は何か (What is your favorite / least favorite subject?)  
3✓ 04. 担任の先生は誰か (Who is the teacher in charge of your class?)

## Interviewee Name

9✓ サヤサ (Sayasa)  
3✓ アキラ (Akira)  
8✓ アユミ (Ayumi)  
1✓ タカヤマさん (Takayama-san)  
1✓ ウチダさん (Uchida-san)  
1✓ ハセガワさん (Hasegawa-san)  
1✓ マツダさん (Matsuda-san)

## Interviewee Gender

22✓ F  
24✓ M

## Interviewee Age

9✓ 10s-1.early  
1✓ 20s-2.mid  
3✓ 20s-3.late  
5✓ 30s-1.early  
5✓ 30s-3.late

someone is planning a **wedding** using Exhibit

presentations  
company members  
software tools  
restaurants  
3 recipes  
radio albums  
installed fonts  
hotels near a dance event  
dogs for adoption  
lego sets  
dances, costumes, performances  
breweries and distilleries  
kansai dialect field study data  
wedding attendees

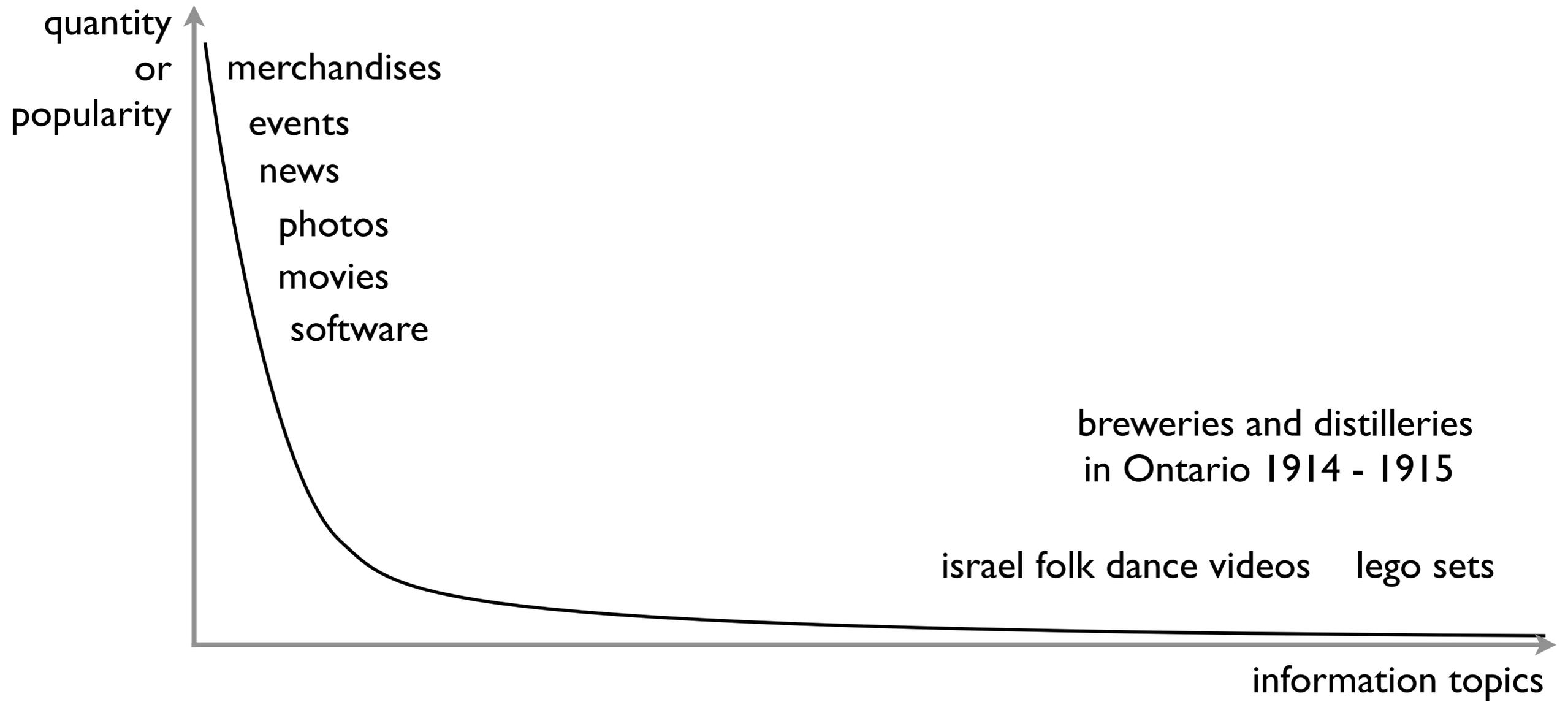
presentations  
company members  
software tools  
restaurants  
3 recipes

If Semantic Web researchers were to  
build a web site with data,  
what topic would the data be about?

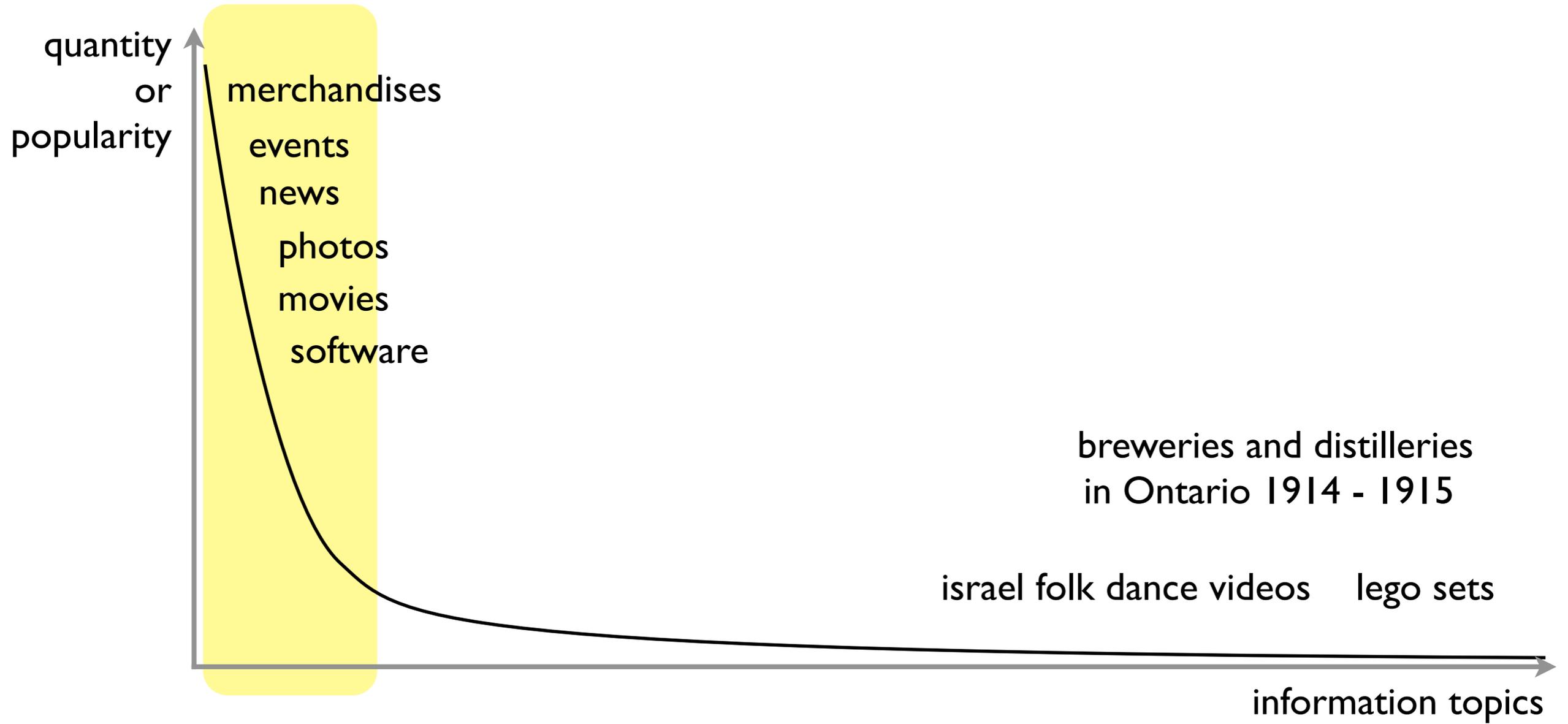
radio albums  
installed fonts  
hotels near a dance event  
dogs for adoption  
lego sets  
dances, costumes, performances  
breweries and distilleries  
kansai dialect field study data  
wedding attendees

