

LFE Medieninformatik • Sven Koch  
Diploma Thesis Final Presentation

# User Interfaces for Machine- Generated Ontologies

Supporting Social Browsing and Exploration in Flickr by  
Exploiting Folksonomies

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11.05.2010





## Introduction – This work is about:

- Tagging-systems (Flickr)
- Folksonomies
- Visualization of tagged data
- Social browsing



## Related work – Social Browsing

- (Pre) 2006: Analysis of navigation with tags (clouds & search)

architecture **art** australia **beach** birthday blue bw **california** canada **canon** china  
christmas **city** concert england europe **family** festival flower **flowers** food france  
**friends** fun germany green italy **japan** london music **nature** new newyork  
night **nikon** nyc paris park **party** people portrait red sanfrancisco sky snow  
spain street **summer** sunset taiwan **travel** trip uk usa vacation water  
**wedding** white winter

Quelle: <http://www.flickr.com>

### Popular Tags

design

blog

video

software

tools

Quelle: <http://delicious.com>



## Related work – Social Browsing

- 2006: Social Navigation (Bookmarking-systems)

**kalmi's Bookmarks**  
Bookmarks | Network | Tags | Subscriptions

See more bookmarks in [Popular](#) or [Recent](#).

**kalmi** Type a tag

10 MAY 10 [New Programming Jargon — Global Nerdy](#) SAVE

07 MAY 10 [Awesome Bubble Navigation with jQuery | Codrops](#) SAVE

Quelle: <http://delicious.com>

Fans	16
ActualAI	↑
carolinerocche	
craig_s96	
EhIne	
helency	
jem	
Kris	↑
LSE Careers Service	↑

Quelle: <http://delicious.com>

# Related work – Social Browsing

- 2007: Social Browsing (Flickr)


**Fotostream von Lord V** pro  
[Alben](#) | [Galerien](#) | [Tags](#) | [Personen](#) | [Weltkarte](#) | [Archiv](#) | [Favoriten](#) | [Profil](#)

## Bumble bee rescue ? #2



Noticed this bumble bee down on the ground under my large old apple tree. Did my normal trick of...

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Hochgeladen: 9. Mai 2010

2 Kommentare

Quelle: <http://www.flickr.com>

## Bumble bee rescue ? #1



Noticed this bumble bee down on the ground under my large old apple tree. Did my normal trick of...

© Alle Rechte vorbehalten

Hochgeladen: 9. Mai 2010 | [Weltkarte](#)

1 Kommentar

## Von Ihren Freunden

Sehen Sie Uploads Ihrer Freunde sobald sie in Flickr verfügbar sind. Sie können auch Kommentare schreiben und Notizen hinterlassen!

