

I'm a Taxonomist... and So Can You!

Taxonomy Boot Camp London 2019



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Authority File

Synonym Ring

Taxonomy

Thesaurus

Ontology

Flat list

Authoritative
names



Alternate
labels



Hierarchy



Associative
relationships

Other fields



Structured/
dimensional
relationships



Domain of Controlled Vocabularies (“Taxonomy”)

Martin Heidegger (1889-1976)

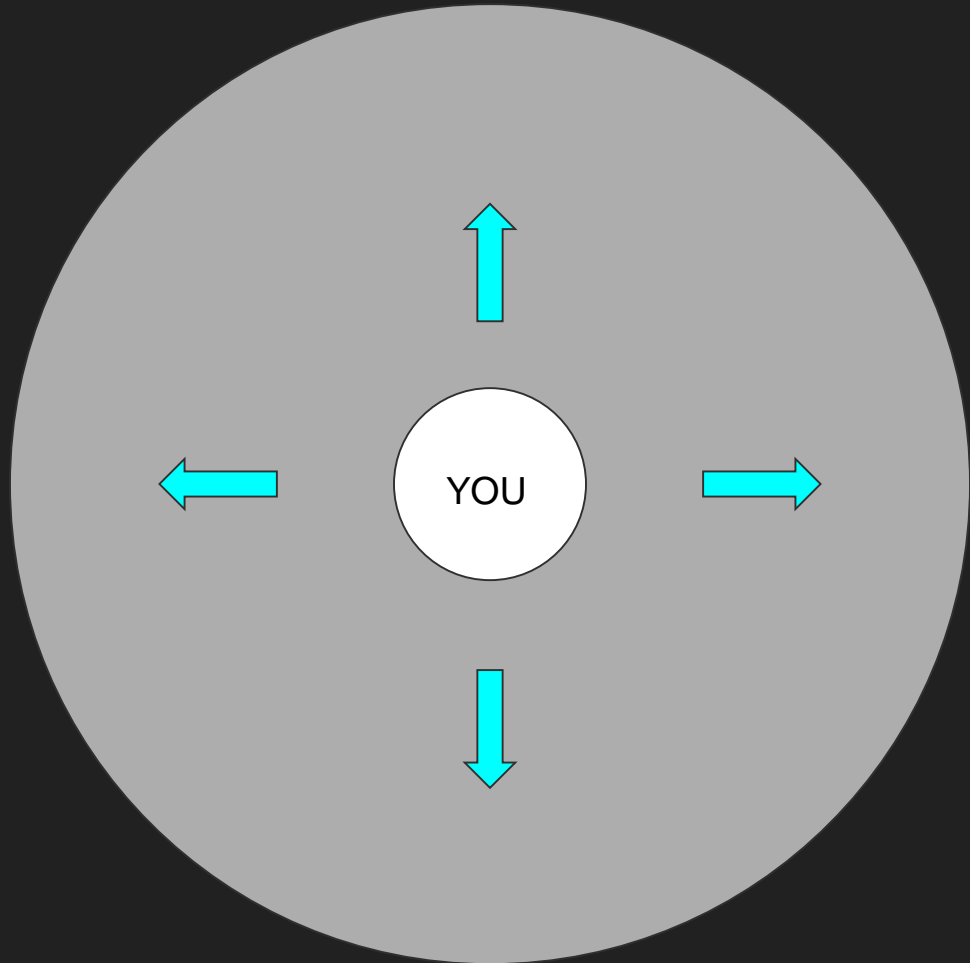
“What is metaphysics?” The question awakens expectations of a discussion about metaphysics. This we will forego. Instead, we will take up a particular metaphysical question. In this way it seems we will let ourselves be transposed directly into metaphysics. Only in this way will we provide metaphysics the proper occasion to introduce itself.