# scientific papers

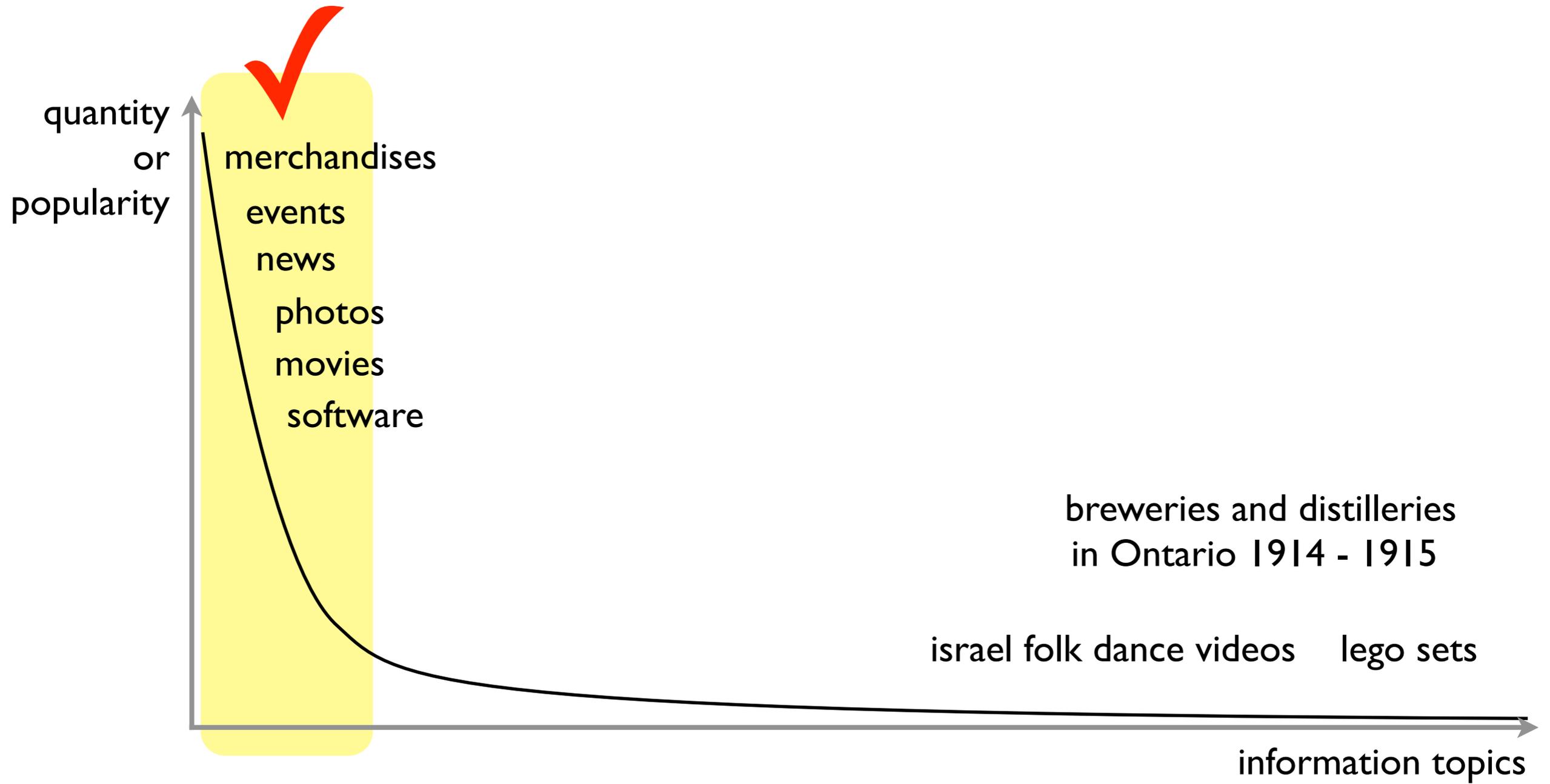
# The Long Tail



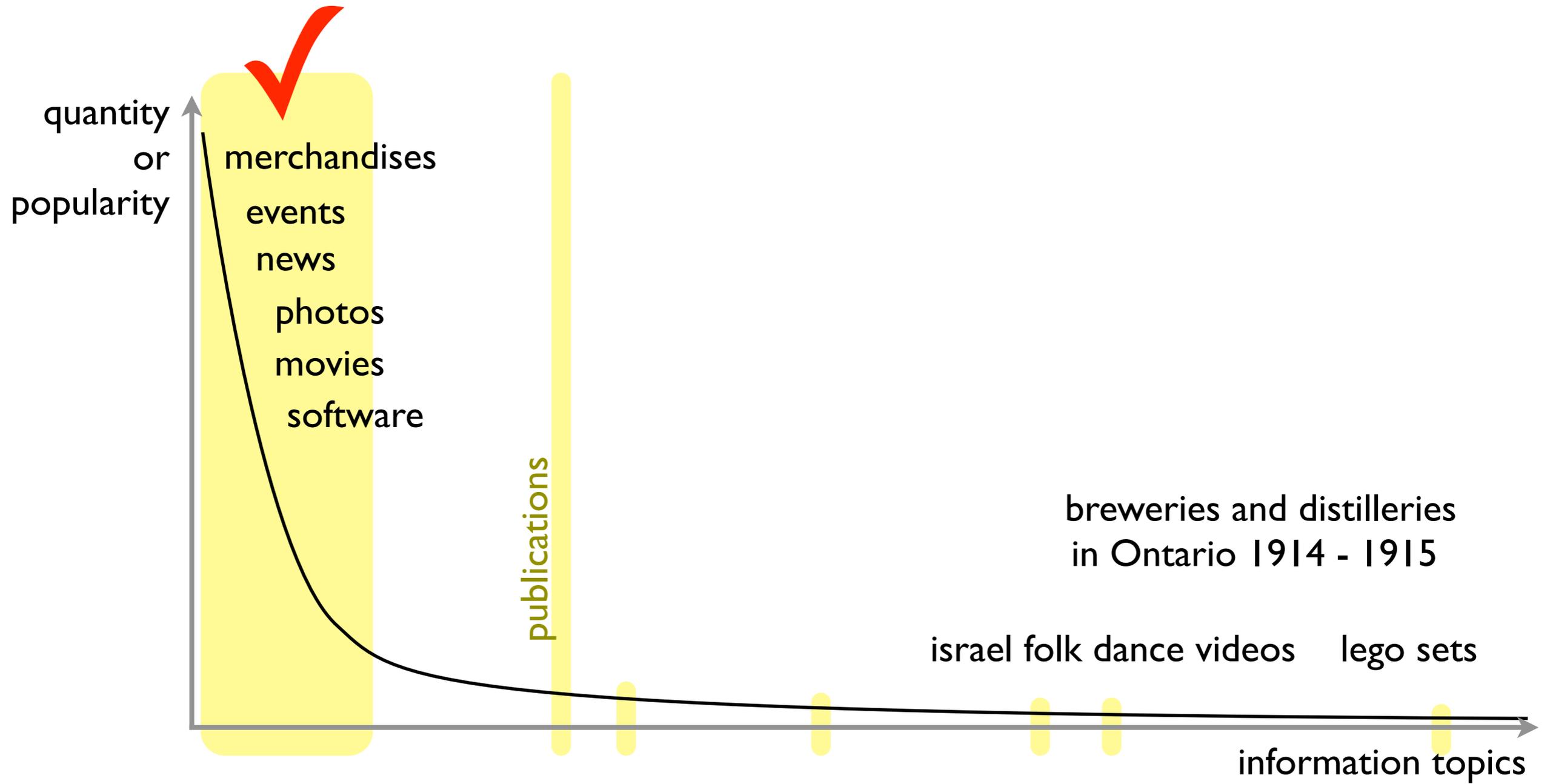
# The Long Tail



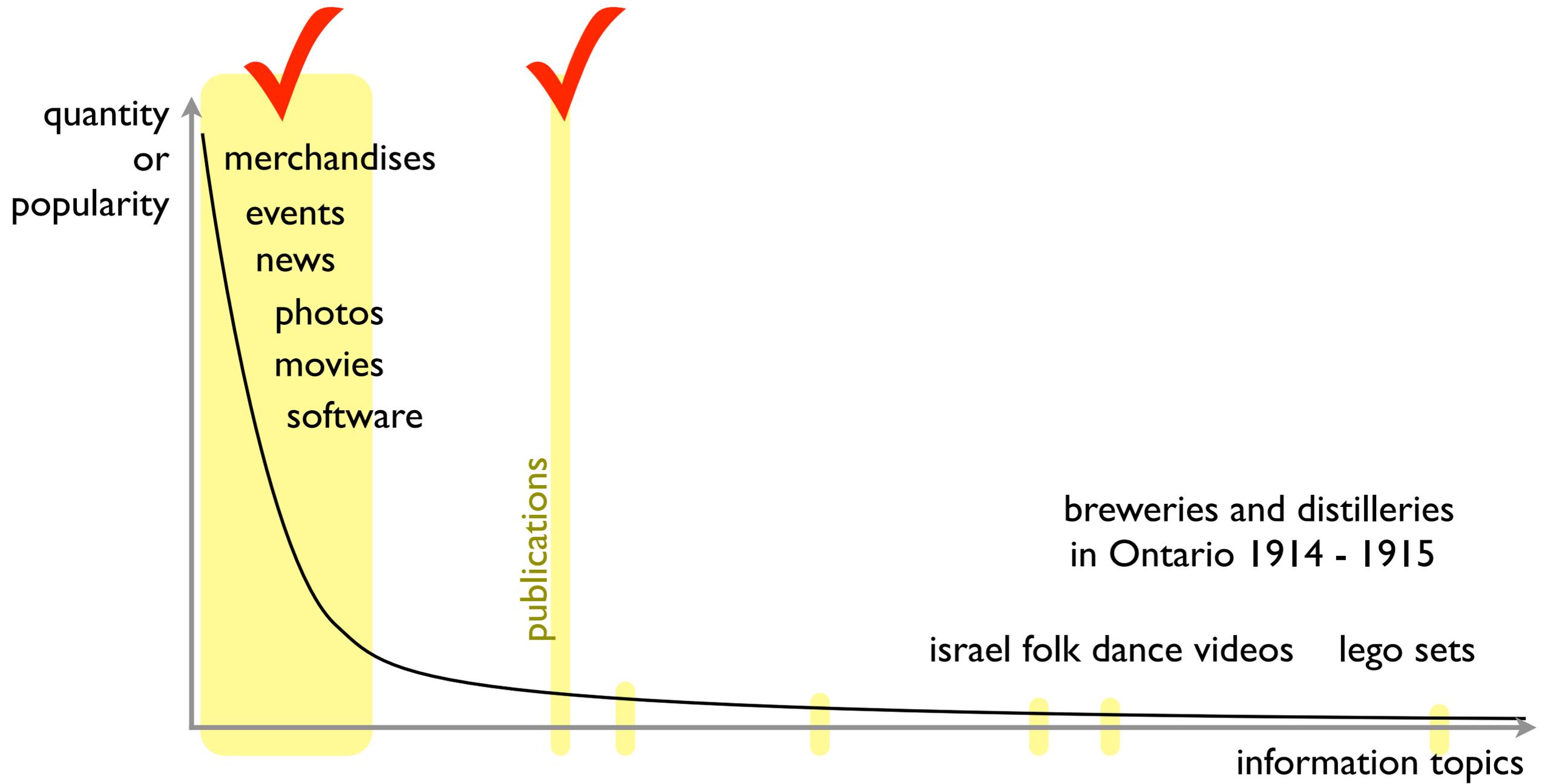
# The Long Tail



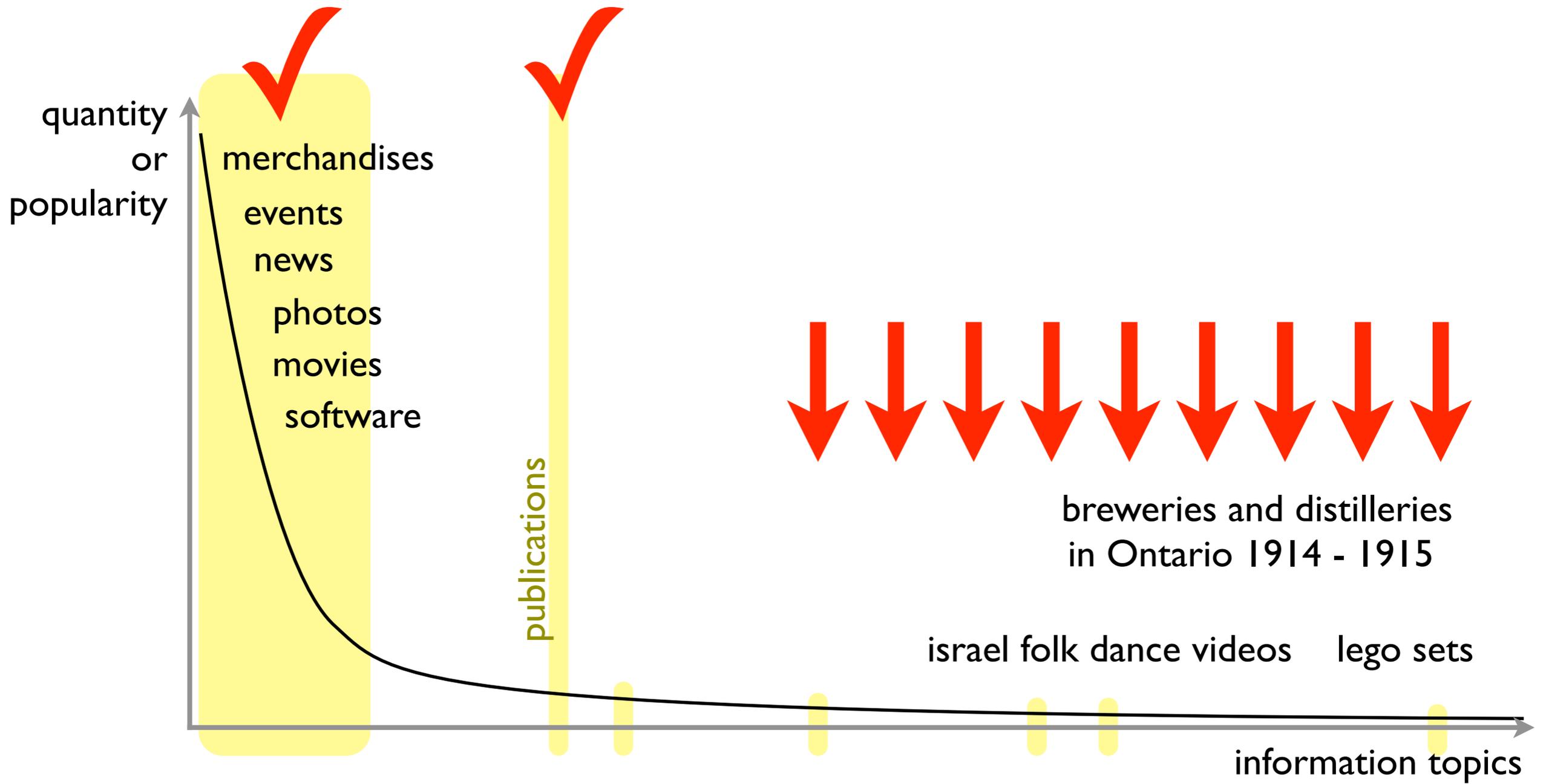
# The Long Tail



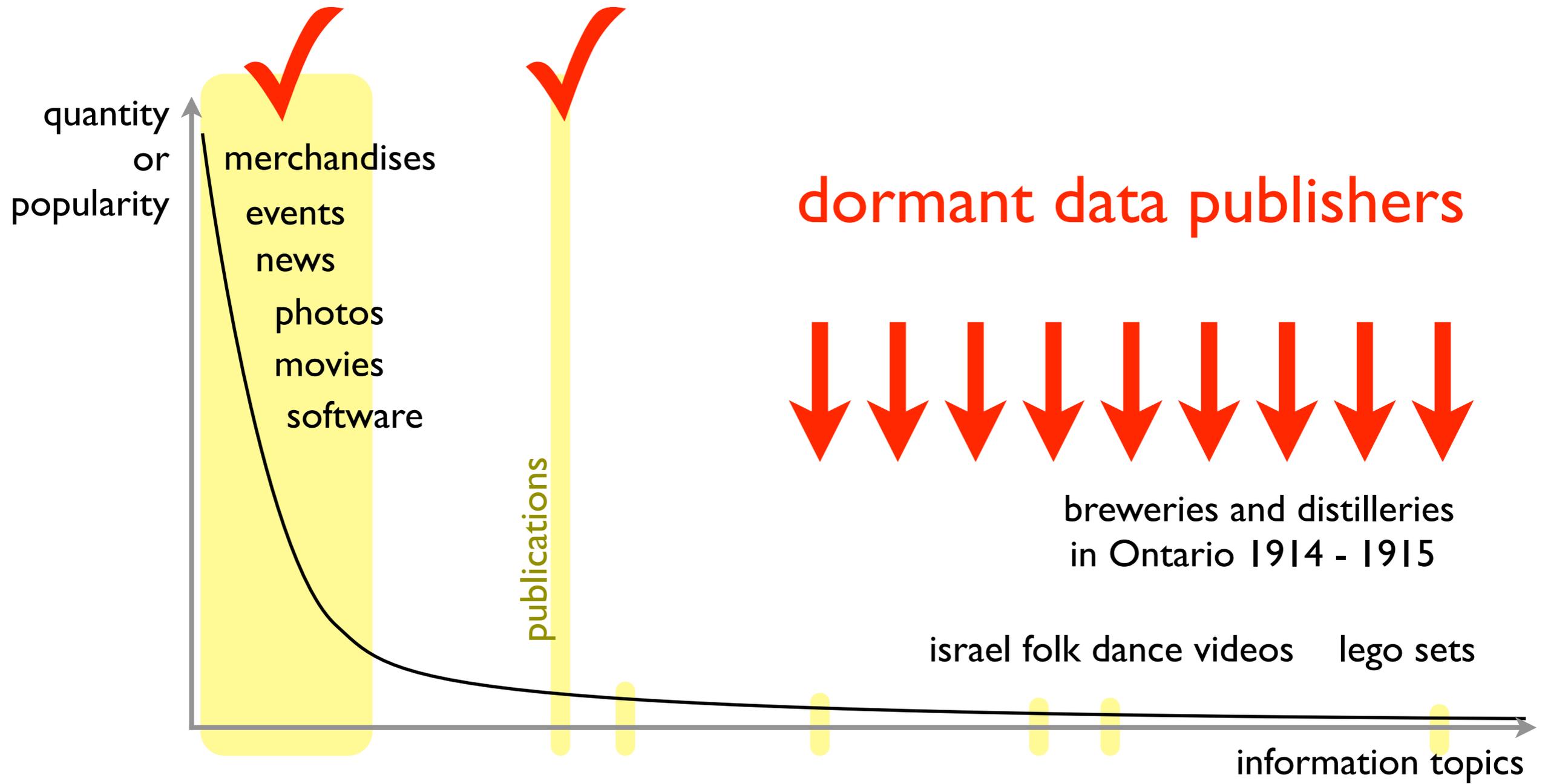
# The Long Tail



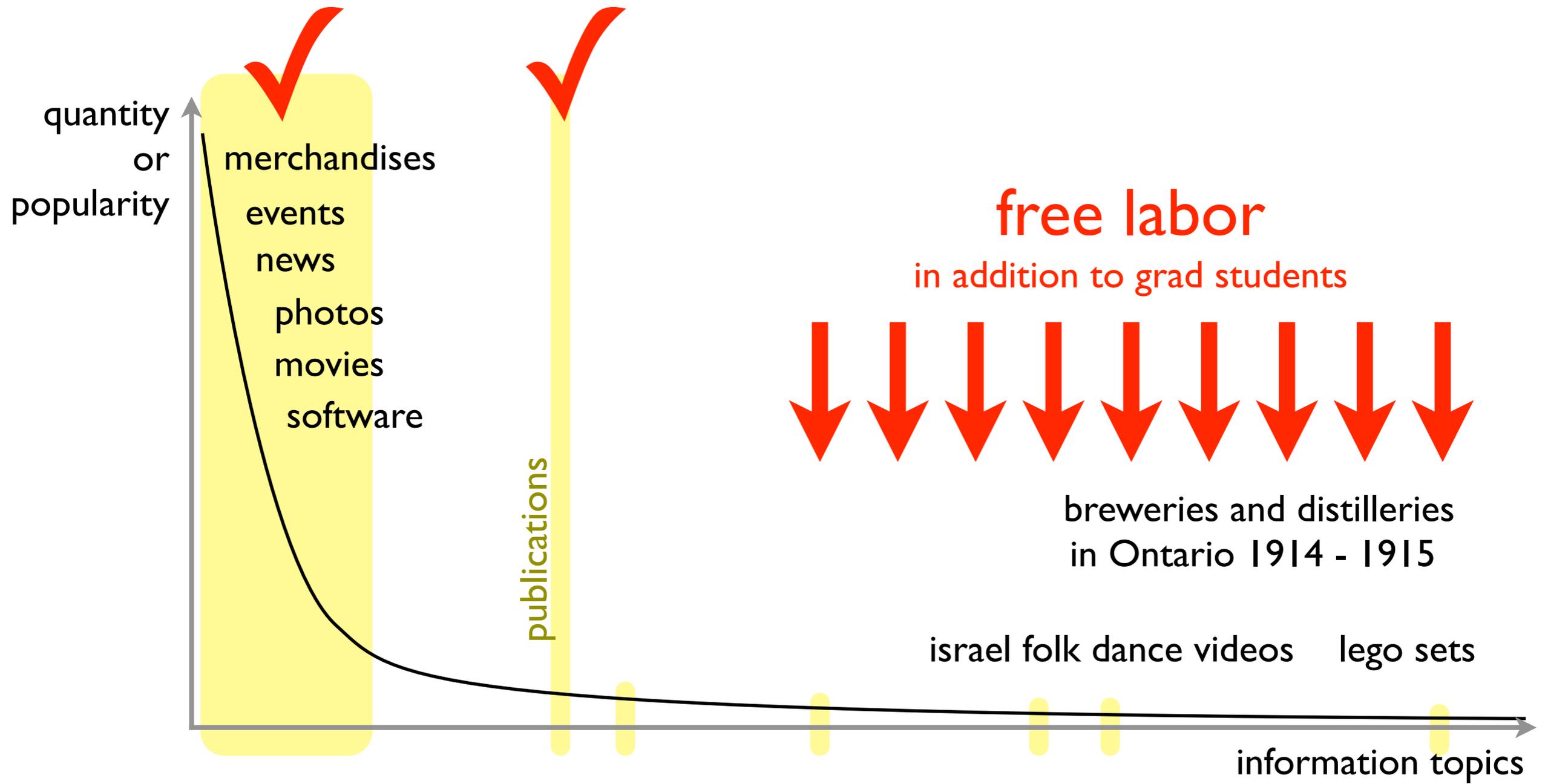
# The Long Tail



# The Long Tail



# The Long Tail



[<<< BACK TO MYPIPELINE](#)



3 Item total

Copy All

sorted by: [Cuisine](#); then by... •  grouped as sorted •  show duplicates



### Smoked Haddock flan

- 200g Smoked Haddock filets
- 2 potatoes
- 600ml milk
- 2 eggs
- pie base

Put the haddock in a saucepan with milk, pepper and thyme. Poach for 10 minutes and leave to cool. Beat the eggs and the fresh cream. Add cooking milk of the cooled haddock. Remove the skin and the stop the haddock. Cut the potatoes into fine rondelles. Place the rondelles of potatoes onto the pie bottom, then add the haddock flakes. Whip the eggs with a touch of milk, then pour the egg on the fish and potatoes. Cook at 180deg C for 40 minutes in the oven.



