Ontology Summit 2013
Track B
Finding the Scope

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Mission Statement

The intent is to explore, clarify, and identify gaps, practical and theoretical, in the of evaluation of ontology from a systems perspective using the paradigm of blackbox evaluation.

- Extrinsic aspects of ontology evaluation includes subjective factors, measures or metrics, and the range of values of quantifiable attributes.
- In a systems context evaluations are derived from examination of inputs or stimuli (to the blackbox) and the outputs or externally measurable attributes or behaviors, where those behaviors are controlled or influenced by an ontology.
- The ontology in question may be fully embedded/encapsulated within an entity or system, or may be externally accessible (and potentially shared) among multiple entities or systems.
- The separation of system or entity behaviors which are not governed by an ontology must be accounted for in any ontology evaluation process.

Extrinsic Aspects

- interoperability among ontologies
- requirements and their verification
- how metrics can be derived from requirements
- how 'good' requirements relevant to ontology can be crafted
- fitness for purpose
- query performance
- relevant relational database evaluation methods, metrics and techniques
- differences in evaluation among an ontology and instance data
- how evaluation metrics can be derived from examination of test inputs or stimuli
- how evaluations can be used to revise requirements
- how evaluations can be used to correct an ontology

Blackbox Boundaries

Where are the boundaries of the ‘blackbox’?

- User level
- System level
- Sub-System level
- Component level

- What are the contexts of the blackbox or it boundaries?

Finding the Scope

- *Evaluation Dimensions, A Few*
- *Dimensionality of Evaluation Context for Ontologies,* Hans Polzer
- *Black Box Testing Paradigm in the Lifecycle,* Mary Balboni, Doug Toppin, Thanh-Van Tran
- *A Methodology for the Development and Verification of Expressive Ontologies*, Megan Katsumi

- **Hans Polzer** - Chair Emeritus, Net-Centric Attributes Functional Team & Lockheed Martin Fellow (ret.)
- **Mary Balboni** (Raytheon) – Over 30 years in engineering, worked through many ifecycles of large systems
- **Doug Toppin** (Raytheon) – Over 30 years in engineering, with recent experience with large scale backend commercial / industry internet provider
- **Thanh-Van Tran** (Raytheon) – Over 25 years in Database and software engineering, Certified DBA, experience with large scale database systems
- **Megan Katsumi** (University of Toronto) - Doctoral student of Michael Gruninger.