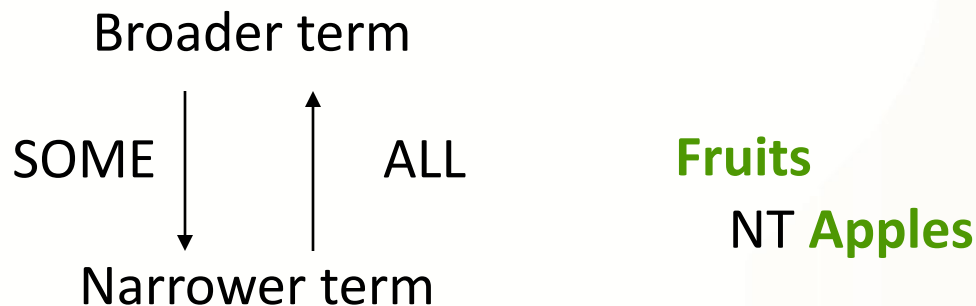


Hierarchical Relationships: Asymmetrical reciprocal relationships



Three types:

1. Generic - Specific
2. Common noun - Proper noun (instance)
3. Whole – Part



1. Generic - Specific:

Category or class

- members
- more specific types

Examples:

Plants

NT **Trees**

Financial services

NT **Investment services**

Romance languages

NT **Italian**

Narrower term “is a”/ “are a kind of” broader term



2. Instance:

Common noun
– Proper noun

Examples:

National parks
NT **Grand Canyon**

Children's writers
NT **Rowling, J.K.**

Holidays
NT **Thanksgiving**

Narrower term “is an example of” broader term



3. Whole - Part:

Concept or Entity

– *integral* part

– subentity

Examples:

U.S. Congress
NT **U.S. Senate**

Colorado
NT **Denver**

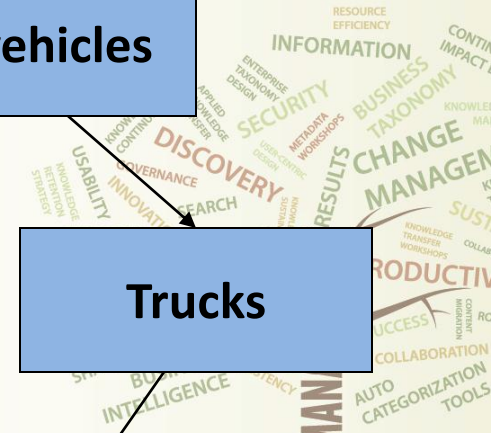
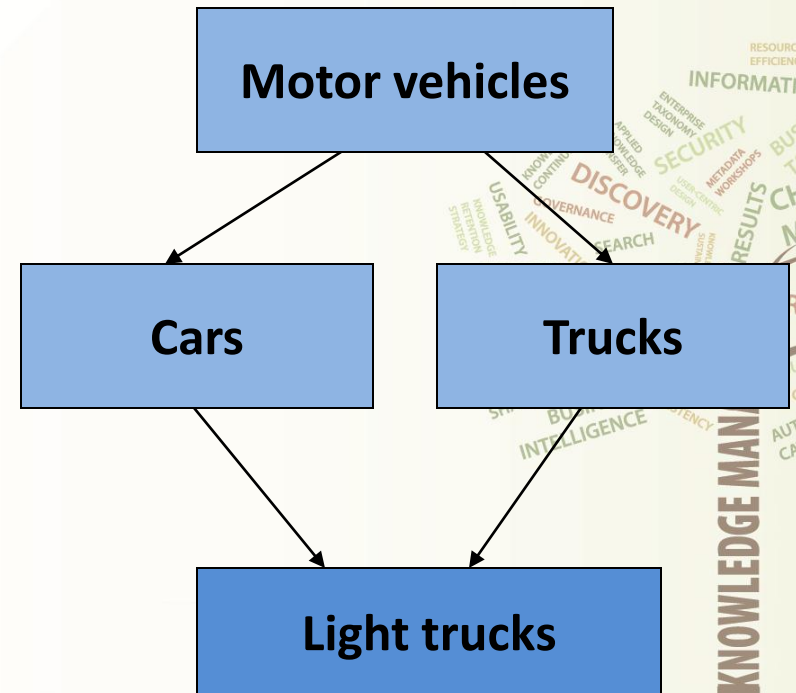
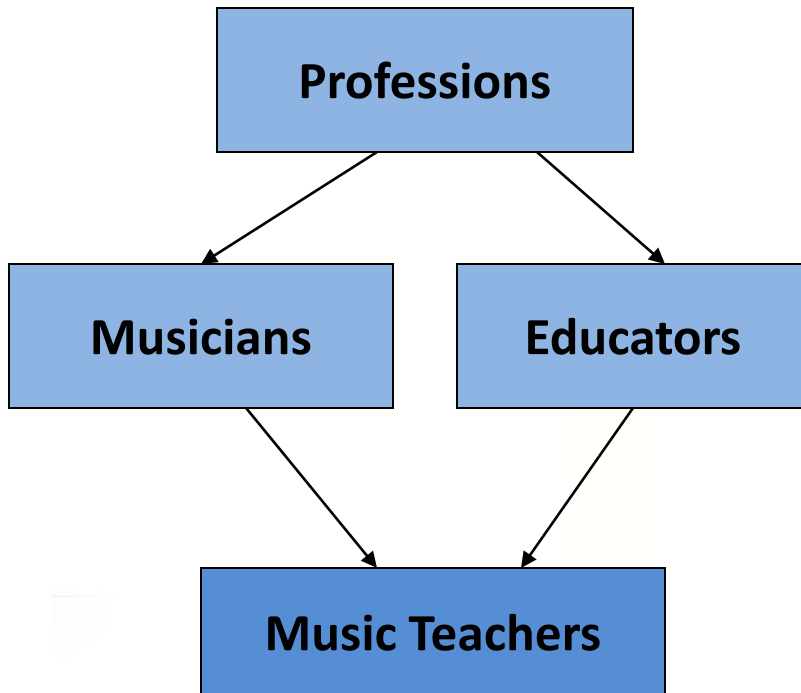
Digestive system
NT **Stomach**

