

Engaging the Public to Increase Accessibility to Media Collections

Utilizing folksonomies

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Outline

- **Digital image collections**
 - Image annotations
 - Text based image retrieval – TBIR
 - The language-gap problem
- **Folksomnies**
 - Definition & Content
 - Capture & maintenance
 - Comparison to library metadata
- **Is this useful?**

examples

[Library of Congress](#)

[Steve.museum](#)

[The commons on Flickr](#)

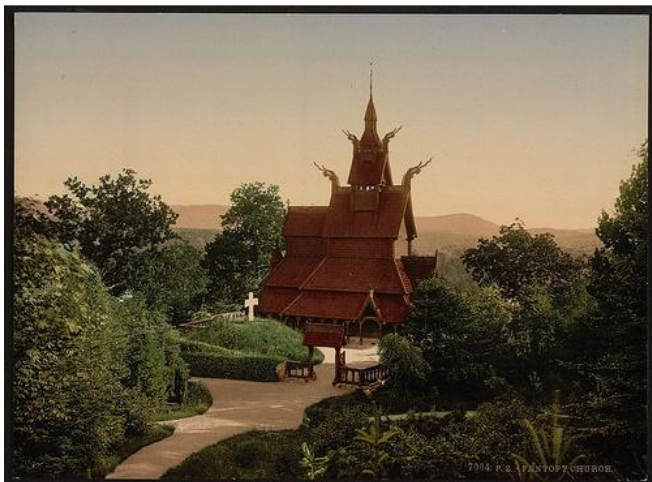
Digital Image collections

examples

<i>Source</i>	<i>Owner</i>	<i>Approximate Size ('09)</i>
Library	<u>Library of Congress</u>	1 000 000
	<u>NY Public Library</u>	700 000
	<u>UB.UiB</u>	20 000
Museum	<u>Smithsonian Inst</u>	246 000
	<u>MMAOA, NYC</u>	140 000
	<u>Powerhouse Museum</u>	74 000
Archive	<u>Swedish National Heritage</u>	<u>70 000</u>
		2 250 000 *

** All manually annotated !*

Image annotation



Title: Fantoft Church, Bergen, Norway
ca. 1890 and ca. 1900.

Subjects: Norway--Bergen.

Format: Photochrom prints--Color--1890-1900.

Rights: No known restrictions on publication.

Repository: Library of Congress,
...hdl.loc.gov/loc.pnp/pp.print

Part Of: Landscape and marine views of
Norway (DLC)

URL: hdl.loc.gov/loc.pnp/ppmsc.06109

Call #: LOT 13432, no. 007 [item] ...

Notes: Title from the Detroit Publishing Co.,
..., 1905.

[Library of Congress](https://www.loc.gov/)

Text based *image* retrieval – TBIR \approx Google search

Requires 'match' between query and annotation terms.

Ex-1: LOC search for “*Norwegian stave church*”

=> No images were found for the search. (Jan.2010) ☹

**\Rightarrow *Language gap* between user query terms
and library annotation**

Access with folksomony

Ex-2: [Flickr.commons](#) search for

”Norwegian stave church”

=> 1-3 of 475 (Sept. '09)



From Papafrezzo



From The Library...



From The Library...

=> *No language gap* 😊

Folksonomy

a combination of folk and taxonomy

for a set of publically specified tags

Coined 2004 (Thomas Vander Wal)