### Sweet Sausage and Cabbage Fettucine

- Marks & Spencer Apple and Pork sausages (4)
- Half an onion
- Half a Savoy cabbage
- 200ml pouring cream
- fettucine (250g)

First julienne your vegetables and cut your sausages into small (half-inch) chunks. Boil some water for the fettucine, and depending on whether you have fresh fettucine or not, start to boil the pasta. Then heat up a pan until hot and add the sausages. Cook with the onions until both are crispy and golden. Add the cabbage when the onions and sausage have been cooking about 7 minutes. Finally add the cream when the cabbage begins to soften. Stir in the mixture into the boiled fettucine and serve with a baguette.

#### Cuisine

- 1 ✓ French
- 1 ✓ Italian
- 1 ✓ Swedish

#### Easiness

- 1 ✓ moderate
- 2 ✓ very easy

#### Time

- 1 ✓ 1 hour
- 1 ✓ 20min
- 1 ✓ 30min

Done



<<< BACK TO MYPIPELINE



3 Item total

Copy All

Cuisine

- 1 ✓ French
- 1 ✓ Italian
- 1 ✓ Swedish

Easiness

- 1 ✓ moderate
- 2 ✓ very easy

Time

- 1 ✓ 1 hour
- 1 ✓ 20min
- 1 ✓ 30min



3 Item total

**Haddock flan**  
*Baked Haddock filets*

... a saucepan with milk, pepper and ... 0 minutes and leave to cool. Beat the cream. Add cooking milk of the cooled the skin and the stop the haddock. Cut fine rondelles. Place the rondelles of pie bottom, then add the haddock flakes. ... with a touch of milk, then pour the egg on ...atoes. Cook at 180deg C for 40 minutes in



**Veget Sausage and Cabbage Fettucine**

- Marks & Spencer Apple and Pork sausages (4)
- Half an onion
- Half a Savoy cabbage
- 200ml pouring cream
- fettucine (250g)

First julienne your vegetables and cut your sausages into small (half-inch) chunks. Boil some water for the fettucine, and depending on whether you have fresh fettucine or not, start to boil the pasta. Then heat up a pan until hot and add the sausages. Cook with the onions until both are crispy and golden. Add the cabbage when the onions and sausage have been cooking about 7 minutes. Finally add the cream when the cabbage begins to soften. Stir in the mixture into the boiled fettucine and serve with a baguette.