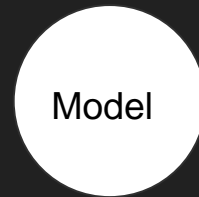
Heidegger, “What is Metaphysics?”, published in [Basic Writings](#), trans. and ed. David F. Krell, Harper Collins, 1977

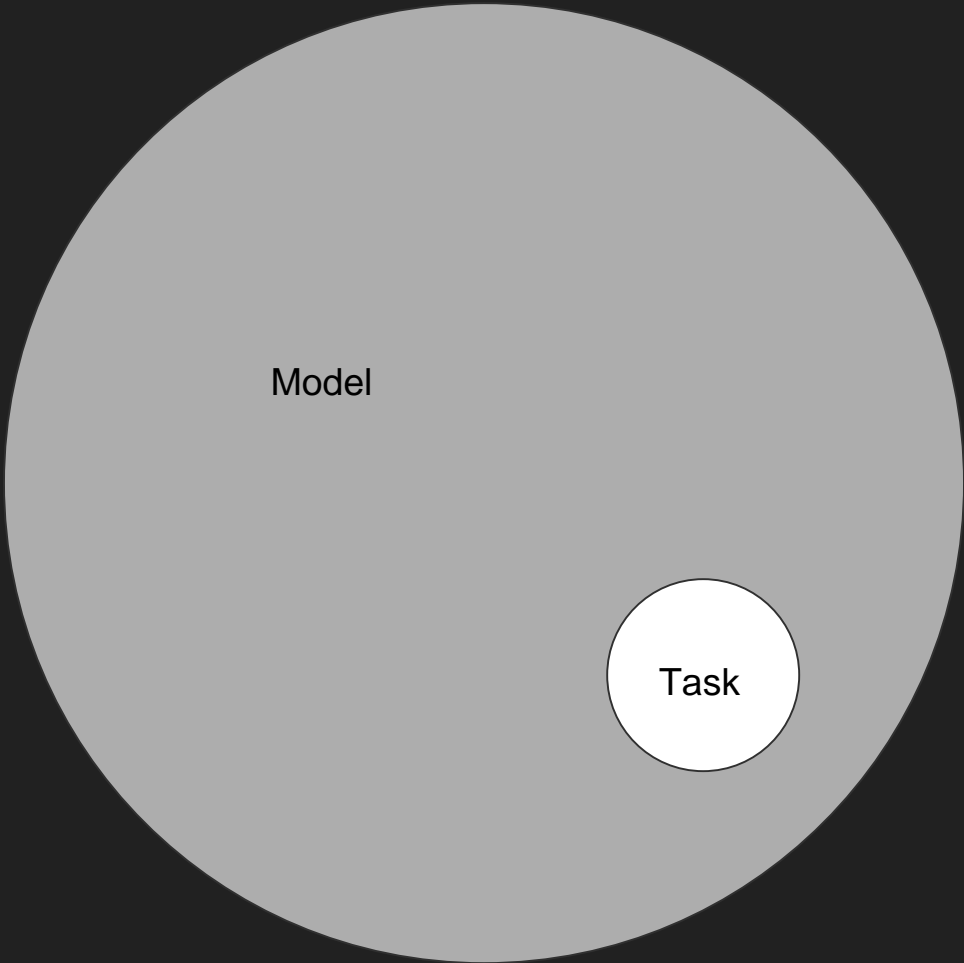


YOU









Bob Kasenchak (1973-)*

“What is taxonomy?” The question awakens expectations of a discussion about taxonomy. This we will forego. Instead, we will take up a particular taxonomic question. In this way it seems we will let ourselves be transposed directly into taxonomy. Only in this way will we provide taxonomy the proper occasion to introduce itself.

*With apologies to Heidegger



FRAME 1

On Conference Talks



Problem: what kind of talk is this?

It's just the beginning

Types of Conference Talks?

- Theoretical
- Revolutionary
- Reassuring
- Practical
- Funny
- Sharing
- Technical
- Controversial
- Short
- Product/Book/Service Plug

Types of Conference Talks?

- Solo
- Co-presenting
- Panelist
- Panel moderator
- Discussion leader

Types of Conference Talks?

- Keynote
- Plenary
- Lightning/Short
- Session [?]
- Workshop
- Product/Service
- Case Study

Types of Conference Talks?

- Technical
- Ethical
- Big picture
- Motivational
- ...?

