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The ontology of subjects of works

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FRBR's Group 3 entity-types

- **Concept:** "an abstract notion or idea"
 - e.g., economics; romanticism; supply-side economics
- **Object:** "a material thing"
 - e.g., Buckingham Palace; The Lusitania; Apollo 11
- **Event:** "an action or occurrence"
 - e.g., The Battle of Hastings; The Age of Enlightenment; The Nineteenth Century
- **Place:** "a location"
 - e.g., Howard Beach; The Alacran Reef; Bristol

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Other FRBR entity-types

- Group 1
 - **Work; Expression; Manifestation; Item**
- Group 2
 - **Person; Corporate body**

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Some questions (Delsey)

- Do these **entity-types** ...
 - collectively exhaust the sorts of things that works can be said to be about?
 - individually "appropriate and meaningful" for bibliographic purposes?
- Is the "Term" **attribute** sufficient and appropriate?
- Is the "Has as subject" **relationship** sufficient and appropriate?
- How are the paradigmatic and syntagmatic relationships between **entity-instances** to be handled?

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Some proposals (Buizza & Guerrini; FRAR; Delsey; FRSAR WG)

- further **entity-types**
 - Name; Identifier; Time; Subject
- further **attributes**
 - Type of concept; Type of object; Type of name
- further **relationships** between entity-instances
 - Equivalence; Hierarchical (Generic; Partitive; Instance); Associative

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What does it mean to say that *p* is about *z*?

- I. What is the **logical** nature of the relationship between a proposition *p* and the thing that *p* is (said to be) "about"?
 - implications for studies of ...
 - the nature of subject cataloging/indexing
 - the nature of relevance
 - the design of retrieval models for information systems

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What does it mean to say that p is about z ?, cont'd

- What is the **ontological** nature of the thing that p is (said to be) "about"?
 - implications for studies of ...
 - the nature of subjects
 - the design of conceptual models for catalogs

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What is the relationship of z to p ?

- p : x is A -- e.g., Cataloging is exciting.
 - is p about " x " -- i.e., its grammatical subject? (Ryle)
 - is p about x -- i.e., the thing that's denoted by its grammatical subject? (Thalheimer)
 - is p also about " A " -- i.e., its predicate? (Ryle)
 - is p also about A -- i.e., the property of being exciting, or the class of things that are exciting? (Thalheimer)

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What is the relationship of z to p ?, cont'd

- p : x is A -- e.g., Cataloging is exciting.
 - is p about library science (i.e., a kind of which x is an instance)? (Goodman)
 - is p about subject cataloging (i.e., an instance of the kind x)? (Goodman)
 - is p about something relative to certain other propositions? (Goodman)
 - is p about whatever the discourse (in which a sentence expressing p is uttered) is about? (Ryle)
 - is p about any of these things to a certain degree -- i.e., does p provide a certain amount of information about any of them? (Putnam)

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[Digression]

- Goodman: "A memorandum concerning the bearing of the present paper upon problems of information retrieval is planned for The Transformations Project on Information Retrieval, at the University of Pennsylvania, sponsored by the National Science Foundation."

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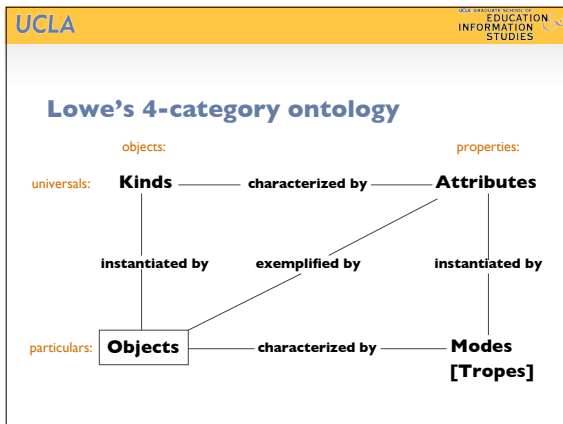
What sort of thing is z ?

- What is the ontological commitment of proposition q : p is about z ?
 - e.g., p (Cataloging is exciting) is about cataloging
 - e.g., p (*Two kinds of power*) is about cataloging

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Some ontological categories

- concrete particulars**
 - e.g., individual physical objects/organisms
- abstract universals**
 - e.g., properties; relations; kinds?
- abstract particulars**
 - e.g., "tropes"; sets?



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4-level semiotic "ontology"

referent	sense	legisign	sinsign
	megatype	type	token
object	concept	word-type	word-token
situation	proposition	sentence	utterance
	work	manifestation	item

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- ### Possibilities
- **separatism:**
 - "subjects" is a new ontological category!?
 - **pluralism:**
 - e.g., some subjects are particulars, some are universals ... [FRBR]
 - **unitarianism:** all subjects are ...
 - sets (of ... what? propositions/works?), and so ... abstract particulars?
 - kinds (of ... what? proposition/work?), and so ... object universals?

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- ### Possibilities, cont'd
- **all subjects are concepts**
 - when we say that *p* is about cataloging (or Buckingham Palace), do we really mean that *p* is about the concept of cataloging (or the concept of Buckingham Palace)?
 - would that mean all subjects should be treated as concepts, or as propositions, or as works?
 - so what?

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- ### A little clarification ...
- concept¹: sense, meaning
 - concept²: kind [Lowe]
 - concept³ [FRBR?]: non-particular
 - type¹: [vs. token]
 - type²: kind [Lowe]

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- ### A little further clarification ...
- hierarchical relationships
 - **generic** (genus/species)
 - e.g., university / research university
 - **instance** (kind/instance)
 - e.g., university / University of Texas
 - **partitive** (whole/part)
 - e.g., university / university department
 - e.g., University of Texas / The iSchool

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Proposals

- Group 3 **entity-types**:
 - Concept**¹; **Subject** [Buizza & Guerrini]
- attribute** of Concept¹:
 - Type**²: object (instance) vs. kind
- relationships** between entity-instances of Concept¹:
 - generic; instance; partitive; genealogical (parent/child); ...
- and ...

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Treating subjects as works

- mirroring in Group 3 the W(E)MI hierarchy of Group 1 entities
 - Concept**; **Term**(/Name?)-**type**; **Term**(/Name?)-**token**
- taking seriously the idea that the subject of a work is not a property that inheres in the work
 - [Goodman: works are relatively (not absolutely) about subjects]
 - subject catalogers/indexers do not uncover the subjects of works: they assign word-tokens to items
- echoing the idea in IR that documents, queries, terms ... are ontologically equivalent

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Thank you. Questions?

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