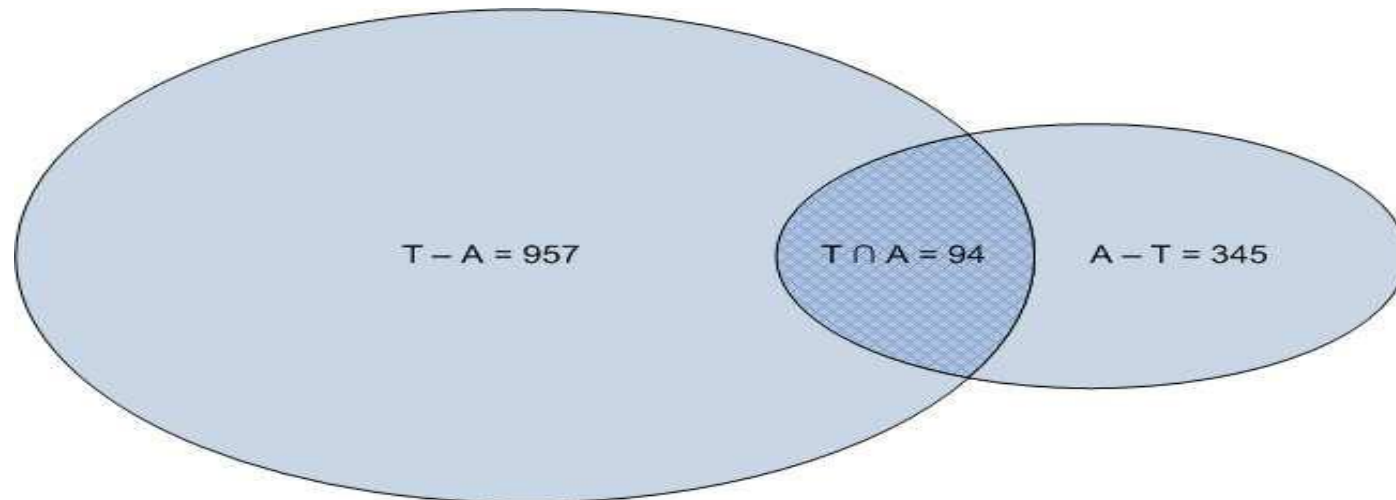
Ex. Tags from
[Flickr.commons](#)