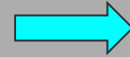
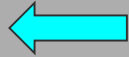
<https://www.etprofessional.com/10-types-of-conference-talks>

<https://smallbiztrends.com/2013/01/conference-speaking-opportunities-value.html>



THE UNIVERSE OF
CONFERENCE TALKS

YOU



FRAME 2

On Motorbikes and Pipes



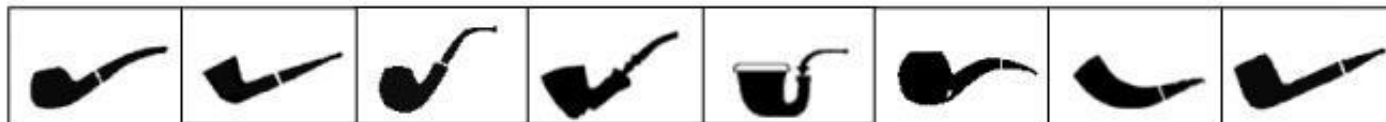
Iwan Ries & Co. Pipe Shape Chart



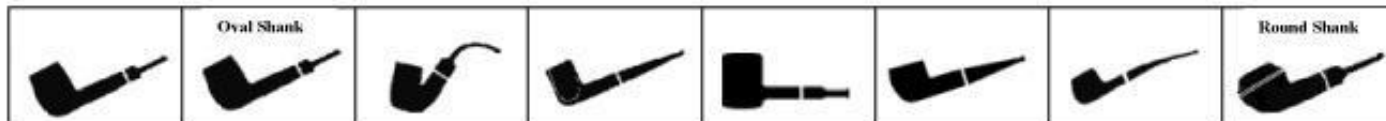
Apple Bent Apple Author Billiard Bent Billiard Blowfish Brandy Bulldog



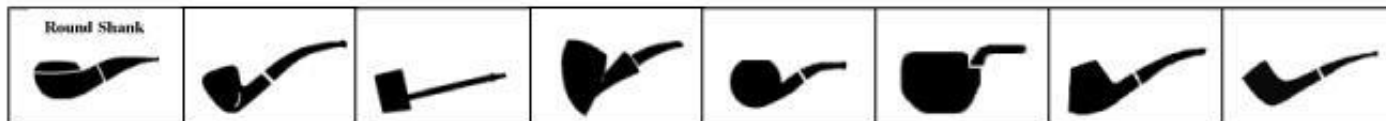
Bent Bulldog Calabash Canadian Oval Shank Cavalier Cherrywood Chimney Churchwarden Cutty



Diplomat Dublin Egg Freehand Gourd Calabash Hawkbill Horn Liverpool



Lovat Lumberman Oval Shank Oom Paul Panel Billiard Poker Pot Prince Rhodesian Round Shank



Round Shank Bent Rhodesian Strawberry Tankard Tomahawk Tomato Vest Pocket Volcano Zulu

Problem: what is this?

Motorcycle
Moped
Scooter
...?



Zombie Apocalypse Prepper Crossbow Bike

Problem:

How to assign a value to a three-year old
Zombie Apocalypse Prepper Crossbow Bike
for insurance/replacement purposes?

[Unsatisfactory] Solution:
Do a bunch of research

Problem:

How to assign a value to a three-year old
Zombie Apocalypse Prepper Crossbow Bike
For insurance/replacement purposes?

Better Solution: Design an information environment
flexible enough to handle edge cases and including
resources for researching the outliers



THE UNIVERSE OF
VEHICLES

VEHICLES YOU
USUALLY DEAL
WITH

FRAME 3

On Organizational Vocabularies

CLINICAL INTERESTS

Anemia
Aplastic Anemia/Bone Marrow Failure
Autoimmune Disorders
Bleeding Disorders
Bone Marrow/Stem Cell Transplantation
Leukemia
Low Platelet Counts
Low White Blood Cell Counts
Lymphoma
Multiple Myeloma
Myelodysplastic Syndromes
Myeloproliferative Disorders
Pediatric Hematology/Oncology
Sickle Cell Disease
Thrombosis and Hemostasis/Blood Clotting
Transfusion Medicine

SPECIALTY

Hematology (Adult)
Hematopathology
Oncology (Adult)
Pathology – Transfusion
Medicine
Pediatric Hematology/Oncology
Radiation Oncology

RESEARCH INTERESTS

Gene Therapy and Transfer
Health Services and Outcomes Research
Hematologic Malignancy
Hematopoiesis
Hemostasis, Thrombosis, Vascular Wall Bio
Leukocytes, Inflammation, and Immunology
Red Cell Physiology and Disorders
Transfusion Medicine
Transplantation

