

Argumentation 3.0

How Semantic Web technologies can improve
argumentation modeling in Web 2.0 environments

Jodi Schneider, Alexandre Passant, Tudor Groza, John G. Breslin

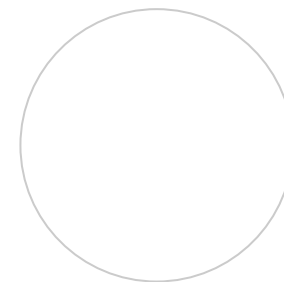
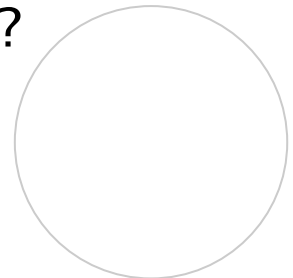
COMMA 2010
2010-09-10
Desenzano del Garda, Italy



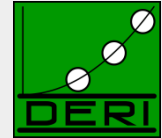
World Wide Argument Web (WWAW)



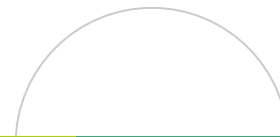
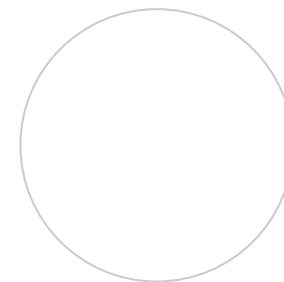
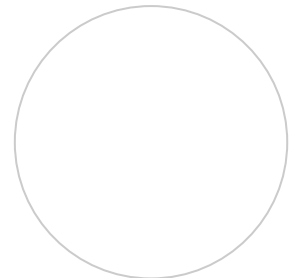
- What if instead of following mailing lists, blogs, online magazines, scientific journals...
- You could follow ARGUMENTS?
 - Who is arguing about this topic? Or product? Or idea?
 - Is their view positive or negative?
 - Are their ideas credible?
 - Are they trustworthy? Do people I trust, trust them?
 - What arguments are they making?



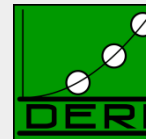
Parts of the WAW exist



- An interchange format
 - Argument Interchange Format
- Argument schemes
 - e.g. Walton
- Argument-related ontologies
 - IBIS, ScholOnto, SWAN/SIOC, ...
- Prototype interfaces
 - Argument blogging
 - Arvina, MAgtALO



Argument blogging (AIF+DGDL [22])



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Digi

Phil Hope agrees to return £41,000 as MPs retreat on expenses claims - Telegraph

File Edit View History Bookmarks Develop Window Help

http://www.telegraph.co.uk/news/newsttopics/mps-expenses-claims/

opinion... Phil Ho... MP's Ex... Daniel1... Editor's... Bishop ... Liberal ... Blog Bu...

Mr Lansley apologised to his South Cambridgeshire constituents for claiming "overgenerous" expenses in a letter to his local paper. "The public has every right to be angry about MPs' allowances. I was part of that system and I'm sorry for my part in it," he wrote.

The announcements come amid a growing acceptance at Westminster that politicians from the three major parties must act decisively to restore public trust in parliamentary democracy or risk a backlash from the electorate in the June 4 European and local council polls.

David Cameron has said that Tory MPs shown to have broken the rules could be sacked, and on Tuesday Gordon Brown has admitted that "extreme" action is needed to restore public trust in politicians.

The Prime Minister said an independent review of every claim made over the past four years would allow MPs to show they are "worthy of public trust".

"I think the issue here with Hazel Blears is about whether the CGT could or could not have been paid," Mr Brown said. "She has what has happened, I have talked to her, she has repaid the tax."

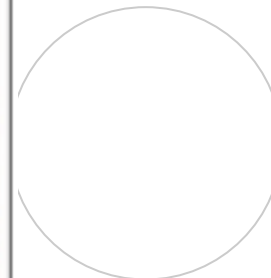
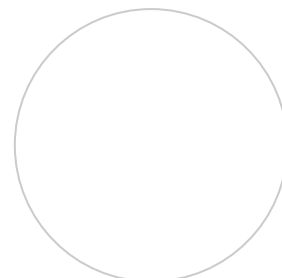
Mr Brown said other ministers who had come to the government on accommodation arrangements, including Charman, Transport Secretary Geoff Hoon, were in a "difficult position" and could face disciplinary action if the independent review found there were problems.

