

Improving Tag Space Navigator

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MOTIVATION

proliferation of tagging on websites associated with Web 2.0



LIVEJOURNAL



& many more !

Problem

- organizing tag is difficult
 - difficult to come up with a 'good' tag
 - 75% of tags are used only by one user* ('ToDo-Until-7th-Apr', 'OhILikeThis')
 - tag recommendation system
 - not sufficient, applies only to text-based contents
- browsing tag is tricky
 - no hierarchy among tags
 - Related / Not-Related relationships
 - existing navigation UI considers only the frequency and co-occurrence of tags

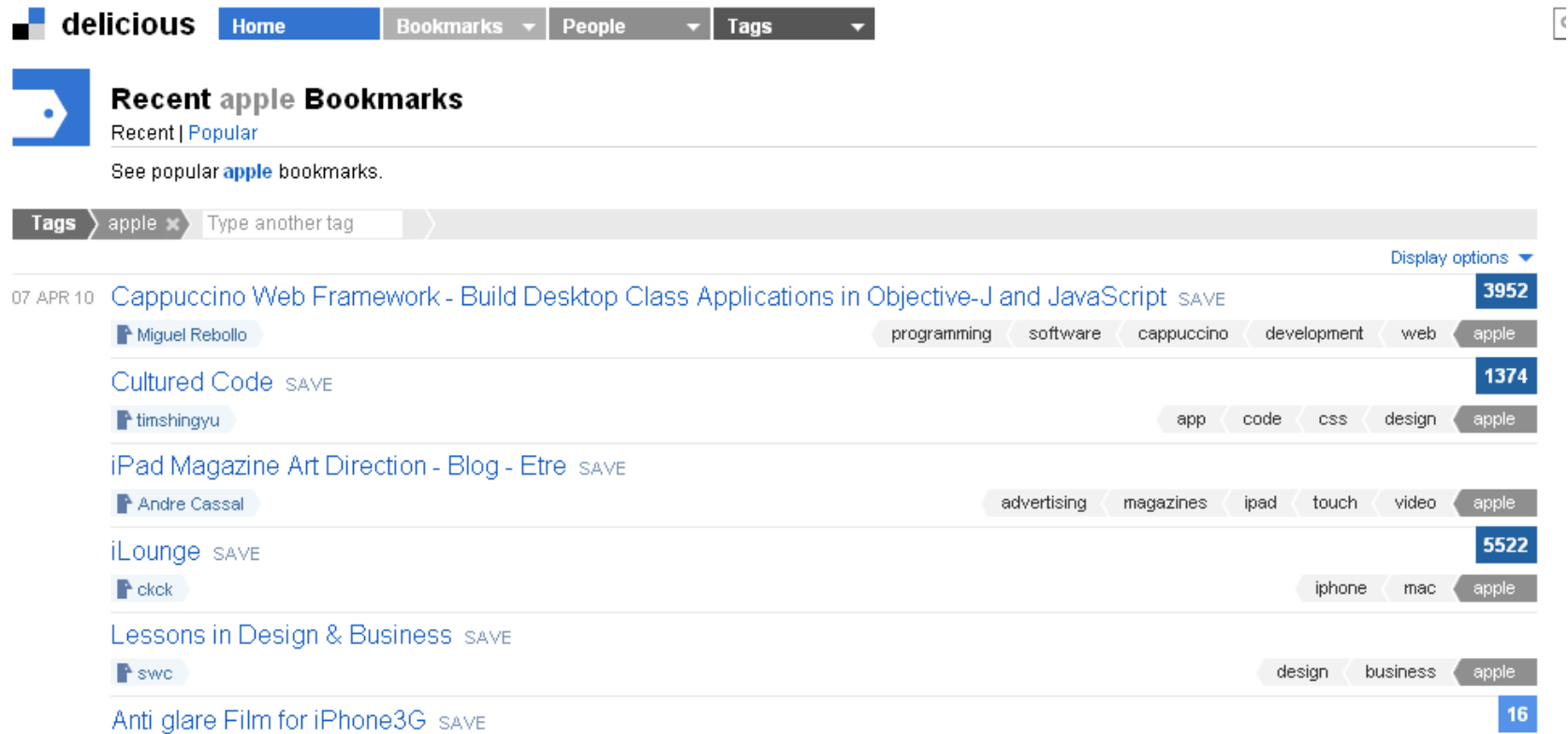
Solution

- improved visual tag navigation tool with
 - hierarchy of tags
(Apple – [iPod, iPad], automobile – [BMW, Toyota])
 - tag cluster
 - by topic
 - by synonyms (automobile-car, scenic-beautiful)
 - Use synonyms thesaurus