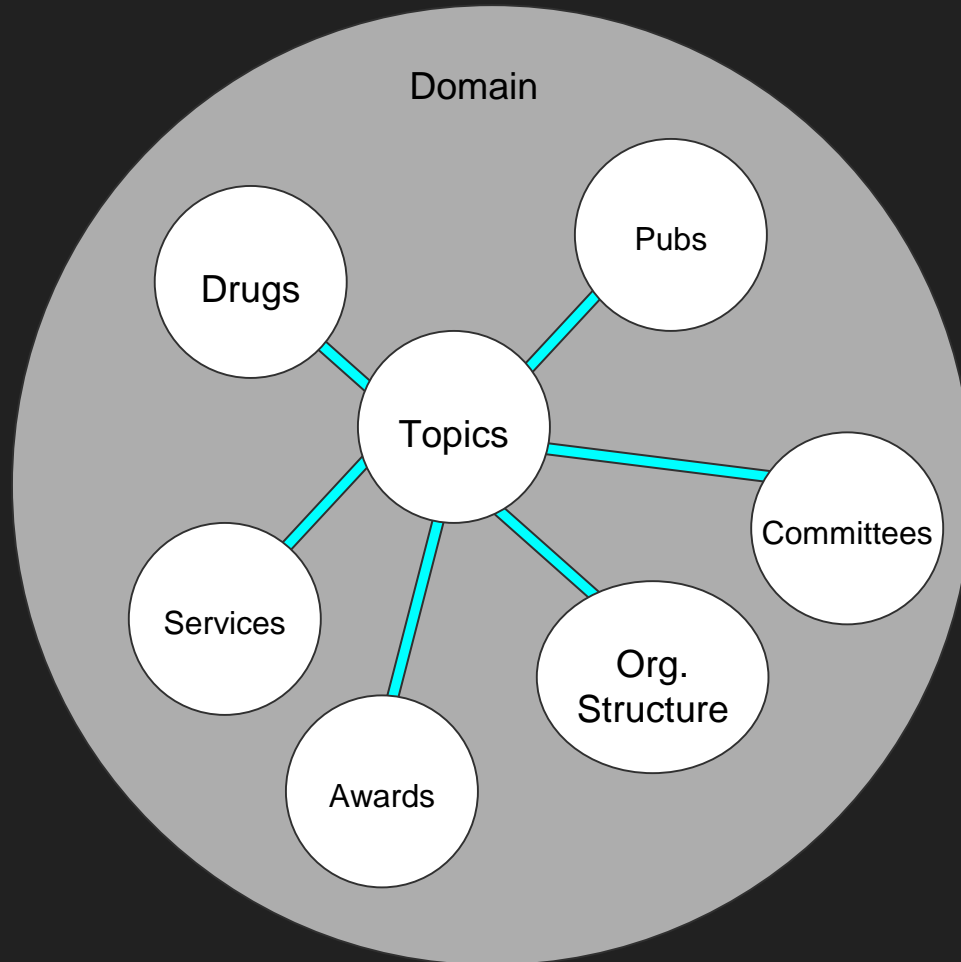
DISEASE AREAS

Anemias
Hematopoietic Cell Transplantation
Hemostasis/Thrombosis
Leukemias
Lymphomas
Lymphoproliferative Disorders
Multiple Myeloma & Waldenstrom's
Macroglobulinemia
Myeloproliferative Disorders
Myelodysplastic Syndromes
Thrombocytopenia

SUBSPECIALTIES

Int Med: Hematology
Int Med: Oncology
Int Med: Hematology/Oncology
Int Med: Transfusion Medicine
Int Med: Other
Peds: Hematology/Oncology
Peds: Hematology
Peds: Oncology
Peds: Other
Path: Laboratory Medicine
Path: Transfusion Medicine
Path: Hematopathology
Path: Other
Rsrch Sci: Biochemistry/Molecular
Biology
Rsrch Sci: Biophysics/Physiology
Rsrch Sci: Immunology/Microbiology
Rsrch Sci: Oncology
Rsrch Sci: Hematology
Rsrch Sci: Cell Biology
Rsrch Sci: Pharmacology
Rsrch Sci: Other
Rsrch Sci: Transfusion Medicine





What Is a Taxonomy Project?