Mr Hope, who has also been criticised for employing his son Nick and daughter Anna for parliamentary work, said that he was repaying his expenses because

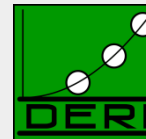
Argument Blogging V3

SUPPORT REFUTE ATTACK INFERENCE

"politicians from the three major parties must act decisively to restore public trust in parliamentary democracy"



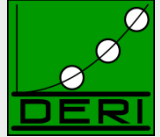
Generate argument maps from conversations (Arvina, MAgtALO)



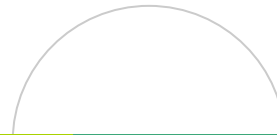
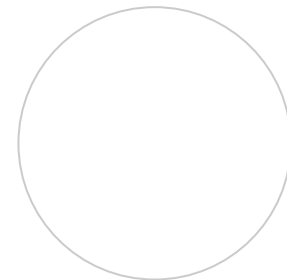
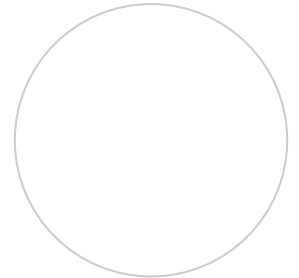
A screenshot of a web-based conversation window. The title bar reads "New conversation startedJoining the conversation: YouJim MatherDennis CanavanDuncan Mc". Below the title bar is a row of avatars: one with a cartoon face and a green status indicator, followed by seven generic grey avatars, and a plus sign button. A toolbar contains icons for Reply, Edit, Playback, Unfollow, Archive, Spam, Read, and Unread. The main content area shows a message from "You and Jltests@appspot.com:" at "10:19 am". The message text is: "New conversation started", "Joining the conversation:", "You", "Jim Mather", "Dennis Canavan", "Duncan McLaren", "Ed Douglas", "Colin Hood", "Niall Stuart", and "Topic: The line should be built". At the bottom of the message are three buttons: "I Agree", "I Disagree", and "Ask a question". A large, faint circle is drawn on the right side of the screenshot, overlapping the message content.

Source: Mark Snaith, ODET 2010

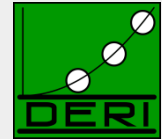
What's missing from the WWAW?



- ① Users
- ② Collation & querying across the Web
 - ArgDF?
- ③ Trust & credibility layer



Social Semantic Web



Bringing the Web to its full potential



Social Connectivity

Collaboration and Communication Tools
Blogs, Forums, OSNs, Wikis



Social Semantic Information Spaces
Web, Desktop



World Wide Web
URIs, HTML, HTTP



Semantic Web
RDFS, OWL, SPARQL

Syntax

Semantic

Social Semantic Web can bring...



① Users (**Social Web**)

- ❑ Facebook: 500 million active users, 22 billion minutes/day
<http://www.facebook.com/press/info.php?statistics>
- ❑ LinkedIn: 75 million users
<http://press.linkedin.com/>

② Collation & querying across the Web (**Semantic Web**)

- ❑ based on semantics with search engines like Sindice

③ Trust & credibility layer (**Social Semantic research**)

- ❑ Restricting to the friends or colleagues you trust
- ❑ ... Or even, Ted for golf, and Roberto for restaurant tips!

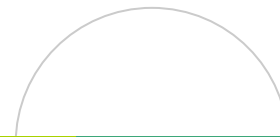
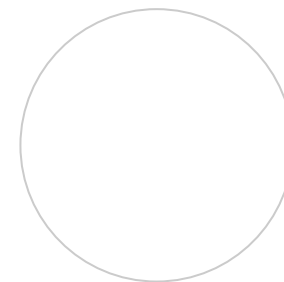
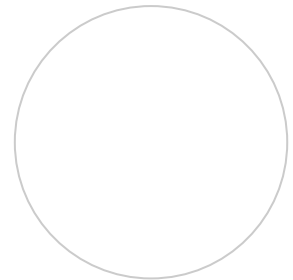
Argumentation on today's Social Web



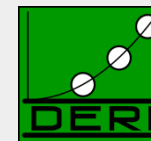
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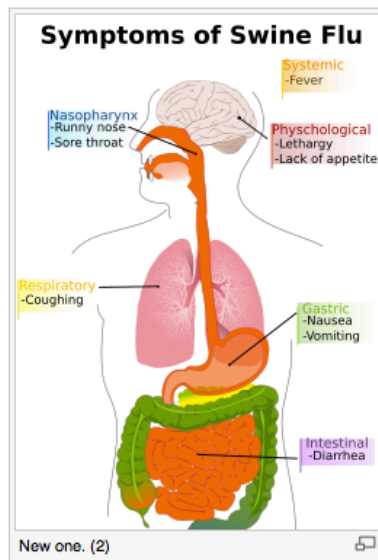
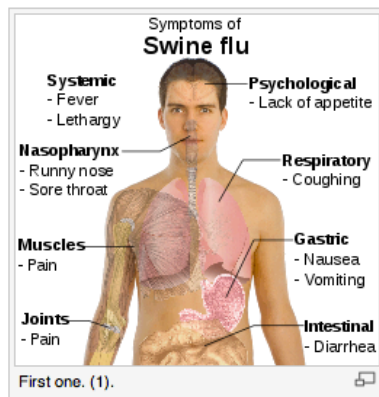
- Numerous sites with different 'genres':
 - Forums, Blogs, Wikis, Microblogging, ...
- Affordances like:
 - How long does a comment remain visible?
 - How easy is it to quote?
 - How is agreement expressed?



