

Sustainable Semantic Resources: How do we get there?

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Resources are *means*, not *goals*

- Key perspective – **usage**
 - Typical scenario:
assume a resource is useful, then take it as goal
- A resource needs to
 - Have clear usefulness in "popular" applications
 - Be of sufficiently high quality to improve performance
 - Can it contribute beyond WN?
 - (only largely utilized resource)
- Often not clear :
 - How to effectively utilize a resource for a task, which parts of it
 - E.g. – how to best use WN? Not clear...

OBSTACLES

- Semantic research is **fragmented**
 - Tasks/applications are fragmented - need to cater for many different tasks/applications (and evaluate resource contribution)
 - Resources are fragmented - an application developer has a large entry barrier to try leveraging a new resource (and not incentive)
- May be better to **focus** on:
 - Few applications, and direct resource creation for them
 - Few "generic" semantic tasks on which resource will be tested
 - Textual Entailment, Semantic Text Similarity (SemEval STS, but better defined)
 - But testing on end-application task is important (MT evaluation, answer assessment)
 - Few most useful semantic resource types
 - E.g. synonyms, hypernyms, antonyms, inference (entailment) relations
 - Avoid vague notions like “similarity” (easiest, but how useful?)

Integrated & High-quality Resources

- Application developers need integrated semantic knowledge, regardless of its origins
 - Develop knowledge integration algorithms
- Better **quality** required – for application impact
 - Improve current resources rather than building new ones (focus!)
 - Resource developers should be involved in resource application
 - Split between resource **builders vs. users** problematic!
 - May utilize crowd/community to manually improve knowledge
 - E.g. our short paper at ACL-2012
 - Educational applications/games?

Resource Evaluation

- Need resource creation/evaluation benchmarks
 - As funded consortia projects?
- Should be predictive of resource utility for applications
- Ablation tests within applications
 - RTE ablation tests and Knowledge Resources Pool
 - Side-effect of application benchmarks!
 - May create a suite of tasks/systems over which resources are evaluated
- May facilitate paper acceptance at major venues
 - Per Sandra's point.