Miller's Law

Or: The Magical Number Seven
(Plus or Minus Two)

The number of objects an average person can hold
in working memory is about seven.



George Armitage Miller (1920-2012), Princeton cognitive psychologist, published one of the most-cited (29K) papers in psychology in 1956 in *Psychological Review*: "The Magical Number Seven, Plus or Minus Two: Some Limits on Our Capacity for Processing Information"

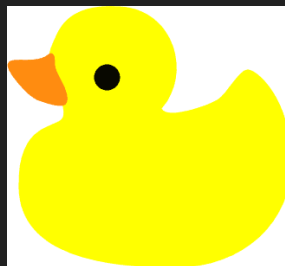
What Is It?



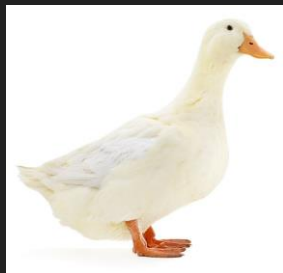
Toy



Bath Accessory



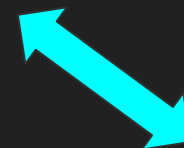
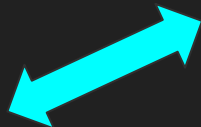
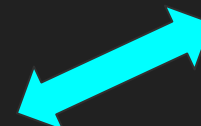
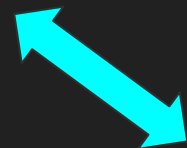
Rubber Duck



Duck



Yellow



**NOT SURE IF
FUNNY**

OR COPYRIGHT INFRINGEMENT



The Laws of Taxonomy

According to Me



Laws of Taxonomy

- 1) The All/Some Law
- 2) The “Where Will People Find It?” Law

Corollary: The Oh shit! Where do I put this? Axiom

The “Where Will People Find It?” Law

User-facing

Not necessarily logical (by strict taxonomy logic)

Not necessarily machine-friendly (for ontology)

Animals

Dogs

Dog food

The All/Some Law

Not user-facing

Logical (by strict taxonomy logic)

Machine-friendly (for ontology)

Animals

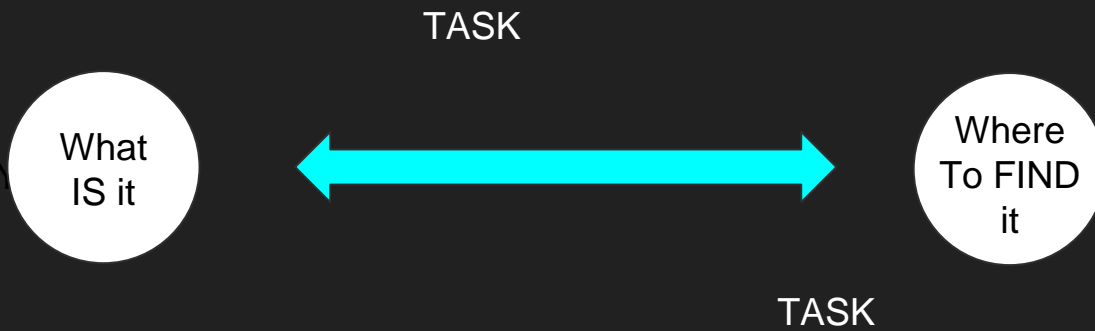
Dogs

Pet food

Dog food

Related associatively but not hierarchically





Structure vs. Findability

Linguistics

Applied Linguistics

Theoretical Linguistics

(NPT: General Linguistics)

Structure vs. Findability

Linguistics

Applied Linguistics

Conversation assessment

Forensic linguistics

Language pedagogy

Literacy

Multilingualism

Translation

Theoretical Linguistics

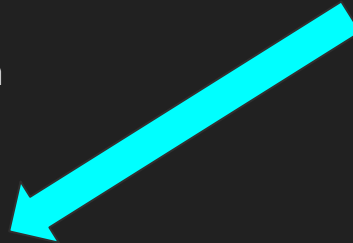
Morphology

Phonology

Semantics

Syntax

Grammar?



