Aaron Loehrlein University of British Columbia April 9, 2013

# General Principles of Taxonomies

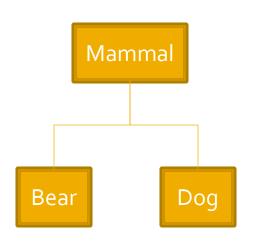
#### **Taxonomies**

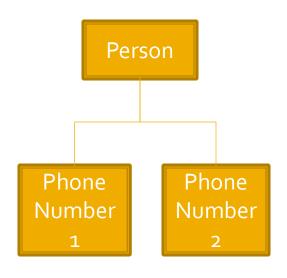
- Systems that use meaningful principles to group, arrange, and/or describe items.
- There are many different types of taxonomies, each with their own strengths and weaknesses.

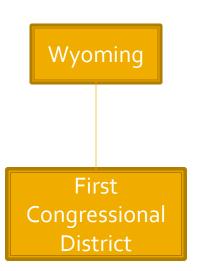
#### Examples of taxonomies

- Sequences of categories
  - E.g., grocery lists
- Hierarchies
  - E.g., biological taxonomies of species
- Ontologies
  - An organization of specific types of classes and relationships
- Others
  - Anatomical charts

### Hierarchy

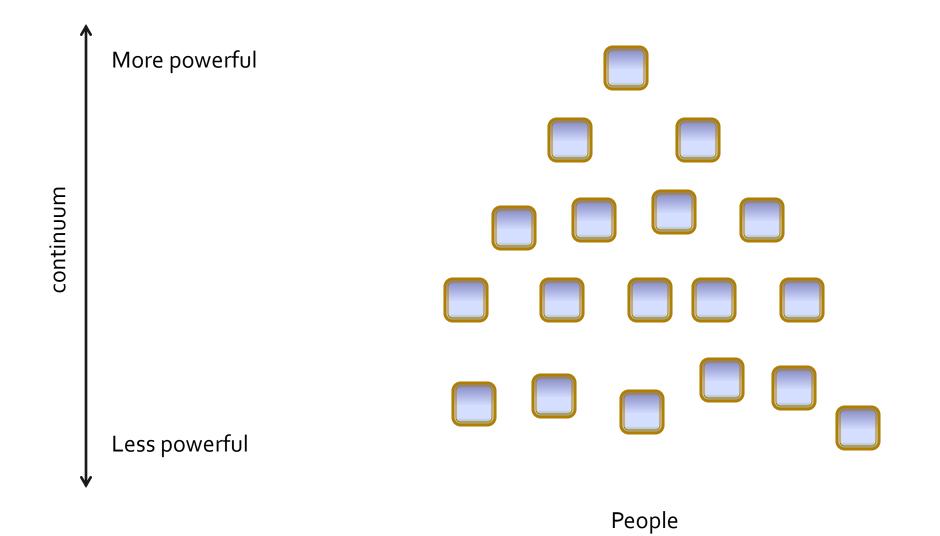




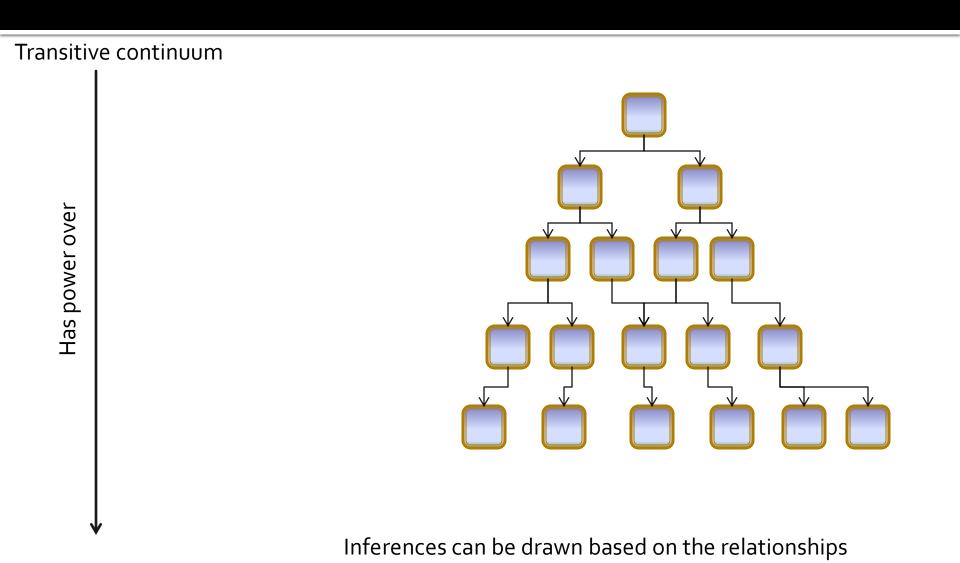


One-to-many Hierarchical One-to-many Non- hierarchical One-to-one Hierarchical

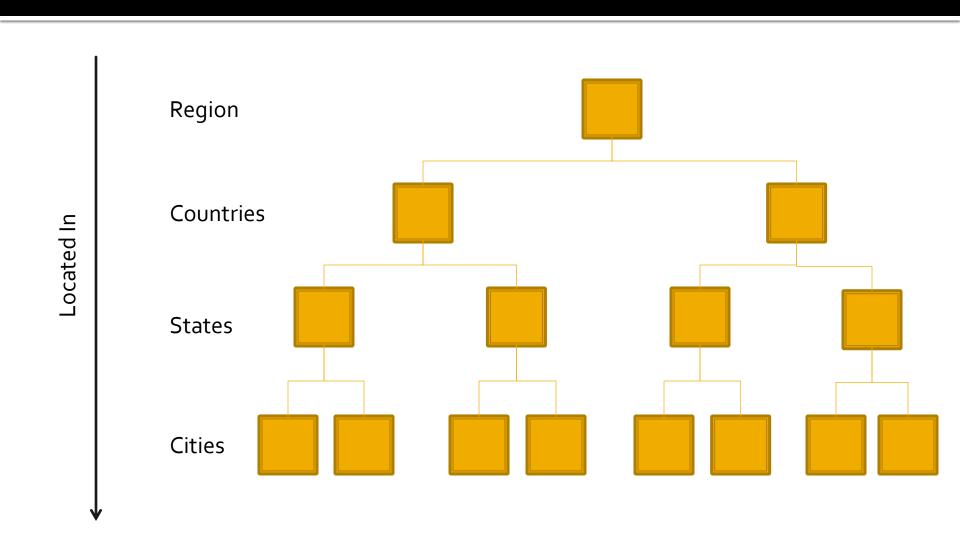
## Hierarchy



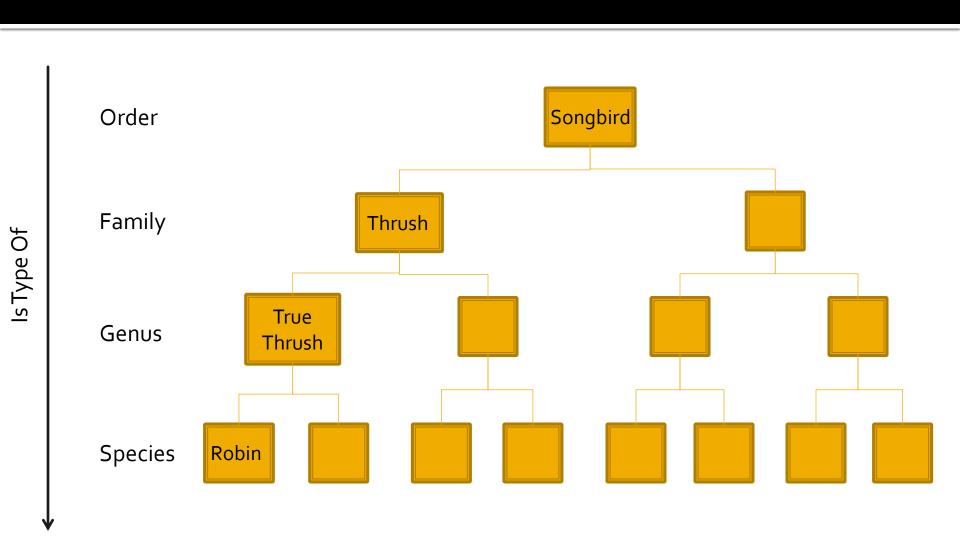
## A hierarchy with relationships



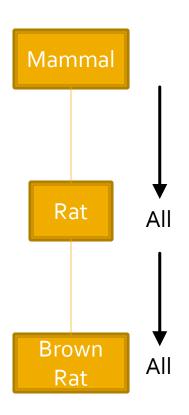