Technical Challenges

- creation of tag hierarchy
 - [Heymann et al, 2006]
- semantic vagueness
 - how to handle the overlap with other tag group
 - 'jaguar' – car? animal?
- easy navigation
 - maintain a consistent representation of the structure
 - without interrupting the orientation
 - going up and down the hierarchy

- Related Work: Delicious tag explorer



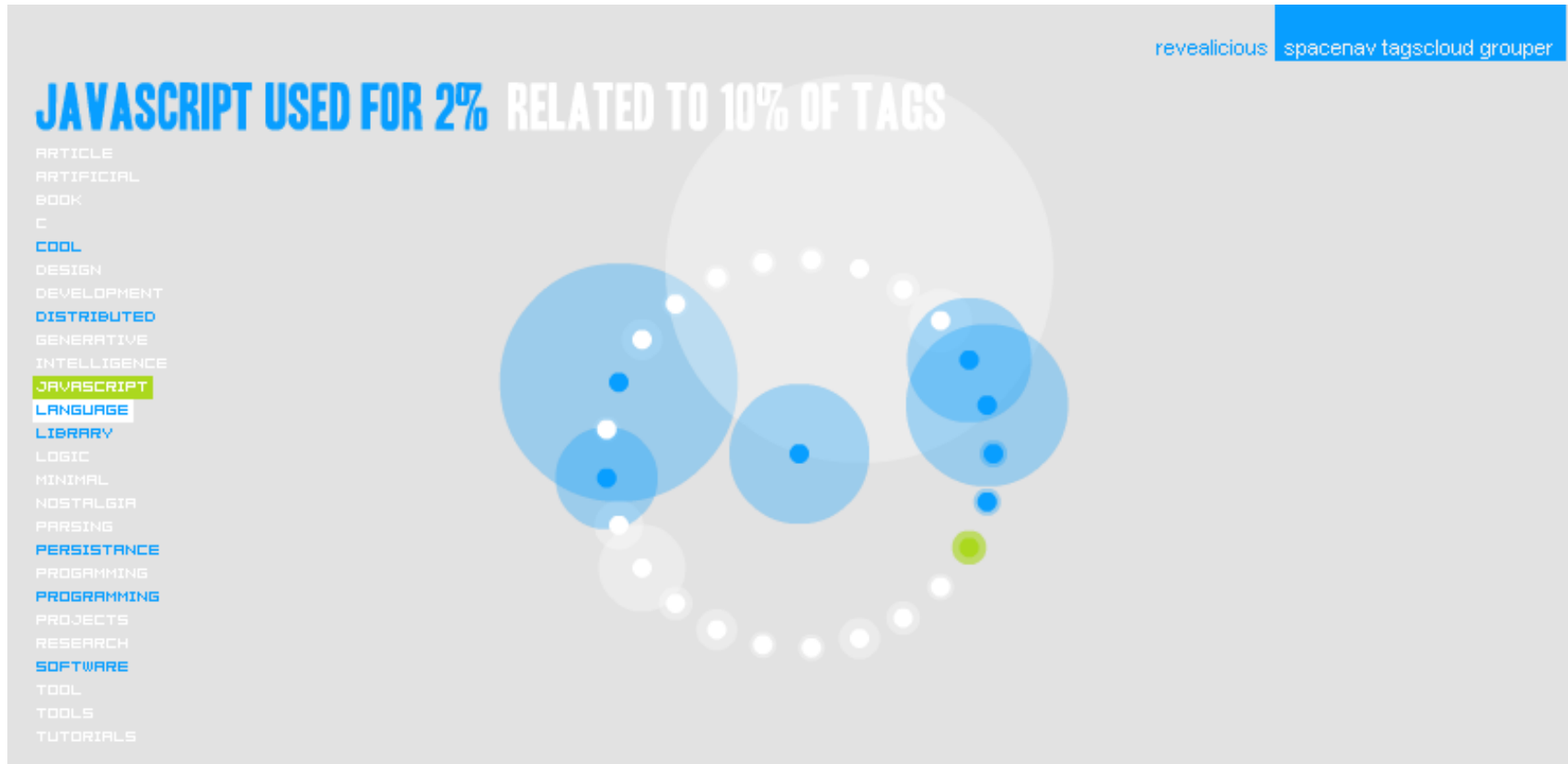
The screenshot shows the Delicious website interface. At the top, there is a navigation bar with the Delicious logo and menu items: Home, Bookmarks, People, and Tags. Below this is a section titled "Recent apple Bookmarks" with a sub-menu for "Recent | Popular". A message says "See popular apple bookmarks." Below that is a tag filter bar showing "apple" as the selected tag and a search input "Type another tag". On the right, there is a "Display options" dropdown. The main content area displays a list of bookmarks:

- 07 APR 10 Cappuccino Web Framework - Build Desktop Class Applications in Objective-J and JavaScript** SAVE **3952**
Miguel Rebollo | programming software cappuccino development web apple
- Cultured Code** SAVE **1374**
timshingyu | app code css design apple
- iPad Magazine Art Direction - Blog - Etre** SAVE
Andre Cassal | advertising magazines ipad touch video apple
- iLounge** SAVE **5522**
ckck | iphone mac apple
- Lessons in Design & Business** SAVE
swc | design business apple
- Anti glare Film for iPhone3G** SAVE **16**

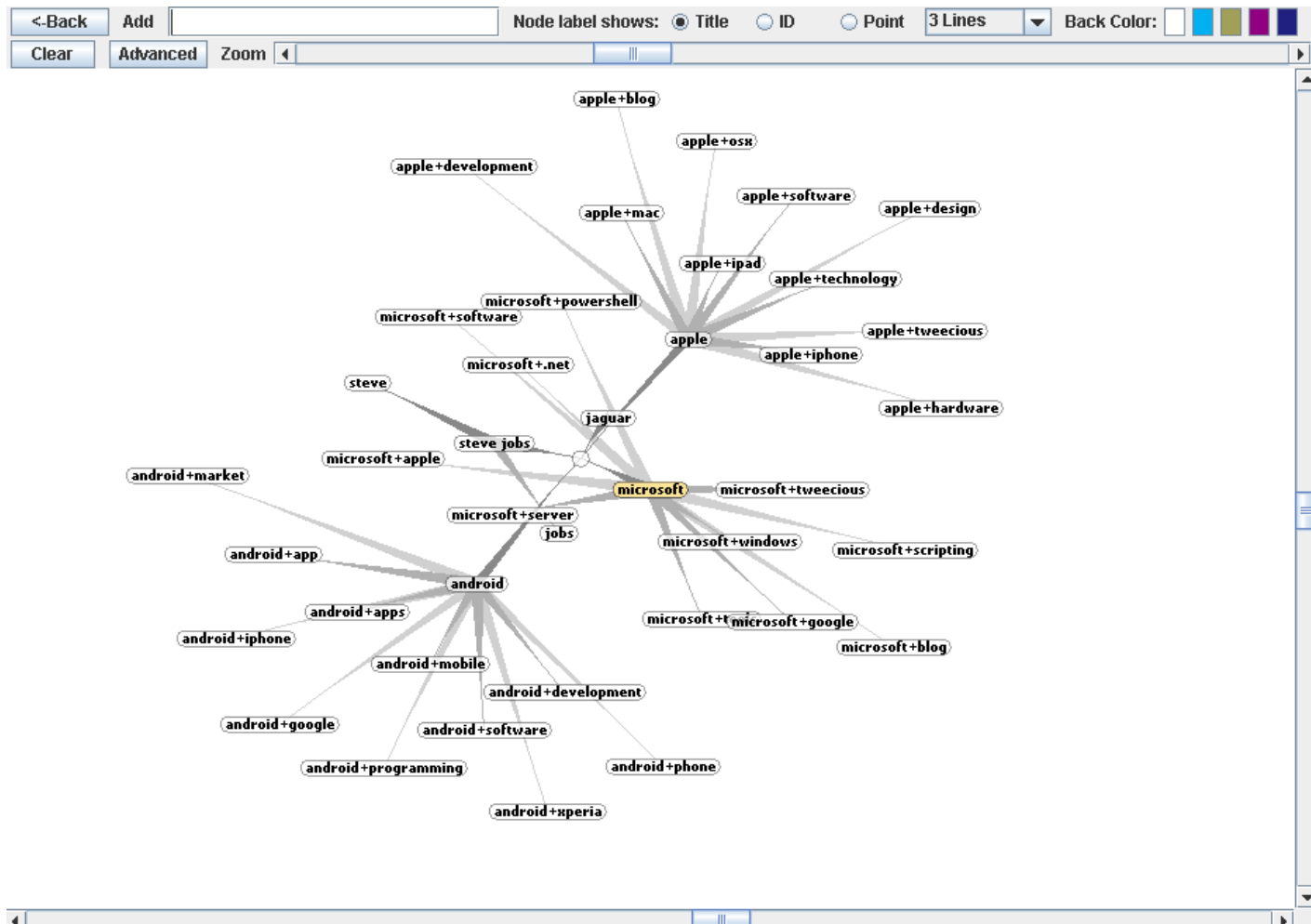
- Related Work : Tagnautica
(<http://www.quasimondo.com/tagnautica.php>)
 - explore the space of related Flickr tags