Tags

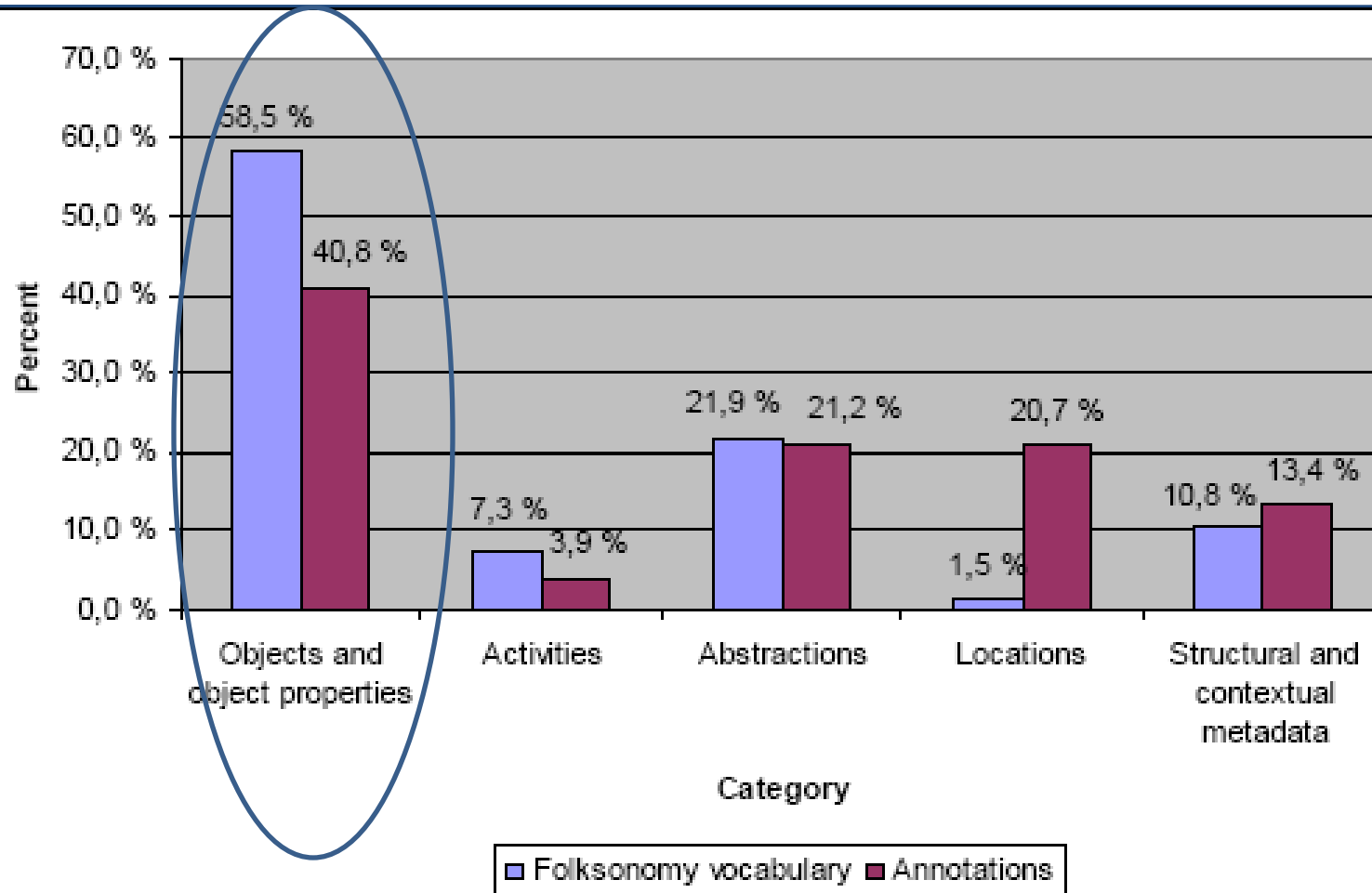
- Library of Congress
- Bergen
- Norway
- church
- Fantoft
- stavkirke
- stave church
- photochrom
- color
- colorized
- Hordaland
- Fantoft stavkirke
- Scandinavia
- scenic
- Norwegian architecture
- haze
- hazy
- sky

Annotation vs folksonomy study

<i>Experiment size</i>	<i># terms (tags)</i>	<i>comment</i>
20 images	439	UB annotations
20 UiB students	1 051	UiB taggers
Descriptor overlap	94	91% new terms
Total search terms	1 396	68% new terms



Jan-Erik Bråthen, master's thesis project. IFIM,UiB



Jan-Erik Bråthen, 2009

Tag collection

example

Steve museum tagger

<http://tagger.steve.museum>

LOG OFF

THE ART MUSEUM SOCIAL TAGGING PROJECT


SET 2 213 REMAINING

Start Here

ADD ↓

bird by shore
Islamic art
bird

NEXT →



Painter: Abu'l Hasan; Calligrapher: Mir 'Ali
55.121.10.15 recto: Spotted Forktail: Album Leaf, 55.121.10.15 recto: ca. 1610-15
Ink, colors, and gold on paper; H: 15 3/16 in. (38.6 cm) W: 10 3/8 in. (26.3 cm)
Purchase, Rogers Fund and The Kevorkian Foundation Gift, 1955, 55.121.10.15
The Metropolitan Museum of Art

Tags for this work:
Abu'l Hasan, Persian miniature, bird, bird by shore, border, feathers, floral,
flowers, frame, gilt, illustrations, Islamic art, long tail, miniature, ornate
border, rock, yellow

Tag collection alternatives

Alternative interfaces:

