International Association for Ontology and its Applications (IAOA)

Semantic Web Applied Ontology Special Interest Group (SWAO SIG)

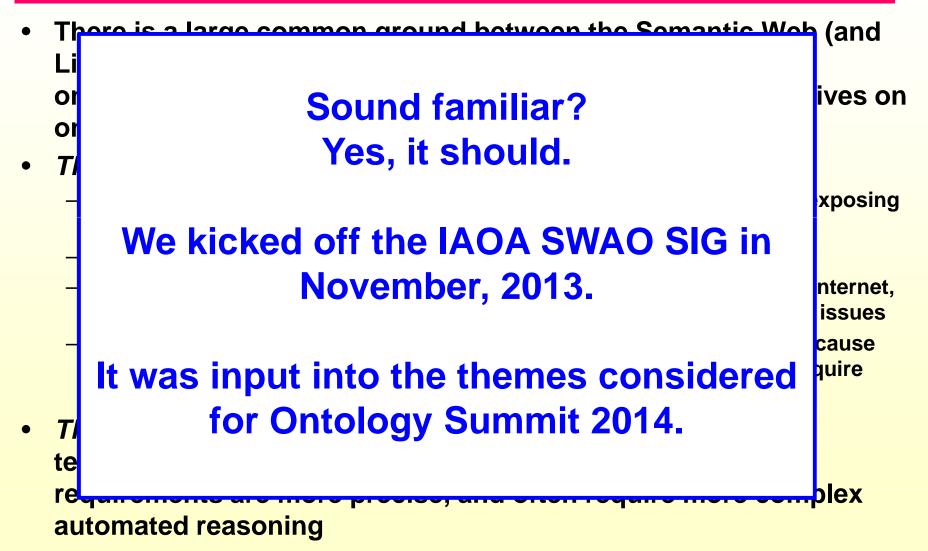
Ontology Summit 2014 Symposium April 29, 2014

Leo Obrst (MITRE), IAOA Executive Council Liaison to SWAO SIG IAOA SWAO SIG Co-Chairs: Michael Bennett (Hypercube Ltd.) Andrea Westerinen (Nine Points Solutions, LLC) Elie Abi-Lahoud (University College Cork – Ireland)