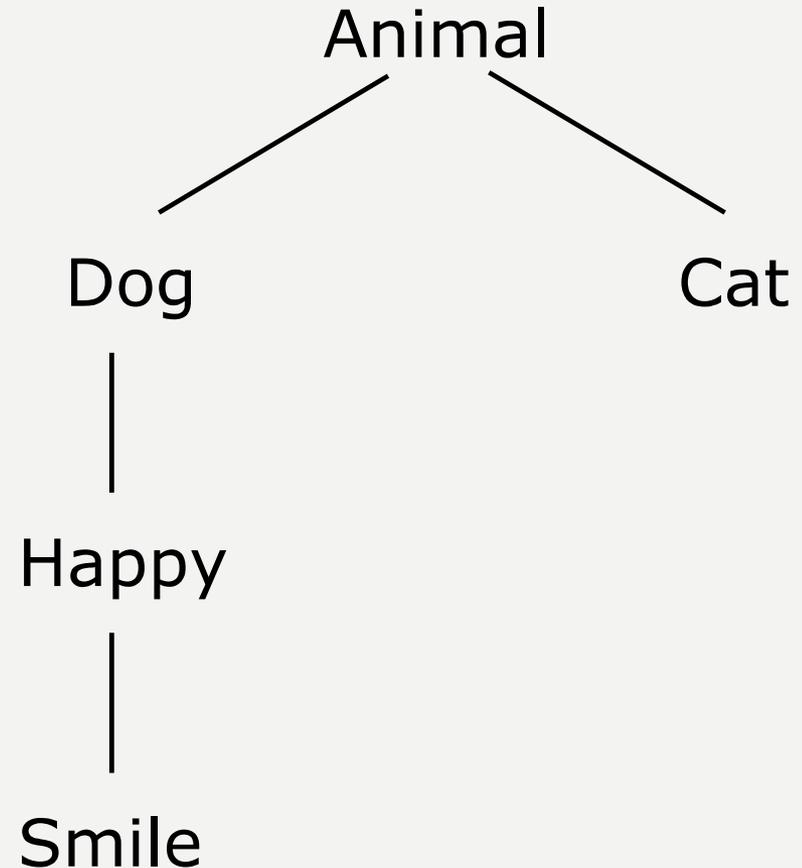


Quelle: <http://www.flickr.com>



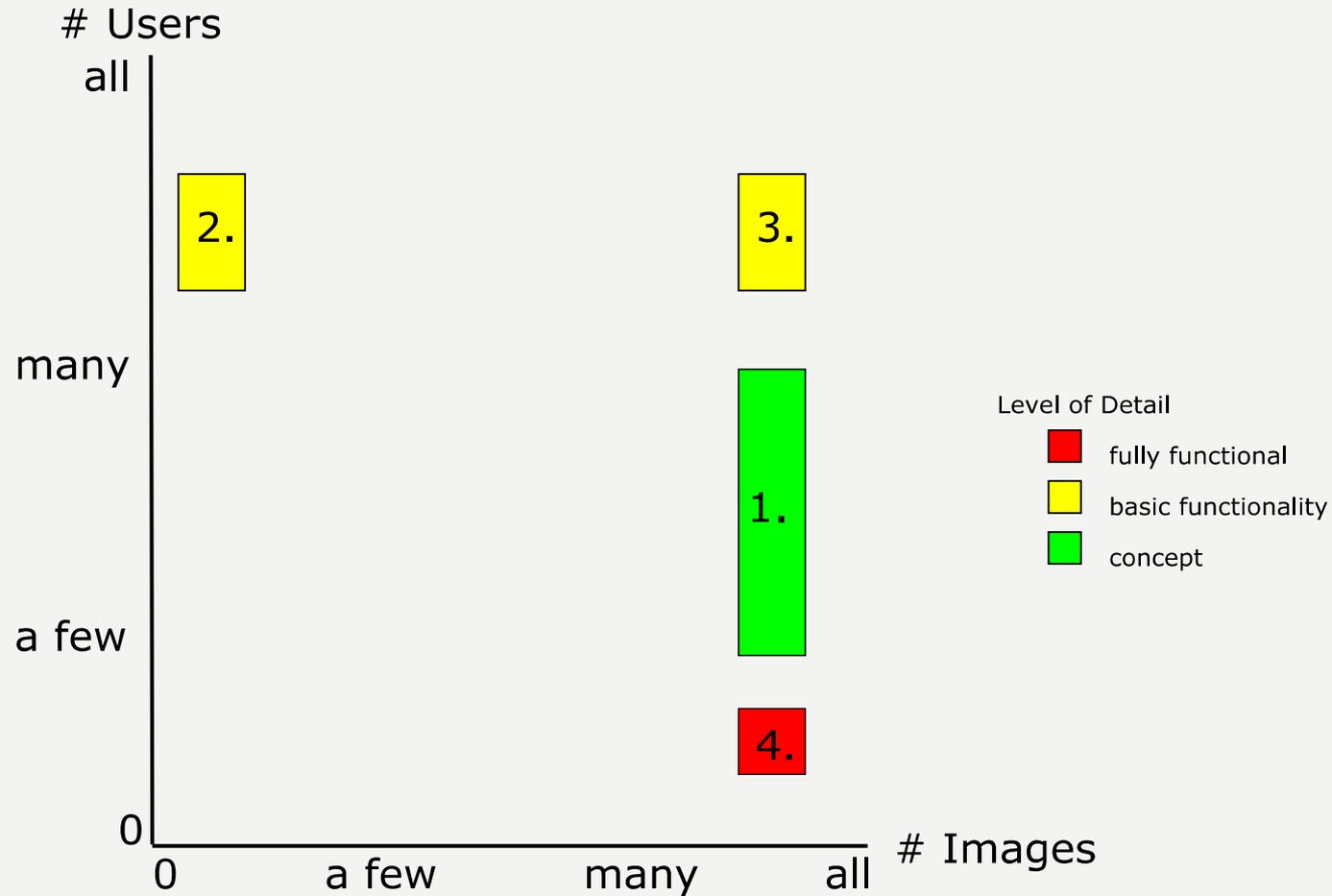
## Contribution

- More visualization, less navigation.
- Individual tags to support individual collections.
- Non-general relations between tags to support orientation.