Arguments in Web 2.0 & Social Web: Wikis – Wikipedia article discussion



Which symptoms image should we have?



- Wiki pages
- Can edit others' words
- Must add by hand:
 - Headings
 - Indentation
 - Signature macro ~~~~
- Emphasize *topic*
- Persistent 'archives' in view

It seems we have two symptoms images to choose between now, which gives us the advantage to use the one we think fits best. See [Talk:2009 swine flu outbreak#Which symptoms image should we have.3F](#) for discussion. [Mikael Häggström \(talk\)](#) 04:56, 1 May 2009 (UTC)

I'm still unhappy with the inclusion of diarrhea, which is quite a rare symptom of influenza in adults. However, I can see the argument that it should be there for completeness. Of the images, I prefer the first. [Tim Vickers \(talk\)](#) 15:06, 1 May 2009 (UTC)

WHO continues to state the symptoms associated with the current outbreak strain "in some patients" include diarrhoea and vomiting. That does not appear to be true of other "swine flu" strains in humans, so may not belong in this article except where it discusses *A/California/2009 (H1N1)*. Another suggestion is to remove the image from this article and instead direct readers (again) to [Influenza-like illness](#) (which needs its own version a symptoms image). --[Una Smith \(talk\)](#) 18:58, 1 May 2009 (UTC)

For pete's sake, remove diarrhea. It only shows in children. put a pediatric picture if you want to include diarrhea. You know, if we include every rare symptom in images, you'll have way too many things to list. Include only common symptoms. diarrhea is not common in adults. Now, you could easily have another intestinal infection at the same time as having the flu - but it is so freaking unlikely to have the flu cause diarrhea.

Arguments in Web 2.0 & Social Web: Microblogs



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- Brief messages
- URI's <http://twitter.com/...>
- Stream-based
- Interconnected
 - Replies
 - Retweets
 - Hashtags



southernmax RT @trueblueamerica: #TCOT #HCR If Republicans are backing down from repeal & replace. Who has the backbone in DC to stand in the way of Obama Destroying USA

4 minutes ago from web



shailjas will this make teens chaste? RT @CNN Abstinence-focused education gets \$250 million from health care reform. <http://on.cnn.com/ctZBgv>. #hcr

4 minutes ago from HTC Peep



jasoncherkis RT @mikedebonis: Catania estimates that 20 to 25K DC residents will get soon better health care thanks to #hcr. Much cheaper for city too

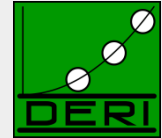
4 minutes ago from txt



taylormarsh Under the radar... NPR shifts abortion language to neutral. It's long past time. <http://tinyurl.com/ycmrquh> #women #hcr #media

4 minutes ago from web

What's missing for large sites?



■ Is 'agree' / 'disagree' enough?

😊 Jean-Claude Bradley, Carl Boettiger, Alexey and 3 other people liked this



■ If there's more complexity, will my users adopt it?

- What kind of interfaces make this palatable + easy?

■ Which ontology should I use?

- What features are important?
Depends on a given community, type of environment

■ "Show me the data"

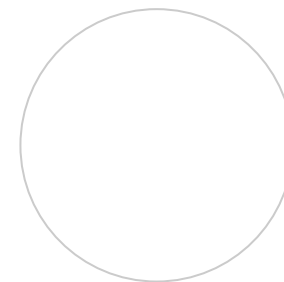
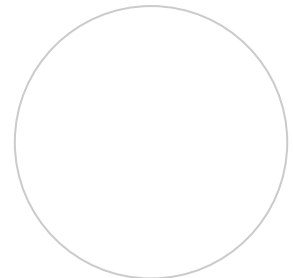
- chicken & egg problem

What's missing for individual users?



To get users to comment:

- Make it easy-to-use
- Need enough space for the message length
- Context matters:
 - Am I looking at the most recent message?
 - Who wrote the message I'm replying to?