Structure vs. Findability

Linguistics

Applied Linguistics

Conversation assessment

Forensic linguistics

Language pedagogy

Literacy

Multilingualism

Translation

Theoretical Linguistics

Grammar (?)

Cognitive grammar

Functional grammar

Generative grammar

Morphology

Phonology

Semantics

Syntax

Structure vs. Findability

Linguistics

Applied Linguistics

Conversation assessment

Forensic linguistics

Language pedagogy

Literacy

Multilingualism

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Grammar

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Phonology

Semantics

Syntax

Structure vs. Findability

Appliances

Home appliances

Dryers

Microwaves

Ranges

Refrigerators

Bottom-freezer refrigerators

Counter-depth refrigerators

French door refrigerators

Mini refrigerators

Side-by-side refrigerators

Top-freezer refrigerators

Appliances

Home appliances

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Top-freezer refrigerators

Structure vs. Findability

Taxonomist
(Pseudo-)Objective
Standards-based

What
IS it



Where
To FIND
it

Users

Authors/
Content creators

Experts/
Academics/
SMEs

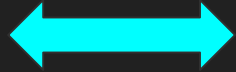
Content

Other stakeholders

Structure vs. Findability

Taxonomist
(Pseudo-)Objective
Standards-based

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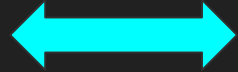
Content

Other stakeholders

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it

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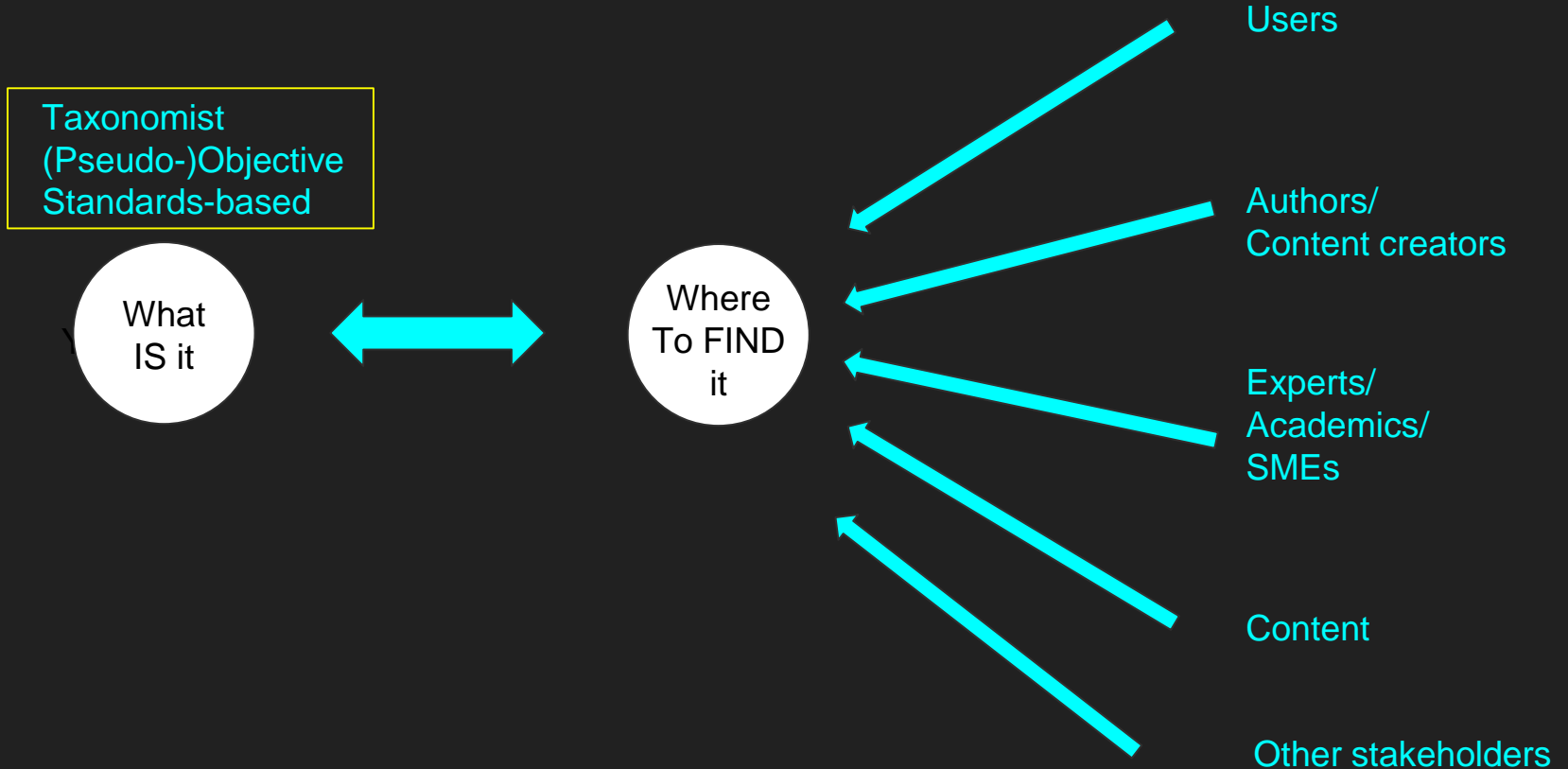
Authors/
Content creators

