



# A Collaborative View on Semantics

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# On definitions

- **Semantics**
- (From Wikipedia, the free encyclopedia)
- **Semantics** is the study of meaning. The word "semantics" itself denotes a range of ideas, from the popular to the highly technical. It is often used in ordinary language to denote a problem of understanding that comes down to word selection or connotation. This problem of understanding has been the subject of many formal inquiries, over a long period of time. The word is derived from the [Greek](#) word *σημαντικός* (*semantikos*), "significant",<sup>[1]</sup> from *σημαίνω* (*semaino*), "to signify, to indicate" and that from *σήμα* (*sema*), "sign, mark, token".

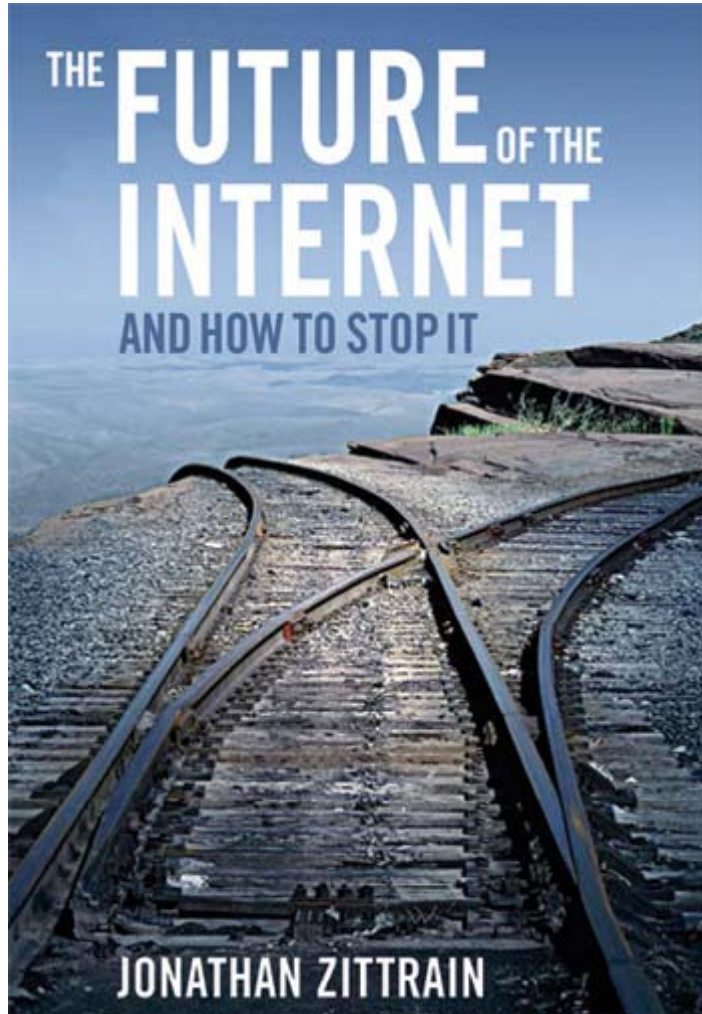
Semantics: A meaningful model for significant issues ...



## Issues in mind

- When can we be sure of developing for “significant things” ?
- How can we make semantic techniques, models and technologies really make the difference ?
- When a semantics-based solution really pays-off ?
- How can we overcome the problem of shortage of time and effort for maintaining complex ontologies ?
- And what about user attraction and sustainability ?

# A book on Future Internet



The Internet's current trajectory is one of lost opportunity.

Its salvation, Zittrain argues, **lies in the hands of its millions of users.**

Drawing on **generative technologies** like Wikipedia that have so far survived their own successes, this book shows how to develop new technologies and social structures that allow users to work creatively and collaboratively, participate in solutions, and become true "netizens."

## New Issues in mind

- But how can we really tap into the power of vast numbers of users ?
- Who are they ?
- And what is inspirational for them ?

## Some inspiration : on “technology”

“A fascinating technological profile of a generation that will change the world.” —USA Today

### growing up digital

The Rise of the Net Generation



DON TAPSCOTT

Author of the International Bestseller  
*The Digital Economy*

Extract:

“by the term ‘**technology**’ we characterize things that are invented **after** we are born”

# Some inspiration : the generations

"A fascinating technological profile of a generation that will change the world." —USA Today

## growing up digital

The Rise of the Net Generation



**DON TAPSCOTT**

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- The baby-boomers: born 1948-1965.  
Main Technology: TV
- The Generation-X: born 1966 – 1977.  
Main Technology: Internet
- The Generation-Y: born 1978-1996.  
Main Technology: Web 2.0 / The Cloud ?
- Generation-Z: the NEXT generation, born 1996-. Main Technology yet unknown.

## Hm, it looks like:

- The main factor that is constantly increasing as generations adopt new key technologies is “interactivity”
- From TV to the Internet, the to the Web, and now to the Social Web, interactivity and user enablement are steadily augmenting
- How are ontologies, semantic annotation models, service annotation systems, folksonomies, RDF/OWL repositories, affected by the collaborative web capabilities ?