Collating blog comments



② Collation & querying across the Web

6 Responses to "Comment author tracking plugin"

Comment from John
Date: February 12, 2008, 6:20
Hello, quite a nice feature

Comment from admin
Date: February 13, 2008, 3:12
you might also want to ta

Comment from Giovanni
Date: February 18, 2008, 1:12
but this bug is problemati

Comment from Toadie
Date: March 6, 2008, 3:23 p
Looks good but where ca
===
I serve only the Dukey

Comment from Toadie a
Date: March 6, 2008, 3:28 p
All your base are belong t
PS,
Toadie lives only to serve the Dukey.

Recent activity by user "Cloud" [X]

Posts

- "It was a very good year..."
- "SIOC tutorial accepted for WWW2008"
- boards.ie latest: hires and hiring; doubling visits since 2005"
- "Videos of "Paddy's Valley" to VC pitches"
- "Congrats to Eyal on his PhD defense"

Comments

- "Hello, quite a nice feature"
- "Cool userbase!"

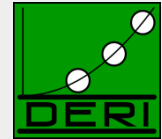
Topics

- "Boards"
- "DERI"
- "NUI Galway"
- "General"
- "SIOC"
- "Semantic Web"
- "Web"
- "Boards"
- "Ireland"
- "Ireland"
- "US"
- "Web 2.0"
- "DERI"
- "NUI Galway"

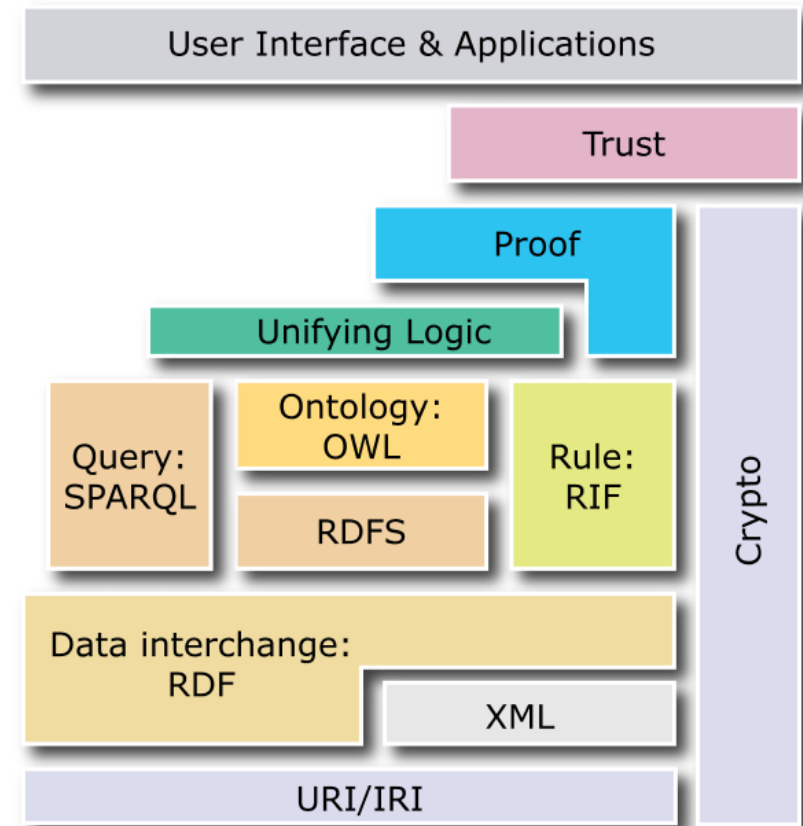
Sindice SIOC plugin for WordPress blogs: did a commenter post on other websites?



Social Semantic Web research area

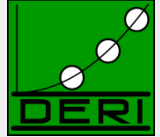


- ③ Trust & credibility layer
 - Golbeck, Computing with Social Trust, Springer 2008
 - Hartig, Querying Trust in RDF Data with tSPARQL, ESWC 2009

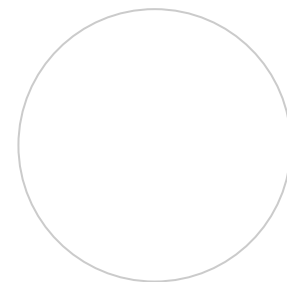
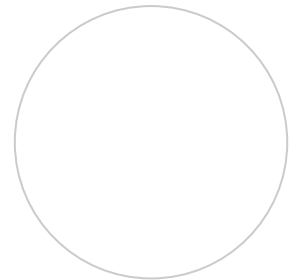


<http://www.w3.org/2007/03/layerCake.svg>

WWAW + Social Semantic Web



- ① Users
- ② Collation & querying across the Web
- ③ Trust & credibility layer



Thank you!



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