#### Relationship: Located in

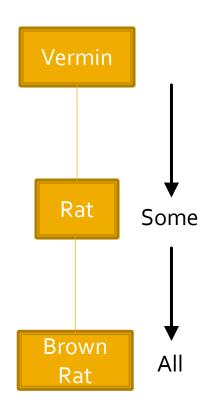


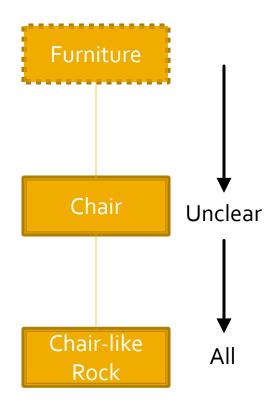
### Relationship: Generic



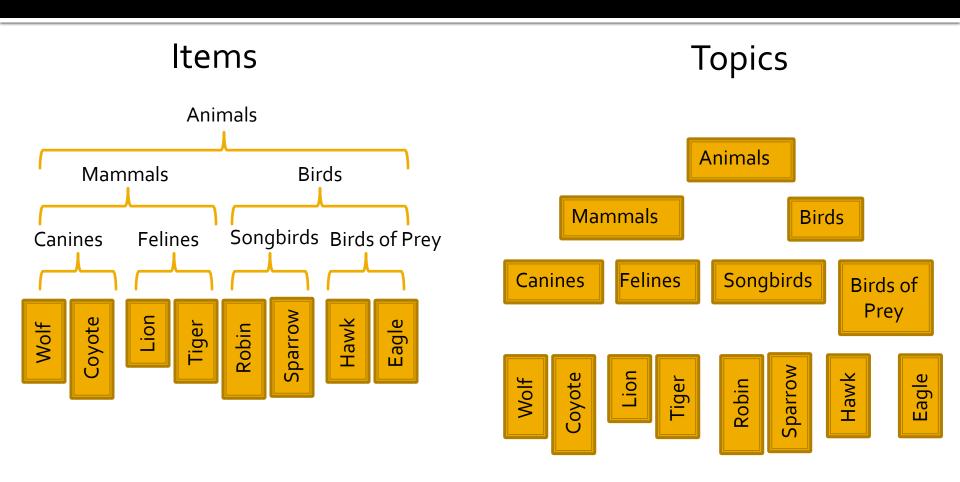
#### **Inclusion Sets**







### Organization of Items vs Topics



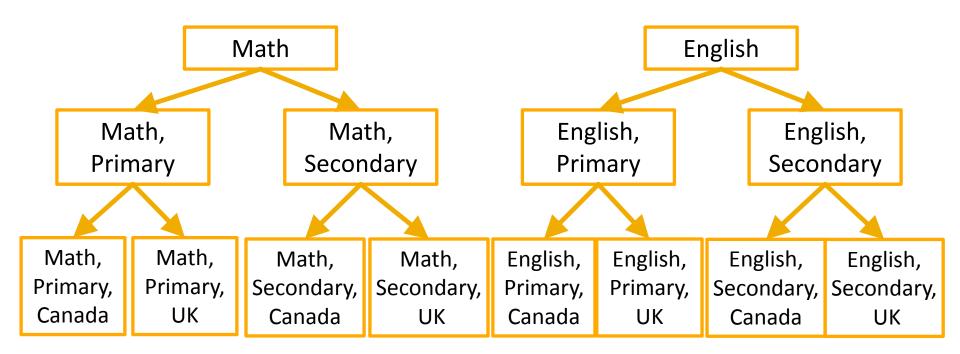
#### **Faceted Classification**

#### **Facets of Education**

**Discipline:** *Math, English* 

**Level:** *Primary, Secondary* 

**Location:** *Canada, UK* 



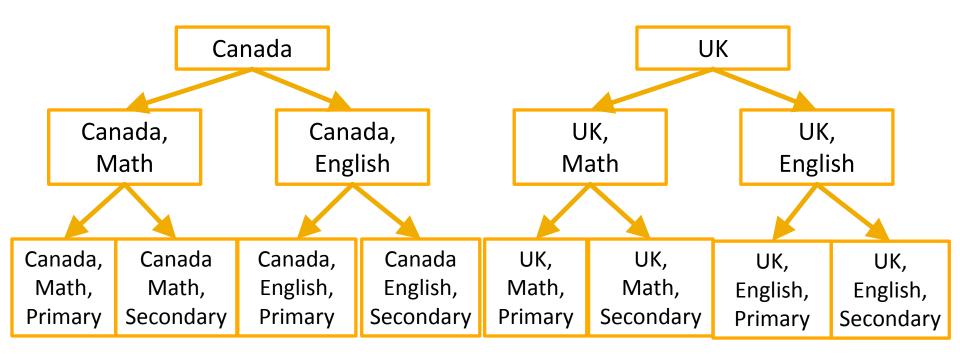
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# Ontologies