# Designspace





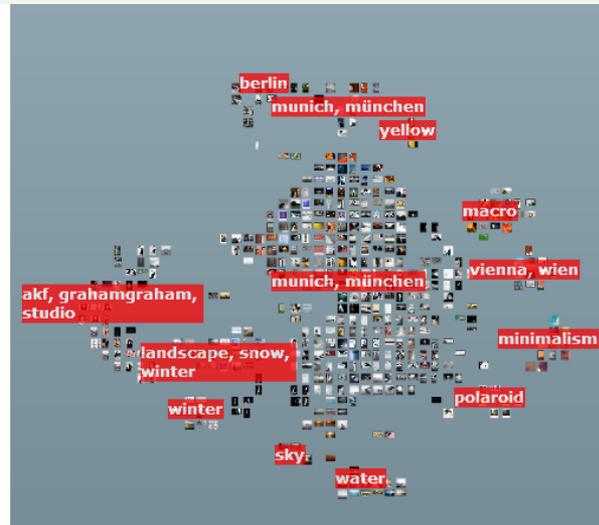
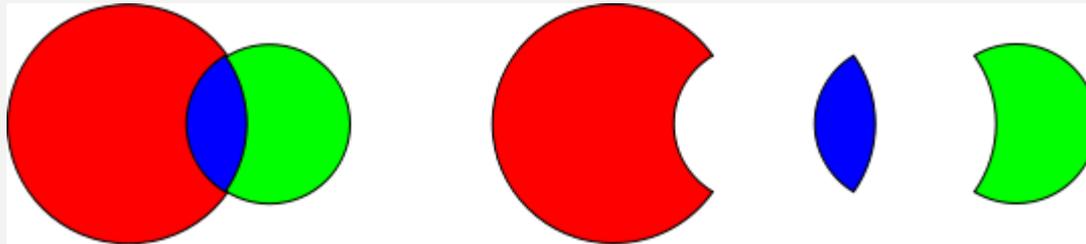
# Presentation

[interactive presentation of the program]



# Some interesting design decisions

Distance and Clusters.





## User Study

- 10 participants
- Usability study
- Experiment to determine how the parameters of design decisions influence the user.





# User Study

- 1) Usability Study
- 2) Usability Questionnaire
  
- 3) Experiment Setup 1 (randomized)
- 4) Experiment Questionnaire 1
  
- ...
- 8) Experiment Questionnaire 3



## User Study – Usability Problems

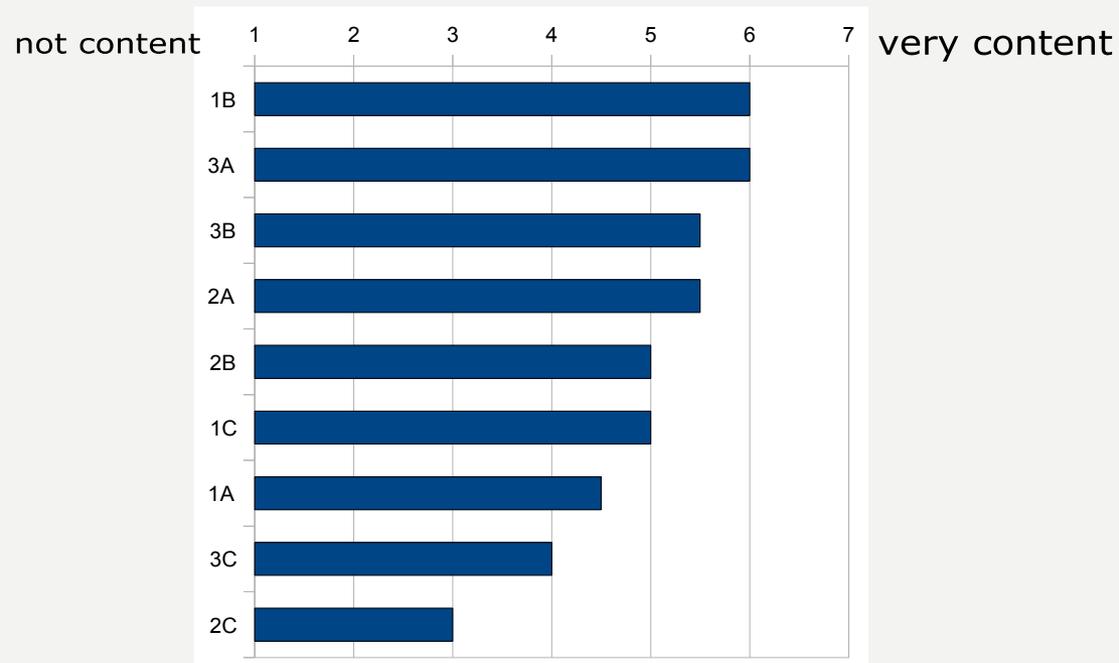
- No preview when zoomed out.
- Tags outside of screen when zoomed in.
- Mouse-Over functionality.

[interactive presentation]



# User Study – Experiment

## User satisfaction





## User Study – Experiment

Influence of photo-collections and type of arrangement (remember: only 10 participants!)

Influence on...	Influenced by...	
	photo collection	type of arrangement
... usefulness of red labels	no	yes
... comprehensibility of red labels	no	no



## User Study – Experiment

Influence of photo-collections and type of arrangement (remember: only 10 participants!)

Influence on...	Influenced by...	
	photo collection	type of arrangement
... user's satisfaction	yes	probably



## Conclusion

- Different arrangements benefit different photo collections.
- There are A LOT of parameters that influence the usefulness of a visualization.
- Future Work: Automatic analysis to determine optimal settings.