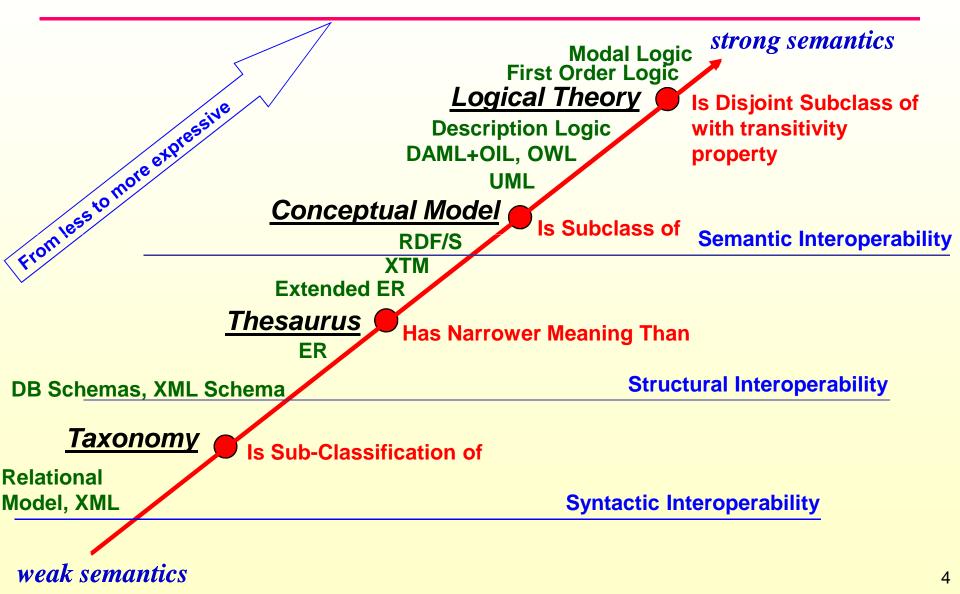
Semantic Web Meets Applied Ontology

- There is a large common ground between the Semantic Web (and Linked Data) and the Applied Ontology (largely focused on ontological analysis) communities in terms of their perspectives on ontologies
- The Semantic Web community emphasizes:
 - Gaining traction/adoption of semantic technologies on the WWW, and exposing data
 - The employment of a bottom-up approach
 - Much of the use of SW technologies, however, occurs not on the open Internet, but on Intranets closed off to more widely distributed communities and issues
 - In general, these Intranets require more precise ontologies primarily because they have more specialized use cases for ontologies, some of which require more precise automated reasoning
- The Applied Ontology community uses Semantic Web technologies, but often in Intranets, where the domain requirements are more precise, and often require more complex automated reasoning