# Prof. Robert Meersman, 22.06.09, Leiden

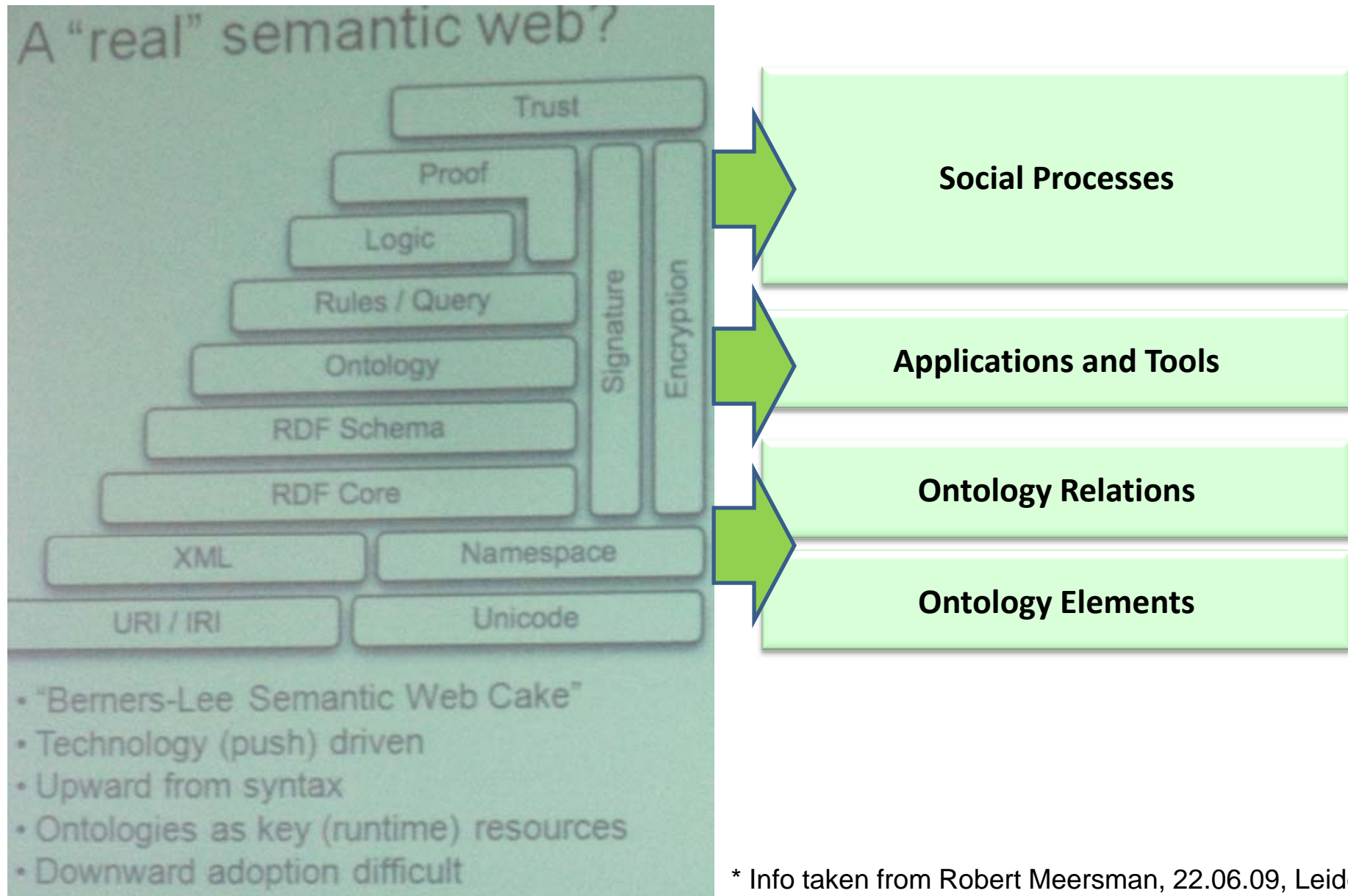


## Michele Missikof: From ICE Conference.,Leiden

### *Model as the key product of Science*

- **understand** more thoroughly the system, and therefore to
- **improve** the characteristics of the system, but also to
- **predict** its future evolution, i.e., how the system will behave under some initial conditions, or react to changes in the context.

# A forward looking view of the Semantic Web



\* Info taken from Robert Meersman, 22.06.09, Leiden

## **As an outcome: When dealing with building and maintaining ontologies, schemas, matching patterns, taxonomies and coding schemas, and other semantic elements:**

- “Weave” collaboration in the main processes of the project
- Try to involve as much users, actors, decision makers as you can, through an open, tools-supported process.
- Seek assistance, if needed, to penetrate into relative social networks, customer communities, or other virtual target group
- Upgrade your offerings around automated draft ontology extraction (NLP, parsing and matching algorithms), visualisation and navigation
- Make it “move on its own” and try to stay on ...

**And finally,**

Don't be afraid to cross  
borders, when you are on a  
planned journey ...



*Semantics and the "Schengen borders"  
between science and engineering.*



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