

Where Will the Ontologies Come From?

- Some large ontologies are becoming de facto standards
 - WordNet
 - NCIBI's cancer ontology
- Many small ontologies
 - are hand-created (e.g. RosettaNet) or
 - Created automatically through machine learning, natural language analysis and from legacy sources (e.g. data schemas)

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Chapter 8

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Where Will the Tools Come From?

- Large variety of tools already exists
 - Editors, storage, querying and inferencing, visualization, versioning
- Mostly developed in academic domain
- ... but taken up in the commercial sector
 - Highly innovative startups

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Where Will the Semantic Markup Come From?

- Clearly not by hand
- Tools for new information resources
- Natural language techniques, borrowing from legacy sources for old resources

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How Should one Deal With a Multitude of Ontologies?

- A big research question, still open
 - A potential bottleneck
- Various approaches currently tested
 - Negotiation
 - Machine learning
 - Linguistic analysis

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Promising Areas for Initial Successes

- Knowledge Management
 - ... because of central authority
- E-Science
 - Use ontologies, are informed and enthusiastic users of new technology
- E-Commerce probably later
 - Problems with privacy, security and trust