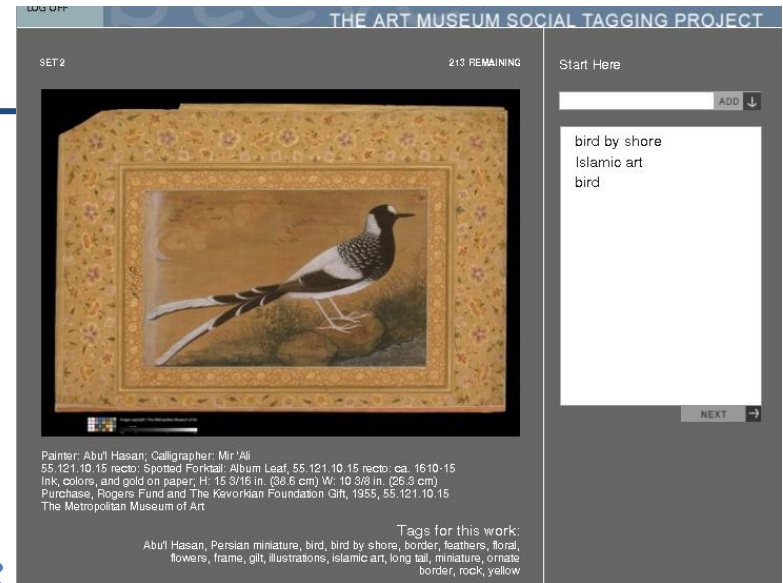
1. Image only
2. Image + current tags
3. Image + current tags + annotation

Alternative tag specification – accept:

1. Only single term tags
2. Only 1 version of each tag
3. Multiple term tags

Tag management:

1. Count/weight multiple identical tags
2. Edit terms



Combining annotations and tags – ex.

<i>Term</i>	<i>Def. Frequency</i>		<i>Usage frequency</i>	
	Annotation.	Tag	Sum	
Bergen	2	1	3	400+
Church	1	2	3	100+
Fantoft	1	2	3	90
Norway	3	1	4	150
Norwegian	0	1	1	50
Sky	0	1	1	0
Stave	0	1	1	100+
Stavkirke	0	2	2	50
...				

- 1. Keep singular/plural forms and compound terms**
- 2. Term weight \approx # of replicated definitions and use**
- 3. Filter tag specifications**
- 4. Delete unused and/or unwanted tags**
- 5. Construct a semantic hierarchy**
- 6. ...**

Is this useful?

Can be!

**Tagging is FREE
Done by the public.**

**Indexing + maintenance
can be automated.**

**Increase access AND
Save time and \$ ☺**

1 example: [Flickr.commons](https://www.flickr.com/commons/)



31 participants, Jan.2010

References

Bråthen, J-E. (2009). An Analysis of Image Folksonomy Generation. Masters thesis, University of Bergen.

http://caim.uib.no/publications/jeb_masterThesis.pdf

Trant, J. (2009, last viewed 25.8.09) Tagging, Folksonomy and Art Museums: Early Experiments and Ongoing Research. Journal of Digital Information 10(1), p1-40. Published at

<http://journals.tdl.org/jodi/article/view/270/277>

Any questions?

Thank you for your attention 😊

[National Library NZ on The Commons](#) [Rights Statement](#) ____

[New York Public Library](#) [Rights Statement](#) ____

[National Galleries of Scotland Commons](#) [Rights Statement](#) ____

[State Library of Queensland, Australia](#) [Rights Statement](#) ____

[State Library and Archives of Florida](#) [Rights Statement](#) ____

[Oregon State University Archives](#) [Rights Statement](#) ____

[nha.library](#) [Rights Statement](#) ____

[Swedish National Heritage Board](#) [Rights Statement](#) ____

[DC Public Library Commons](#) [Rights Statement](#) ____

[The Field Museum Library](#) [Rights Statement](#) ____

[LIGC ~ NLW](#) [Rights Statement](#) ____

[Getty Research Institute](#) [Rights Statement](#) ____

[Galt Museum & Archives on The Commons](#) [Rights Statement](#) ____

[JWA Commons](#) [Rights Statement](#) ____

[LSE Library](#) [Rights Statement](#) ____

[Bergen Public Library](#) [Rights Statement](#) ____