Narrower term “is in” broader term



Polyhierarchies – a term having more than one broader term

- Based on generic relationship



Polyhierarchy is useful when...

- It is obviously logical for select terms (cross-overs/hybrids, e.g. Music teachers or Light Trucks)
- It is indicated by different stakeholder views
- Indexers/taggers browse the taxonomy hierarchically
- End-user testing/input (e.g. card-sorting) indicates users are split as to where in the hierarchy a term belongs



Retail website case study example:

Health & Fitness

- › Portable Fitness Electronics
- › Fitness GPS Watches

Car, Marine & GPS

- › GPS Navigation
- › Handheld GPS
- › Fitness GPS Watches

Exercises taxonomy case study example:

Back Exercises

- › Dead Lifts

Hamstring Exercises

- › Dead Lifts



Polyhierarchy is *not* so good when...

- It violates hierarchical relationship standards
- It becomes excessive, perhaps more common than mono-hierarchies
- It is the result of different kinds of a categorization, and the presence of different kinds of categorization is confusing
- It is a small taxonomy and the user doesn't need or expect polyhierarchy



Multiple, potentially confusing, categorizations:

- Place names in hierarchies for both geographic location and for place type
- Products in hierarchies for both material and for use
- Exercises in hierarchies for both body part and purpose/type (strength, endurance, etc.)

➤ “It’s OK, we can have polyhierarchies”
This is not always the best solution.

➤ Maybe facets (multiple filtering criteria) should be used instead of polyhierarchy.



Violating hierarchical relationship standards

- Might be OK in some cases in some taxonomies
- But avoid overuse in polyhierarchies

Case study example:

The taxonomy does not support associative relationships.

- **Accessories** as a narrower term to a product category
- **Services** as a narrower term to a product category

Computers & Tablets

Laptop & Netbook Computers
Tablets, iPads & E-Readers
Desktop & All-in-One Computers
Monitors
Mice & Keyboards
Printers
Hard Drives & Storage
Computer Memory
Video Cards & PC Components
Networking & Wireless
Software
Computer Accessories
Computer Setup & Services

RESOURCE
EFFICIENCY
CONTINUING
IMPACT EV
INFORMATION
SECURITY
BUSINESS
TAXONOMY
KNOWLEDGE
MAP
CHANGE
MANAGEMENT
SUSTA
PRODUCTIV
SUCCESS
COLLABORATION
AUTO
CATEGORIZATION
TOOLS

KNOWLEDGE MANAGEMENT

Polyhierarchy Recommendations

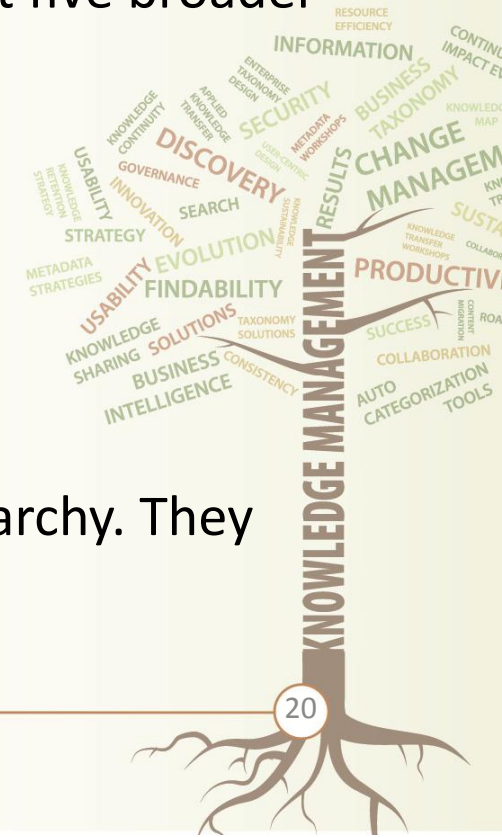
Might be better *not* to have polyhierarchies when the taxonomy is small and the number of top-level categories are few

Case study: Client management documents of a financial services company has 114 topical terms categorized with just five broader terms:

- Account Information
- Client Information
- Client Status
- Disclosures & Notifications
- Approvals/Guidance

Decided against polyhierarchies.

Reason: Repeat users can memorize the small hierarchy. They don't expect polyhierarchy here.



Some is good. More isn't necessarily better.

- Polyhierarchies are best for isolated terms that can fall into two categories.
- Polyhierarchies can become too many in cases of overlays of two different categorization methods for numerous terms. (Facets/filters may be better.)
- Polyhierarchies are useful, no matter how extensive, in term-centric thesauri (i.e., for manual indexing)
- Polyhierarchies should be more limited in hierarchically displayed taxonomies



