# A generic name for the most generic ontologies

Robert J. Rovetto

Formal ontologist

rrovetto@terpalum.umd.edu https://ontospace.wordpress.com

Hire for services: https://tinyurl.com/yas7trzy

https://ontologforum.org/index.php/RobertRovetto

#### Recommendation

 Use the name 'generic ontology' or 'general ontology' for signifying the most abstract or generic ontologies.

Min Observation: 'generic/general ontology' appears more accurate as a name than other terms

#### Currently

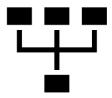
- Distinct names for the most abstract/generic ontologies:
  - foundational, top, top-level, upper, upper-level, core, generic, general, common, ...

# The argument

- a) Starting assumption: the name should most closely match the intended meaning.
- b) The intended meaning for the sort of ontology in question is *the most* abstract, broad or generic ontologies
  - they express/list highly abstract concepts/terms
  - The target domain is that of highly abstract categories and concepts (domain-neutral, domain-independent)
- c) The name 'generic ontology' closely matches the intended meaning
- d) Other names, although arguably analogical, match less, in part because they imply more...

### Limits of the name: 'foundational ontology'

- Appears to assume and/or connote a particular architecture of the ontological system
  - Assumes a preferred direction for generality/specificity
  - The most generic ontology is the foundation, i.e., bottom of an architecture in which more specific ontologies are "on top" of it.



## Limits of the name: 'top/top-level ontology'

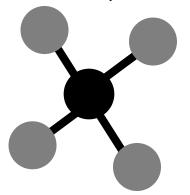
- Appears to assume and/or connote a particular architecture of the ontological system
  - Assumes a preferred direction for generality/specificity
  - The most generic ontology is at the top of an architecture in which more specific ontologies are below it.

# Limits of the name 'upper ontology'

- Appears to assume and/or connote a particular architecture of the ontological system
  - The more generic ontology is at the top of an architecture in which more specific ontologies are below it.
- Uses a word ('upper') that expresses the idea of being subject to gradation.
  - All foundational/top ontologies are upper ontologies, but not all upper ontologies are foundational/top
  - If the intended meaning is the most generic/abstract ontology, then this name less precisely match the intended meaning (the most abstract/generic) than others

## Limits of the name 'core ontology'

- Appears to assume and/or connote a particular architecture of the ontological system
  - No preferred direction of generality/specificity
  - The most generic/abstract ontology is at the *center* of an architecture in which more specific ontologies may link to it...by analogy as (a) extending from it, (b) layering around it, etc.





#### Considerations

- Distinct definitions for the names mentioned.
  - Some ontology developers mean different things for, say, foundational vs. core
  - Some use the term 'categorical ontology' in contrast to these other names
- 'common ontology' is also used by some
  - It also appears more accurate than the other names
- Acknowledge the usefulness of analogy
- Explore the various possible architectures of a set of linked ontologies of varying generality, or of an information system that uses ontologies of varying generality
  - This may further inform any potential architectural implication by names
- What's in a name?
  - I question the utility of having a name for the most abstract ontologies, but the points in this presentation remain valid, I believe.
- Does it matter whether the ontology aims to model or express both individuals and categories, or only abstracta, ...?

# Closing

Observation: In other names, the degree of generality is expressed through a potential architectural, if analogical, assumption. The degree of abstraction is indirectly expressed in the name. Whereas, it is directly expressed in the name 'generic ontology'

#### **Recommendations:**

- if using a name, use the name 'generic ontology' or 'general ontology' or 'common generic ontology' for signifying the most abstract or generic ontologies.
- 2. Do not use 'upper ontology' to exclusively signify the most generic/abstract/broad ontologies

#### Minimum Observation/Take-away:

 'generic/general ontology' or 'generic common ontology' appears more accurate as a name