<<< BACK TO MYPIPELINE



3 Item total

Copy All

Cuisine

- 1 ✓ French
- 1 ✓ Italian
- 1 ✓ Swedish

Easiness

- 1 ✓ moderate
- 2 ✓ very easy

Time

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- 1 ✓ 20min
- 1 ✓ 30min



3 Item total

**Haddock flan**  
*Baked Haddock filets*

... a saucepan with milk, pepper and ... 0 minutes and leave to cool. Beat the cream. Add cooking milk of the cooled the skin and the stop the haddock. Cut fine rondelles. Place the rondelles of pie bottom, then add the haddock flakes. ... with a touch of milk, then pour the egg on ...atoes. Cook at 180deg C for 40 minutes in



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have fun!

MyPipeline ::: One-Pot Wonders

Back Forward Reload Stop Home <http://www.mypipeline.co.uk/projects> Search Bookmarks

<<< BACK TO MYPIPELINE

# RECIPE FINDER

3 Item total

Copy All

Cuisine

- 1 ✓ French
- 1 ✓ Italian
- 1 ✓ Swedish

3 Item total

re-use without scraping

Sweet Sausage and Cabbage Fettuccine

- Marks & Spencer Apple and Pork sausages (4)
- Half an onion
- Half a Savoy cabbage
- 200ml pouring cream
- fettuccine (250g)

Time

- 1 ✓ 1 hour
- 1 ✓ 20min
- 1 ✓ 30min

have fun!

Done

# outline

- ✓ problem: publishing data is too hard
- ✓ demo: using Exhibit to publish data in 10 min
- ✓ implementation: how Exhibit works
- ✓ real world uses + discussion
- related work
- future work
- conclusion

