

# ESWC 2009 & SemWiki 2009

Marek Schmidt

2009-06-18 KEG, Praha

# 4<sup>th</sup> Workshop on Semantic Wikis (SemWiki 2009)



- See Summary
- 15 papers
- 11 demos & posters

# How Controlled English can Improve Semantic Wikis

**Tobias Kuhn**  
**(best paper at SemWiki2009)**

- AceWiki (Attempto Controlled English)
  - <http://attempto.ifi.uzh.ch/acewiki/>
- ACE ↔ OWL
  - Every person who writes a book is an author
  - If X borders Y then Y borders X.
  - Which cities are located in a country that borders Switzerland?
- OWL reasoner, consistency check
- User study



## Navigation:

- [Main Page](#)
- [Index](#)
- [Random Article](#)
- [Search:](#)

## Actions:

- [New Word...](#)
- [Export](#)

[<Back](#) [Forward>](#) [Refresh](#)

[Article](#) | [Noun](#) | [References](#) | [Individuals](#) | [Hierarchy](#)

## planet

- ▷ *We use here the definition of "planet" according to the International Astronomical Union (see <http://www.iau.org>) without the restriction to solar planets.*
- ▷ Every planet is a celestial-body.
- ▷ No planet is a star.
- ▷ No planet is a dwarf-planet.
- ▷ *The distinction between planet and dwarf-planet has been introduced by the International Astronomical Union in 2006.*
- ▷ No planet is a moon.
- ▷ Every planet orbits a star.
- ▷ Every planet that does not orbit the Sun is an extrasolar planet.
- ▷ Which planets orbit the Sun?
  - Earth
  - Jupiter
  - Mars
  - Mercury
  - Neptune
  - Saturn
  - Uranus
  - Venus
- ▷ Every planet is a terrestrial planet or is a gas giant.
- ▷

# WIKITAAABLE: A semantic wiki as a blackboard for a textual case-based reasoning system

Hala Skaf-Molli et al

- Semantic Media Wiki application for cooking recipes
  - Cooking terminology
  - Ontology, adaptation rules
- <http://taaable.fr/>
- Case-based reasoning
  - Orange pie
    - (Apple pie, replace apple with orange)

# Taaable

## Ingredients

I want:

?

I don't want:

?

## Type of dish

I want:

?

I don't want:

?

## More options

Vegetarian

Nut-free

No alcohol

[Advanced Configuration ?](#)

Find recipes!

Get 5!

Reset query

Your request: **orange** **D:pie**

Common path: 1<citrus\_fruit --> orange>

Common cost: 1.3778748590755354

#	Original recipe name	Adaptation overview	Cost
1	<a href="#">Apple Crumble Pie</a>	<a href="#">Replace: lemon_juice by citrus_fruit</a>	5
2	<a href="#">Delicious Key Lime Pie</a>	<a href="#">Replace: key_lime_juice by citrus_fruit, key_lime_peel by citrus_fruit</a>	5
3	<a href="#">Key Lime Pie</a>	<a href="#">Replace: key_lime by citrus_fruit, key_lime_juice by citrus_fruit</a>	5
4	<a href="#">Strawberry Lime Pie</a>	<a href="#">Replace: lime by citrus_fruit</a>	5
5	<a href="#">UPSIDE DOWN APPLE PIE</a>	<a href="#">Replace: lemon_juice by citrus_fruit</a>	5

Results 1 - 5 on 5 | Processing time: 0.0246 secondes

# KiWi – A Platform for Semantic Social Software

**Sebastian Schaffert et al.  
(best demo at ESWC 2009)**

- <http://showcase.kiwi-project.eu>
- Semantic Social Software platform
- Content Versatility
  - Same content, different views
  - KiWi Façades
- Architecture
  - Service-Oriented, Component-Based

# Other topics

- Conceptual models
  - Tags vs RDF
- Distributed knowledge
  - Peer to peer wiki
  - Cross wiki integration
- Architecture
  - plugins



# ESWC 2009

# Frame Detection over the Semantic Web

## B. Coppola et al.

- Frame-based ontology learning
- Generates domain-specific frames (distilled from general FrameNet)
  - Frame detection (SRL)
  - Super sense tagger (WordNet)
  - LMM MetaModel
- Example (europarl)
  - Judgment\_communication → AccuseOfViolation
    - Communicator → People
    - Reason → Violation

- User requirements (competency questions)
- Domain corpus
- Frame datasets (FrameNet, VerbNet, etc.)
- General lexical categories (WordNet super-senses)
- Lexical MetaModel (LMM)

Collecting resources and datasets

Selecting, detecting, and typing domain frames

- Matching requirements to frames
- Frame occurrence detection in corpus
- Super-sense tagging of frame elements
- Distilling relevant domain-specific frames

- Mapping to other resources within LMM scope (e.g. DBpedia)
- Transforming LMM models into regular OWL TBoxes and ABoxes
- Running unit tests based on competency questions

Formalizing domain ontology

# Media Meets Semantic Web – How the BBC Uses DBpedia and Linked Data to Make Connections

G. Kobilarov et al.  
Best In-Use-Track Paper

- Linking CIS Concepts to DBpedia
  - Label lookup
  - Context-based Disambiguation
- Named entity recognition (Muddy Boots)
  - DBpedia URIs
- Automatically generated “Navigational badges”
  - Related stories based on recognized entities

**fin**