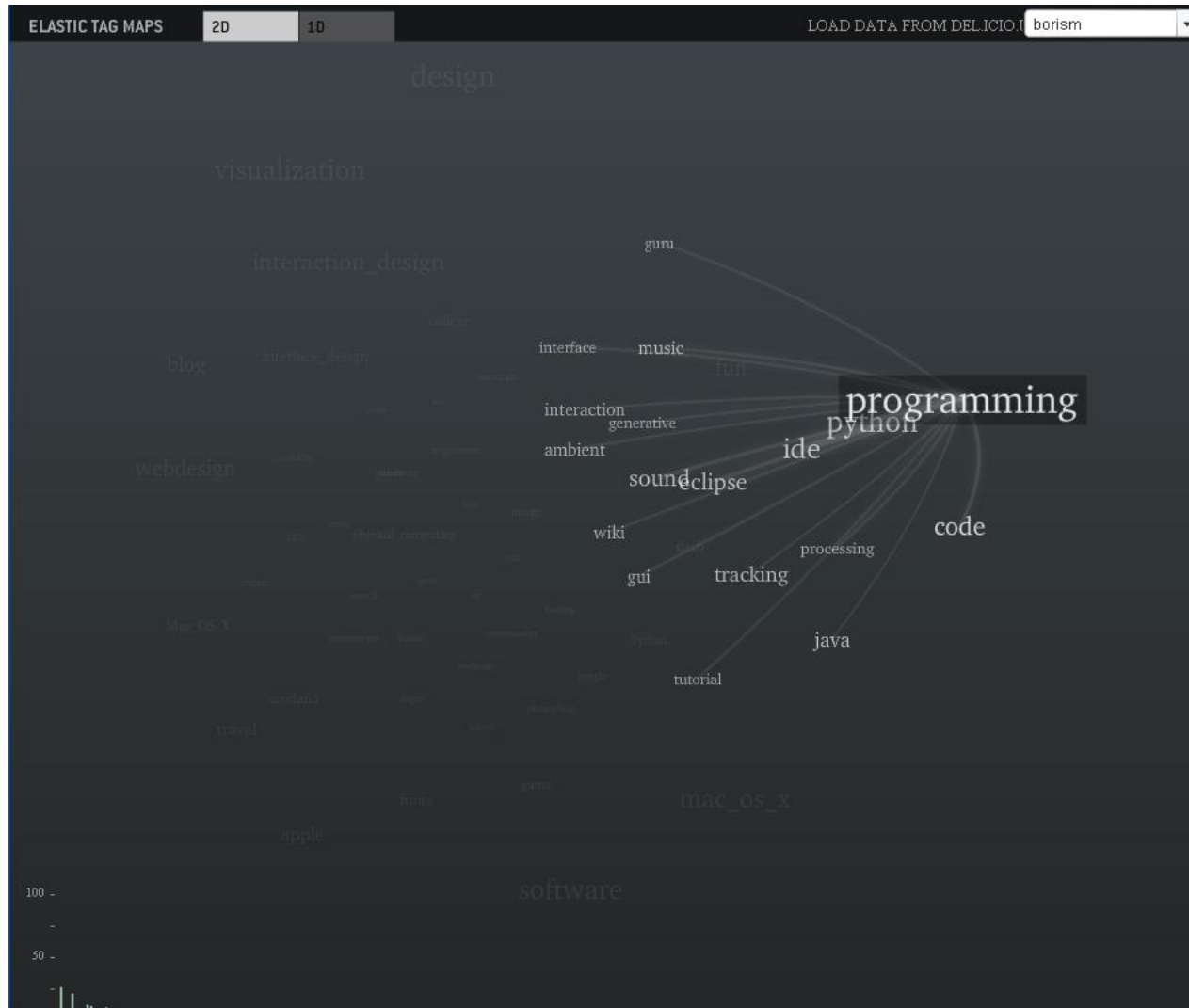
- Related Work: SpaceNav
(<http://www.ivy.fr/revealicious/demo/spacenav.html>)
 - shows relation between tags



- Related Work: HubLog: Graph del.icio.us related tags
 - Shows related tags according to their co-occurrence rate (<http://hublog.hubmed.org/archives/001049.html>)



- Related Work: Elastic Tag Maps
(http://well-formed-data.net/experiments/tag_maps_v5/)
 - frequently used tags are put together
 - tags that tend to co-occur with the selected tag are linked



- Related Work

- *Collaborative Creation of Communal Hierarchical Taxonomies in Social Tagging Systems* – Heymann, Paul and Garcia-Molina, Hector (2006)
- *Automated Tag Clustering: Improving search and exploration in the tag space* – Begelman, Keller, Smadja (2006)
- *Improving Tag-Clouds as Visual Information Retrieval Interfaces* – Hassan-Montero, Herrero-Solana (2006)

Thank you!!