# Related Work

# Related Work



# Related Work



# Related Work



# Related Work



circle size = amount of effort

# Related Work



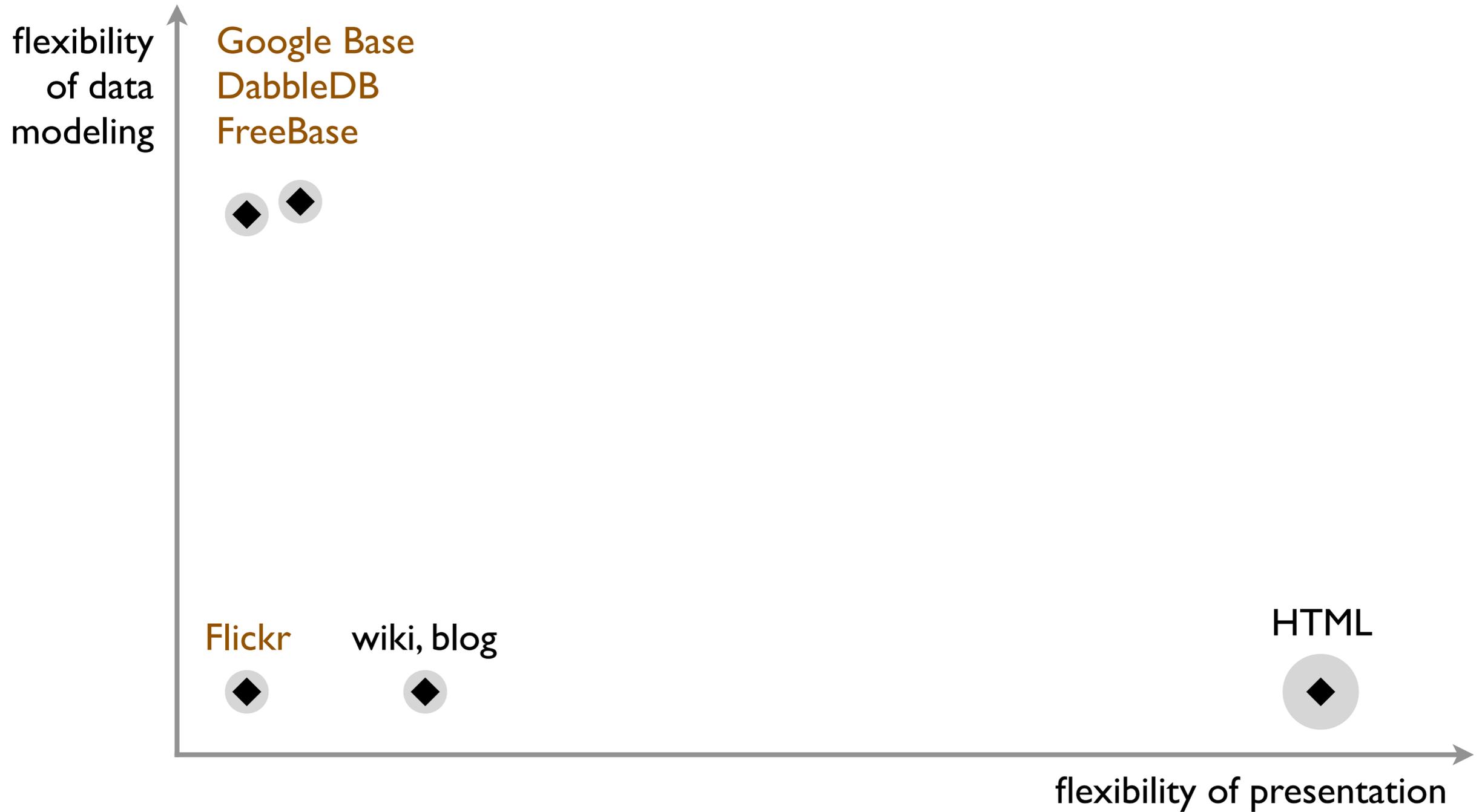
circle size = amount of effort

# Related Work



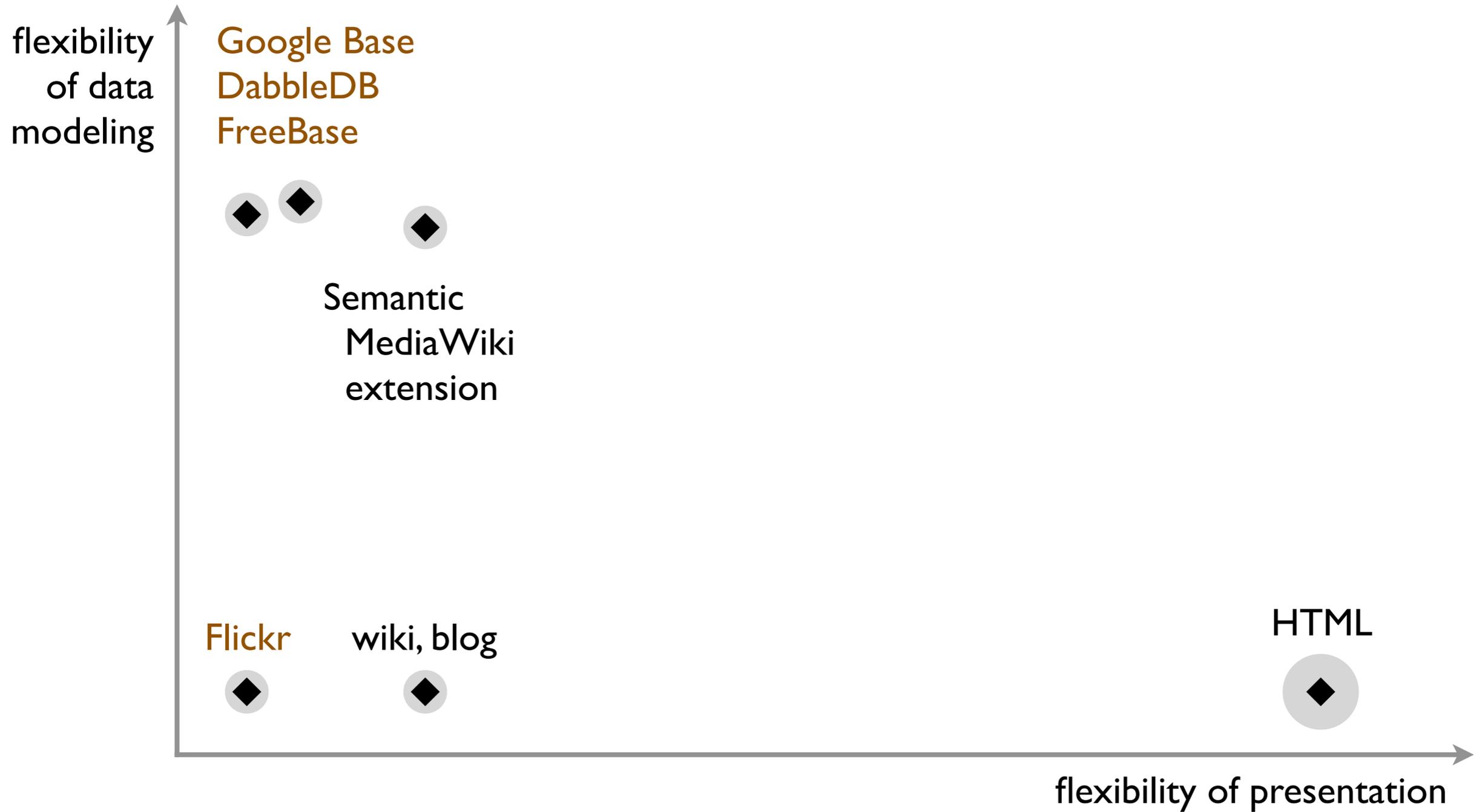
circle size = amount of effort

# Related Work



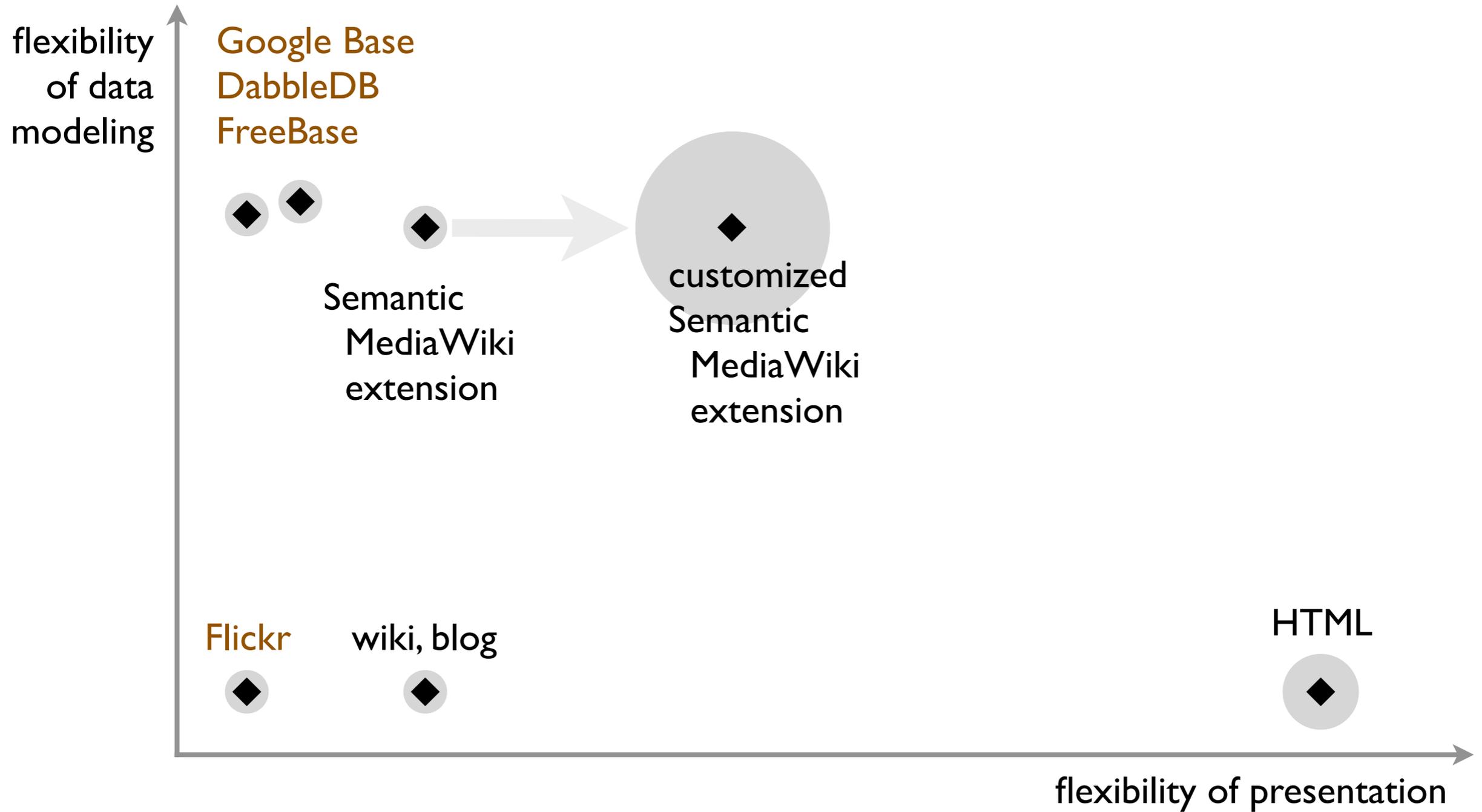
circle size = amount of effort

# Related Work



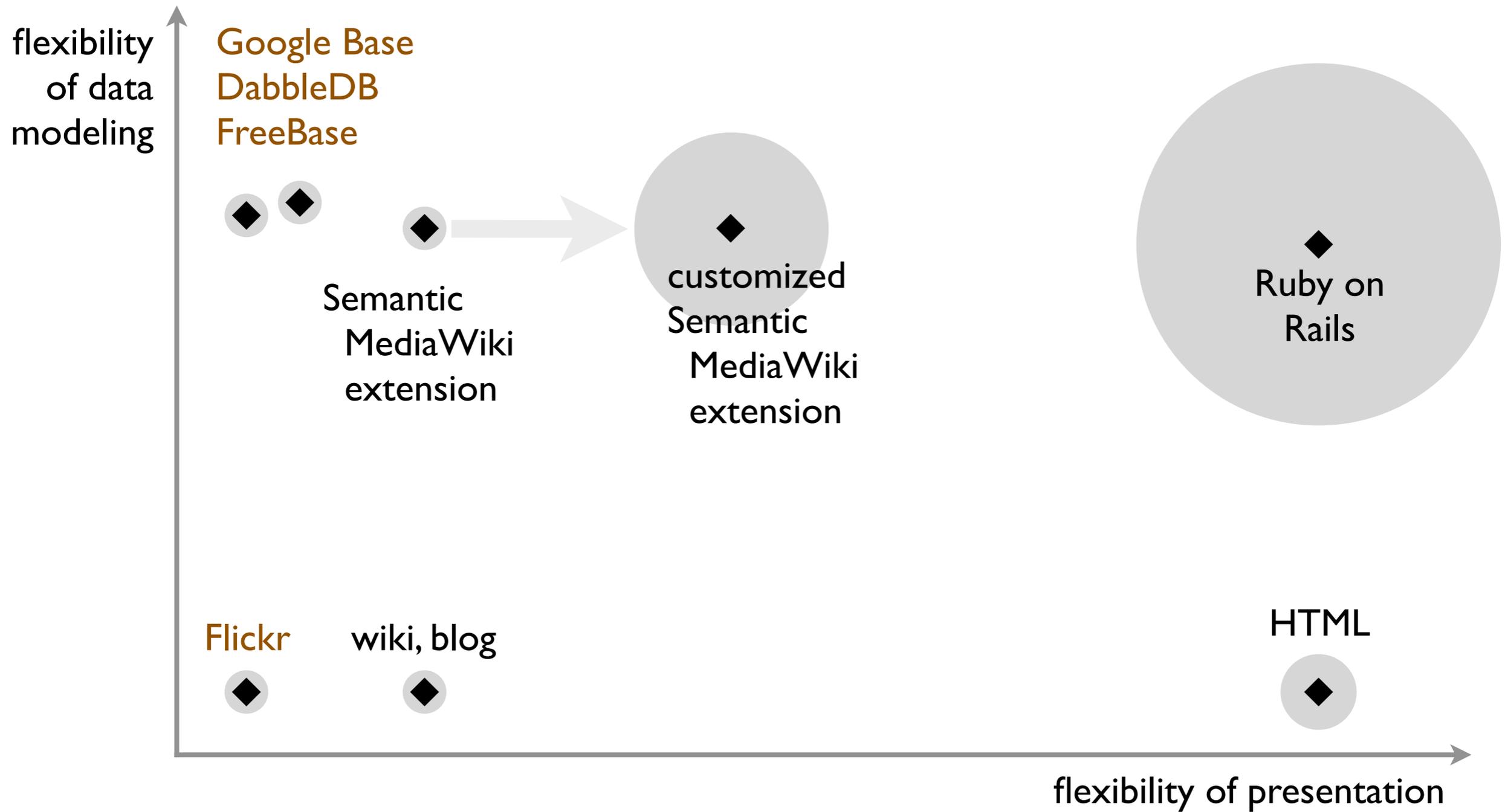
circle size = amount of effort

# Related Work



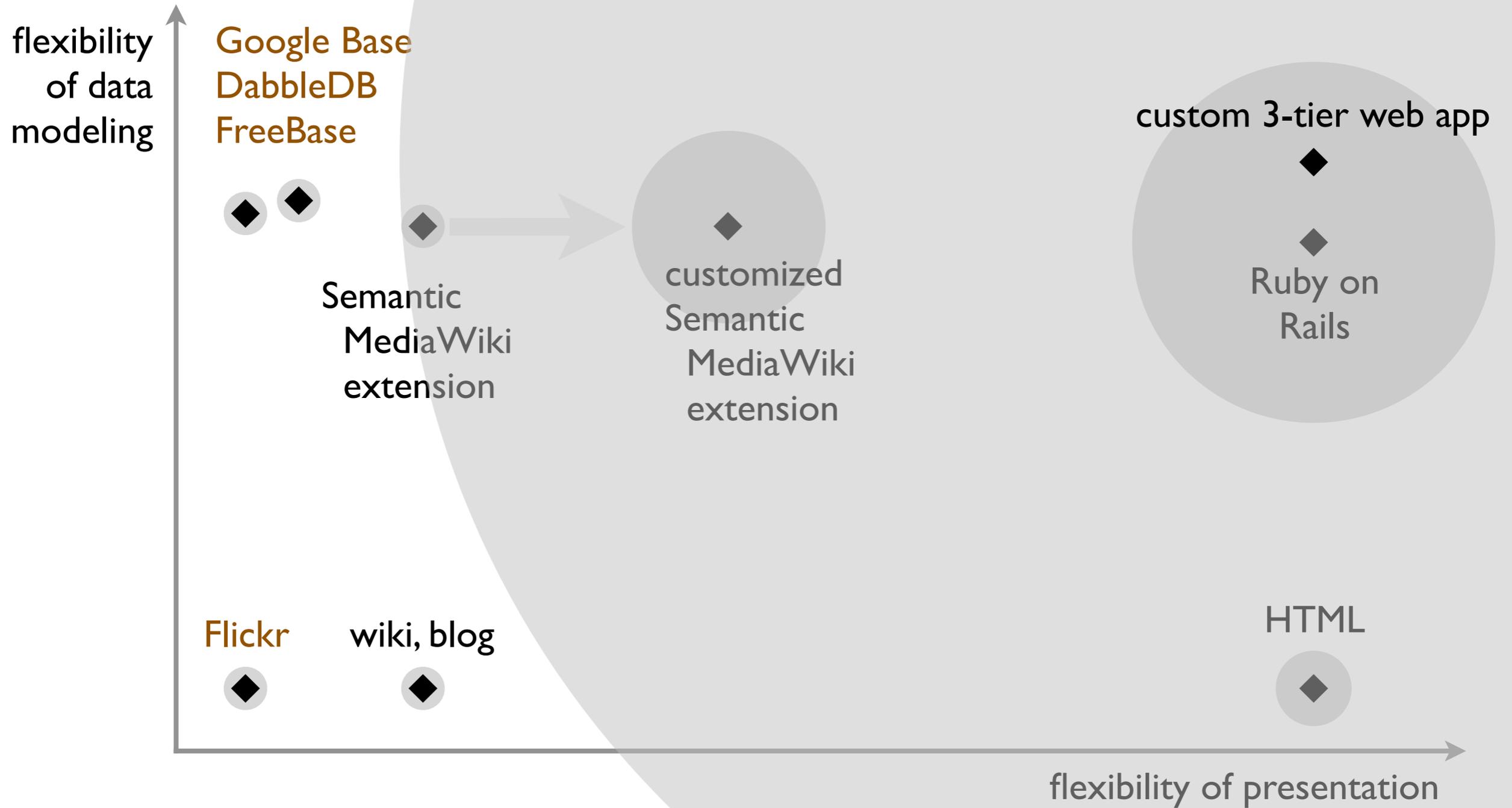
circle size = amount of effort

# Related Work

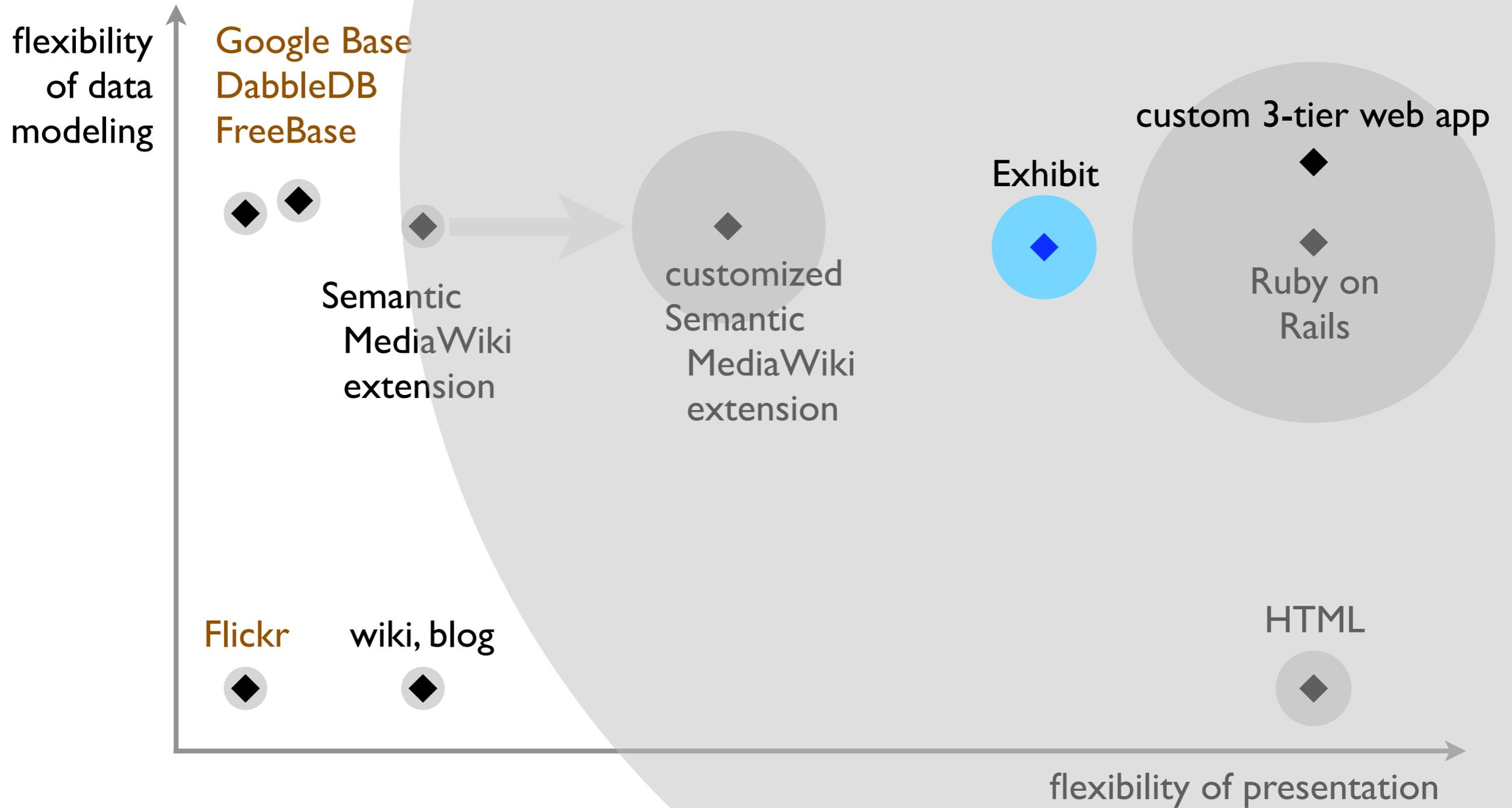


circle size = amount of effort

# Related Work



# Related Work



circle size = amount of effort

# Related Work

## data ownership

unstructured

personal blog  
personal web space

wiki

Wikipedia

personal

group

world

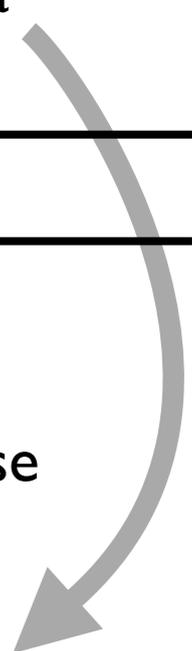
Exhibit  
DabbleDB

Semantic MediaWiki extension

Freebase  
Google Base

structured

DBPedia  
YAGO



# related work

- database in Javascript
  - TimBL's Tabulator
    - generic browsing interface
    - for data consumers to do mash-up
  - Exhibit
    - customizable publishing framework
    - for data publishers