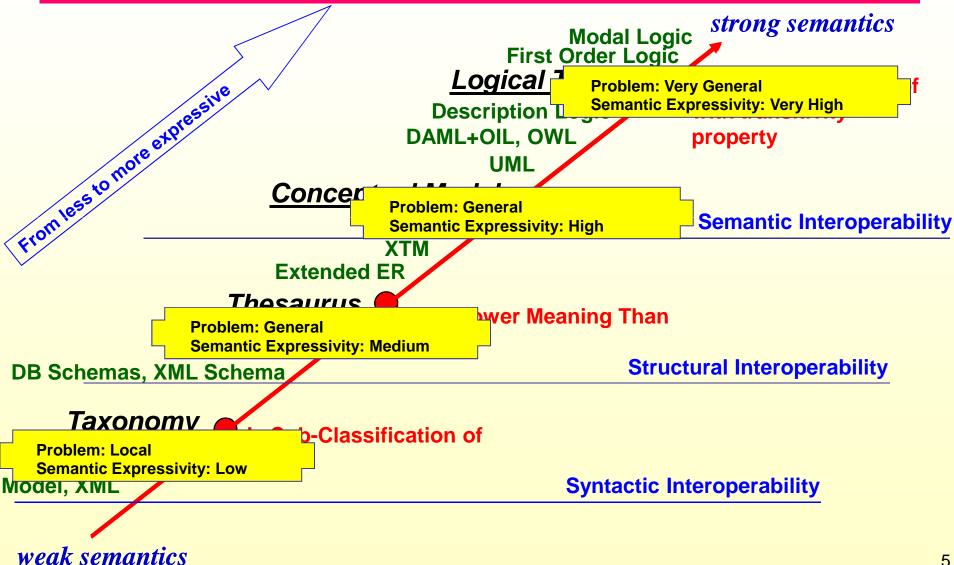
Semantic Web Meets Applied Ontology



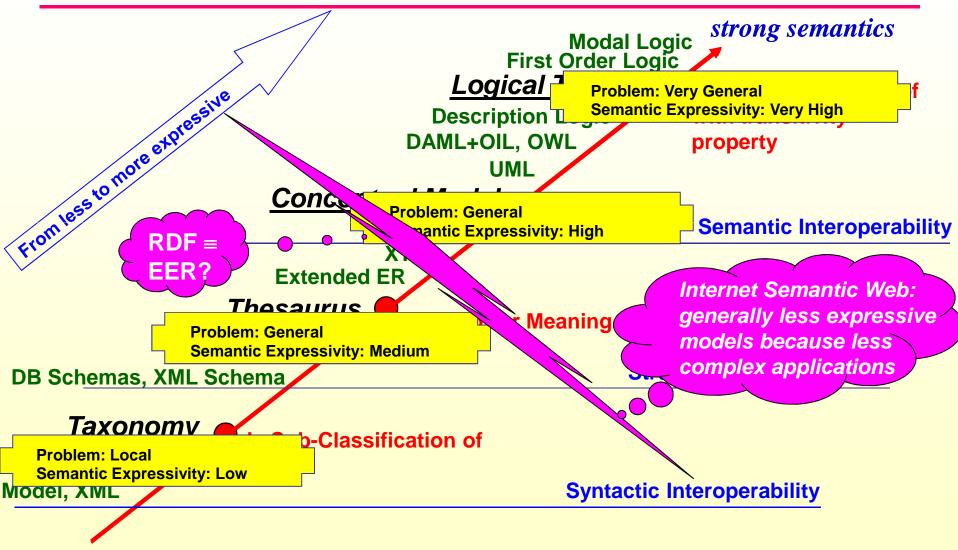
Ontology Spectrum: Range of Models



Ontology Spectrum: Generality & Expressiveness

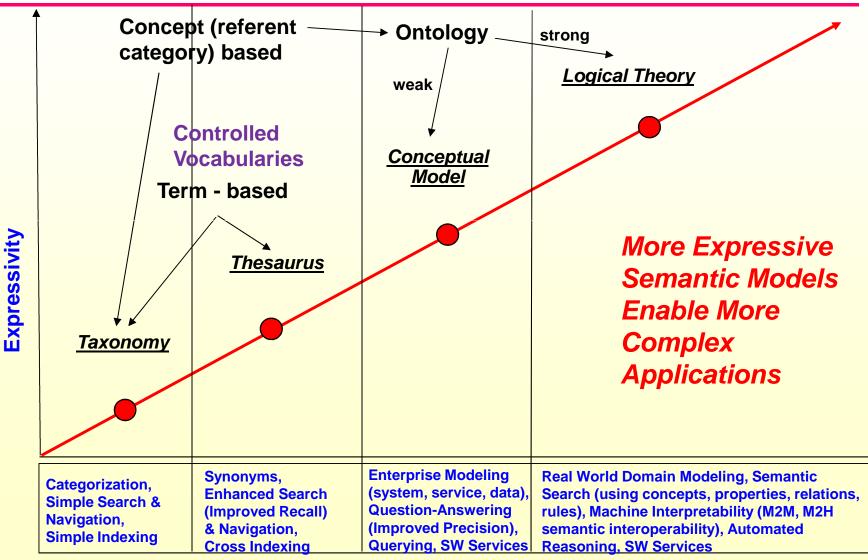


Ontology Spectrum: Generality & Expressiveness



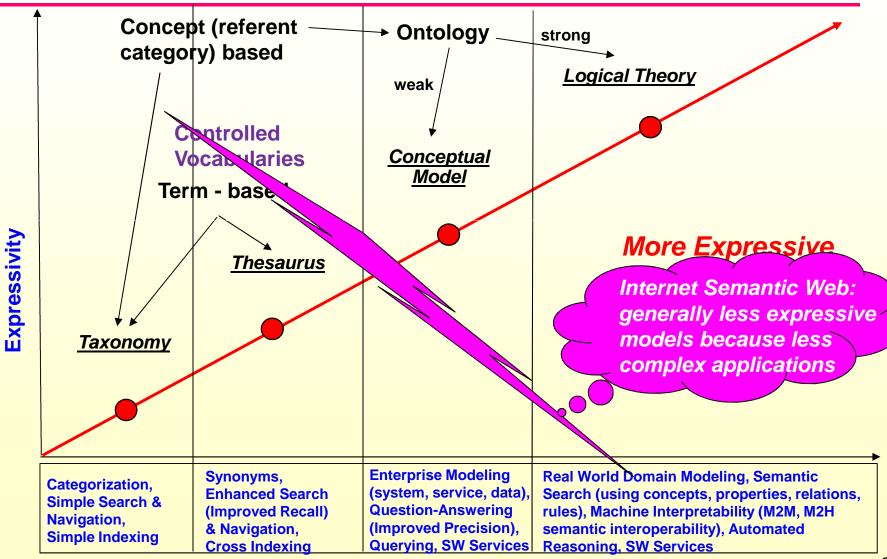
weak semantics

Ontology Spectrum: Application



Application

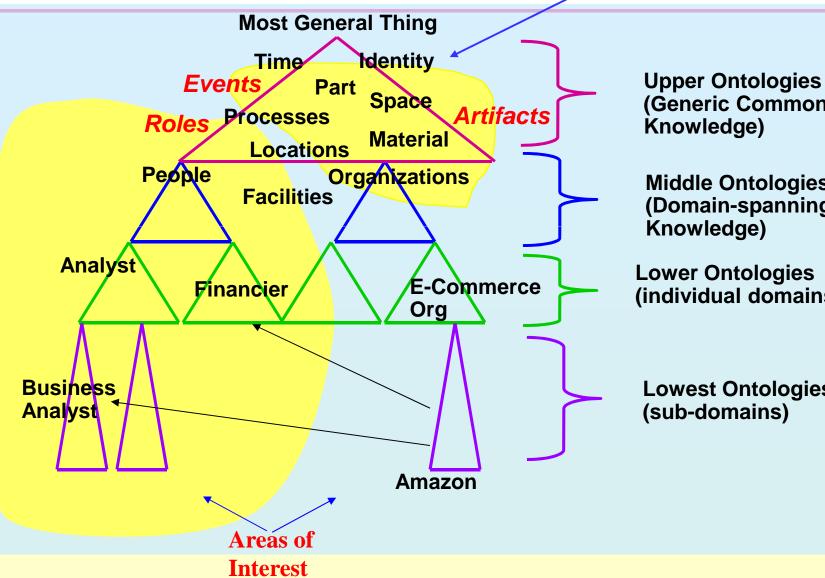
Ontology Spectrum: Application



Application

Upper, Middle, Domain Ontologies

But Also These!



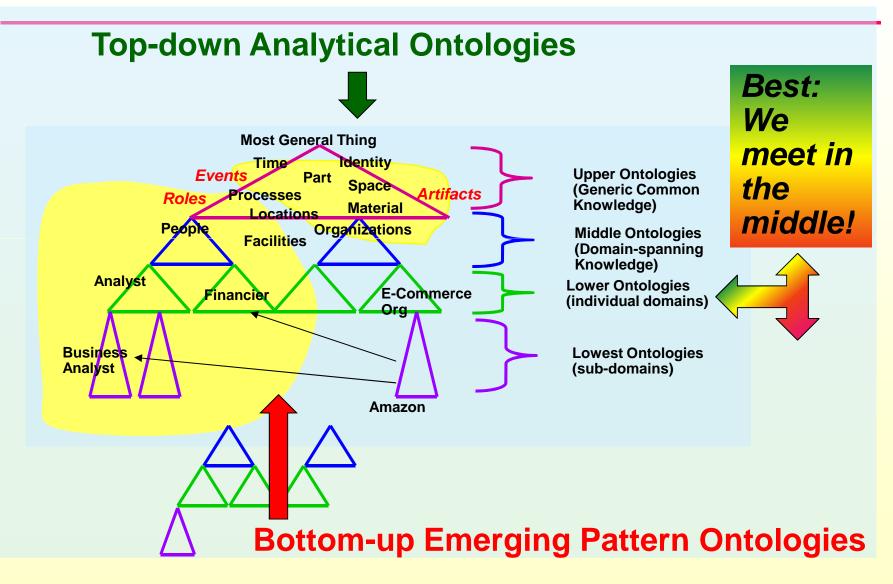
(Generic Common Knowledge)

Middle Ontologies (Domain-spanning **Knowledge**)

Lower Ontologies (individual domains)

Lowest Ontologies (sub-domains)

Upper, Middle, Domain Ontologies & Bottom-up Mid-Level Ontological Patterns



IAOA SWAO

- Join!
 - Join the <u>IAOA</u>
 - Join the <u>IAOA SWAO SIG</u> as either an IAOA member or not
- Co-Chairs:
 - Andrea Westerinen (Nine Points Solutions, LLC)
 - Elie Abi-Lahoud (University College Cork Ireland)
 - Michael Bennett (Hypercube Ltd.)
- SWAO Mission
- Events, events, events!
 - Proposed ISWC 2014 Workshop: No go, but possible other venues!
- Let's continue Ontology Summit 2014! – Workshop, Journal Issue, Book, more