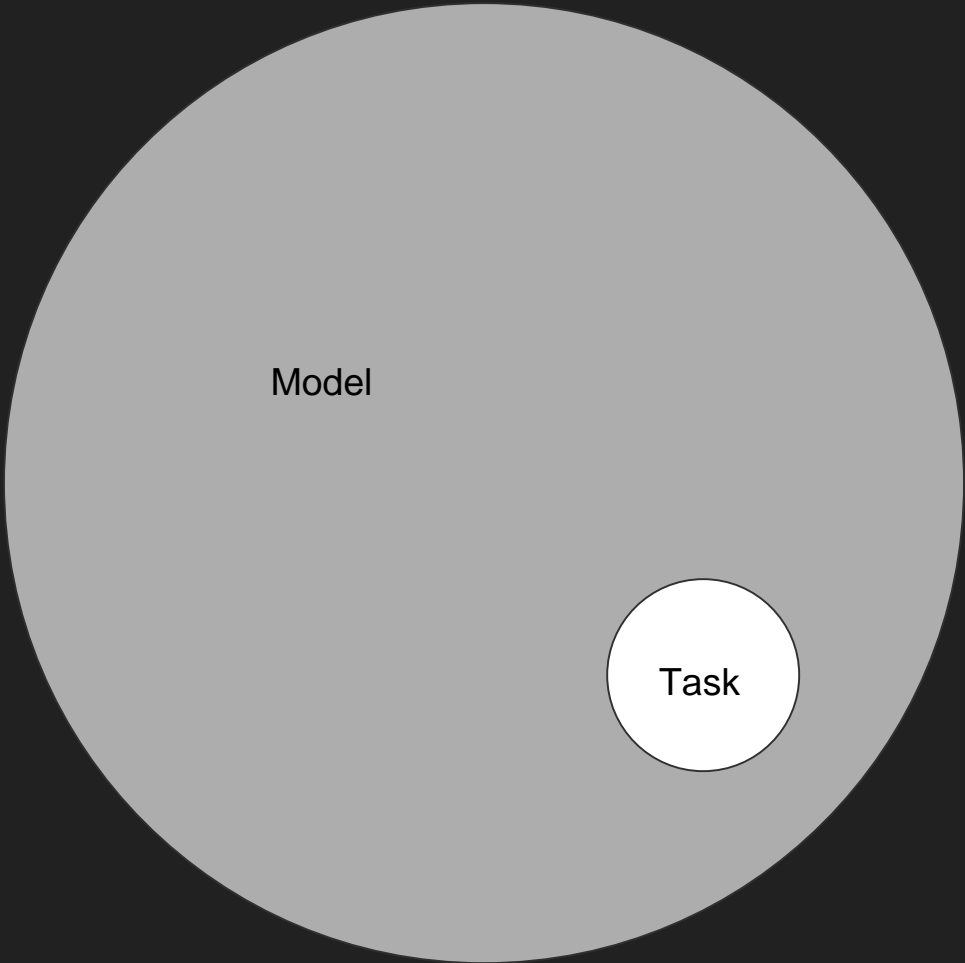
Experts/
Academics/
SMEs

Content

Other stakeholders

Structure vs. Findability





I'm a Taxonomist...
and So Can You!

Thanks.



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