# future work

- feature requests
  - more views: calendar, histogram, ...
  - more flexible layouts
  - visual synchronization, e.g., color coding
  - value formats, e.g., **\$(6,000)**
  - localization
- if there will be a lot of exhibits, let people...
  - search over them
  - merge them together

# future work

- authoring interface
  - HTML got us so far...
  - WYSIWYG editors got us further
  
- Exhibit will get us so far...
- A front-end to Exhibit will get us further

# conclusion

- many dormant data publishers in the long tail
  - ... with few resources to publish data
- Exhibit
  - answer real world needs of publishing data
    - as easy and expressive as HTML
  - tap the free labor in the long tail
    - produce data that doesn't have to be scraped
    - build a Data Web representative of the Web



# AI<sup>3</sup>

## Adaptive Information Adaptive Innovation

adap-tive adj. Showing or having a capacity to make fit for new or special situations; flexible; a successful adjustment.

### Sweet Tools (Sem Web)

AI3's Comprehensive Listing of Semantic Web...  
NOTE: This posting of Sweet Tools — semantic Web 80 newly listed tools since the previous version. It design (see explanation here). New tools or updates...

- 500 items total
- sorted by: labels and Category; then by... grouped as sorted
- 3store**  
A core C library that uses MySQL to store its raw RDF data and caches, forming an important part of the infrastructure required to support a range of knowledgeable services.  
Category: Database/Datastore Primary Language: C / C++  
FOSS?: Yes Listed: 8/12/2006 Updated: 3/12/2007  
URL: <http://www.aktors.org/technologies/3store/>
  - 4Suite 4RDF**  
The 4Suite 4RDF an open-source platform for XML and RDF processing implemented in Python with C extensions.  
Category: Programming Environment Primary Language: Python  
FOSS?: Yes Listed: 8/12/2006 Updated: 3/12/2007  
URL: <http://4suite.org/>



3 item total

sorted by: Cuisine; then by... grouped as sorted

**Smoked Haddock fln**

- 200g Smoked Haddock filets
- 2 potatoes
- 600ml milk
- 2 eggs
- pie base

Put the haddock in a saucepan with milk, pepper and thyme. Poach for 10 minutes and leave to cool. Beat the eggs and the fresh cream. Add the potatoes into fine rondelle potatoes onto the pie bottom. Whip the eggs with a touch of the fish and potatoes. Cook at the oven.

**Sweet Sausage and Cabbage**

- Marks & Spencer Apple
- Half an onion
- Half a Savoy cabbage
- 200ml pouring cream
- Fettuccine (250g)

First julienne your vegetables small (half-inch) chunks. Boil and depending on whether you want to eat the pasta. Then add the sausages. Cook until the sausages are cooked and the cream when the cabbage mixture into the boiled fettuccine.

### Next Generation Personalization

#### Albums

THUMBNAILS • LIST • RELEASE

Artist: 18 ✓ Led Zeppelin, 21 ✓ Pink Floyd, 51 ✓ Rolling Stones

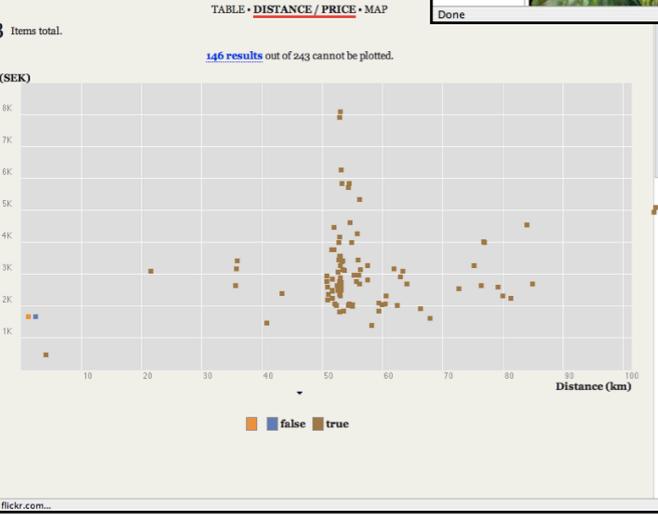
Year: 2 ✓ 1964, 4 ✓ 1965, 4 ✓ 1966, 4 ✓ 1967, 2 ✓ 1968, 5 ✓ 1969, 3 ✓ 1970, 7 ✓ 1971

Albums: Early Days: The Best of Led, Latter Days: The Best of Led, Echoes: The Best of Pink Floyd, Is There Anybody Out There?

sorted by: year and cat; then by... grouped as sorted show duplicates

- Outrigger Construction Crane**  
4 Juniors, 2004, 4668
- Harry Hardtack and Monkey**  
4 Juniors, 2004, 7081
- Pirate Dock**  
4 Juniors, 2004, 7073

Double/twin rooms near Boogie-Bären, Landsberg am Lech, Germany, May 25-28 2007



### Breweries and Distilleries in Ontario 1914-15

55 Brewery and Distillery total

Location:

- 1 ✓ Barrie
- 2 ✓ Belleville
- 1 ✓ Berlin
- 1 ✓ Brantford
- 1 ✓ Brockville
- 1 ✓ Carlsruhe
- 1 ✓ Cornwall
- 1 ✓ Formosa

type:

- 46 ✓ Brewery
- 9 ✓ Distillery

### Primitivism: Rites of Spring

The information within this page has been retrieved from our. Here is the [Exhibit JSON data file](#).

performance	company	date	artist	type
1 ✓ Kirov reconstruction	1 ✓ Ballet Russes	17, 1913	11 ✓ Millicent Hodson	1 ✓ audio
2 ✓ Masine	2 ✓ Masine	3, 1944	9 ✓ Nicholas Roerich	5 ✓ company
3 ✓ World Premier	3 ✓ The Kirov Ballet	31, 1996	3 ✓ Sketch by Millicent Hodson & copy;	71 ✓ costume
			1 ✓ Unattributed	11 ✓ performance
				4 ✓ photo
				5 ✓ production
				1 ✓ set

71 costume filtered from 112 originally (reset)

sorted by: performance; then by... grouped as sorted show duplicates

#### World Premier (7)

Women's Costume for the first

Maidens and Elder Costumes World Premier, Ballet Russes 1913

Sketch: a girl World Premier, Ballet Russes 1913

### MIT Nobel Prize Winners

234 Dog total

name	ragom ID	photo	form	yes	no	date	no
Zoey	07-078		circle	yes	no	2002-02-21	no
Zeta	07-077		circle	yes	no	2005-09-14	no
Xena	07-098		circle	no	no	2000-03-09	no

# google for "exhibit"

### Installed Fonts

This page is another visualization of Lalit Patel's CSS/javascript font detector. It tests the `monospace` at 24px, and measures the width and height of the rendered version of the default font. Go ahead and probe for other fonts, and play around with the filter fac

Font name:

48 Fonts total.

alias (6)

sorted by: kind and labels; then by... grouped as sorted

named (42)

Apple Chancery, Arial, Arial Black

### Affordable Sports (38)

CATEGORY	MANUFACTURER	RATING	PRICEBAND
Affordable Sports	Alfa Romeo	1 1	16 100,000-150,000
Exotic Sports	Agel	1 1.5	21 15,000-30,000
	Asolo Martin	4 2	33 30,000-70,000
	Audi	11 2.5	17 70,000-100,000
	Bentley Motors	16 3	
	BMW	12 3.5	
	Bristol	29 4	

THUMBNAILS • TIMELINE

sorted by: CATEGORY; then by... grouped as sorted show duplicates

BMW 3 Series Coupe Model Year: 1999-2001 4Car Rating: 3.5 Price Band: 15,000-30,000 View Road Test

Honda Civic Coupe Model Year: 1996-2001 4Car Rating: 2 Price Band: 15,000-30,000 View Road Test

BMW 3-Series Coupe Model Year: 2006-4Car Rating: 4.5 Price Band: 30,000-70,000 View Road Test

Mitsubishi Lancer Evo IX Model Year: 2005-4Car Rating: 4 Price Band: 30,000-70,000 View Road Test