A generic name for the most generic ontologies

Robert J. Rovetto
Formal ontologist
rrovetto@terpalum.umd.edu
https://ontospace.wordpress.com
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
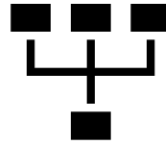
Currently

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

The argument

- Starting assumption: the name (the phrasing of a term) should most closely match the intended meaning.
- The intended meaning for the sort of ontology in question is the most abstract, broad or generic ontologies (they have the most abstract/generic concepts or terms)
- The name 'generic ontology' closely matches the intended meaning
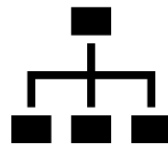- Other names, although arguably analogical, less closely match, in part because they imply more…

Limits of existing names: 'foundational ontology'

- Assumes 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 'top/top-level ontology'

- Assumes 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.
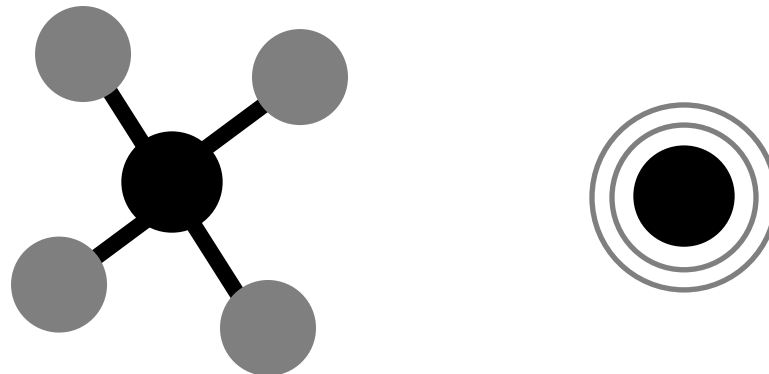
Limits of 'upper ontology'

- Assumes 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 'core ontology'

– Assumes 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 as well
- 'common ontology' is also used by some
  - It also appears more accurate than the other names mentioned in the is presentation.
- 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.

Closing

Recommendations:

1. 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 ontologies

Minimum Observation/Take-away:

1. 'generic/general ontology' appears more accurate as a name than other terms.