Interrogating “identity”
A philosophical approach to an enduring issue in knowledge organization

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The enduring issue

- “Culture and identity in knowledge organization (KO)”
- How well do KO systems (KOSs) represent identity and identities?
  i. How well do KOSs represent relationships of identity between classes of documents? How well do KOSs help people explore those relationships?
  ii. How well do KOSs help people organize knowledge about personal/social identities? How well do KOSs help people find documents about identities?

Propositions

- analysis of identity as a relation informs analysis of aboutness and relevance
- the production of identity is the goal of KO
- effective representation of personal/social identities is a complex special case of a general challenge facing “traditional” KO
- the concept of identity is central to KO

Identity is the crisis. Can't you see?
Identity! Identity.

∀x∀y[∀P(Px∀Py)→x=y]
The philosophical approach

- conceptual analysis, of...
- identity / identities
- KO / KOSs
- representation
- goodness (i.e., "quality": cf. María López-Huertas 2008)

Kinds of identity, I

- individual, personal, self
- group, collective, shared, communal, community, social
- cultural, political, economic, psychological, legal, metaphysical, logical, mathematical ...
- racial, ethnic, gender, sexual, national, linguistic, religious, professional, occupational, familial ...
- numerical, qualitative, relative, absolute, transworld, synchronic, diachronic

Kinds of identity, II

- disciplinary, institutional, departmental
- corporate, brand, product, visual
- mistaken, split
- digital, electronic, virtual, online
- user, object, work, bibliographic, record, citation

Related concepts, I

- user identifier, object identifier, work identifier, record identifier
- identity problem, theory, politics, crisis, theft, status, card
- sense of identity
- property, relation, image, role
- privacy, security, confidentiality, trust, reputation, verification, authentication

Related concepts, II

- sameness, identicality, similarity, indiscernibility
- individuality, uniqueness, distinctness, difference, diversity
- authenticity, cohesion, coherence, tolerance, hybridity
- formation, construction, capture, representation, exploration, manipulation, management
- identification, individuation, differentiation, discrimination, instantiation, exemplification, characterization
- organization, classification, categorization

Analytical approaches to identity

- philosophy of logic
- metaphysics
- social / political philosophy
- philosophy of technology
- philosophy of art
- philosophy of documentation / KO
Two conceptions of identity

- as a relation: “the identity of x and y”
- as a property: “the identity of x”

Identity as a relation

- we say that x and y are numerically identical if x is (the same object as) y
- we say that x and y are qualitatively indiscernible if x has (all and only) the same properties as y
- if x is not (the same object as) y, then we say that x and y are numerically distinct or individual
- if x does not have (all and only) the same properties as y, then we say that x and y are qualitatively discernible or dissimilar

Continuous relations and binary relations

- a relation is a continuous relation (i.e., a relation of degree) if its value can be represented by any point on a line
  - e.g., (partial) equivalence, qualitative indiscernibility, similarity, partial correspondence
- a relation is a binary relation if its value can be represented only by one or other of the two poles of a line
  - e.g., complete equivalence, numerical identity, sameness, complete correspondence

Leibniz’s Law

- “No two substances resemble each other entirely and differ in number alone.” (Discourse on metaphysics, 1686)
  1. the principle of the identity of indiscernibles: if x and y are qualitatively indiscernible, then they are numerically identical
  2. the principle of the indiscernibility of identicals: if x and y are numerically identical, then they are qualitatively indiscernible

The identity of indiscernibles

- p: x and y are indiscernible
- q: x and y are identical
- ¬(p ∧ ¬q) = p → q = ¬q → ¬p
- if x and y are indiscernible, they’re identical: indiscernibility is a sufficient condition for identity
  - only if x and y are identical, are they indiscernible: identity is a necessary condition for indiscernibility
  - if x and y are distinct, then there is at least one property that either x has and y hasn’t or vice versa

Questions ...

- Is principle 1 true? Contingently or necessarily?
- Is principle 2 true? Contingently or necessarily?
- answers will depend on what is counted as a property
  - weak versions of the principles include extrinsic properties (i.e., relations to other objects)
  - strong versions exclude extrinsic properties
More questions ...

- What are the identity conditions / criteria to be used in the process of identification?
- What are the criteria for individuation (determining identity vs. individuality)?
  - e.g., Under what conditions is document x the same document as document y?
- What are the criteria for instantiation (determining similarity vs. dissimilarity)?
  - e.g., Under what conditions is document x an instance of the same work, class, kind, type as document y?

Approaches to personal/social identity

- developmental psychology
- social psychology
- cultural anthropology
- cultural studies
- political science/theory
- social/political philosophy

Personal identity

- the property (or set of properties) that identifies a person
- ... i.e., that distinguishes one person from another

Social identity

- the property (or set of properties) that identifies a group of persons
- ... i.e., that distinguishes one group of persons from another

Kinds/facets of personal/social identity

- age
- ancestral territory
- ancestry/genealogy
- class
- community
- culture
- discipline/field
- ethnicity
- family
- gender
- group
- history
- hobby/interest
- home/birthplace
- language
- mental ability
- mythical origin
- nationality
- organization/department
- physical ability
- political party
- profession/occupation
- race/phenotype
- religion
- sexual orientation
- skin color
- society
- subculture

Identity as a property, I

- identity as: the property (or set of properties) that x has, in virtue of which it is different (and thus distinguishable) from y
- i.e., the property that x has that makes x individual and/or discernible
- the identity of x is what identifies x
- identity as difference
Identity as a property, II

- identity as: what person a thinks is the property that makes x individual
- ... or what person b projects to others as an image of the property that person a thinks is the property that makes x individual
- ... or what person c thinks is the image projected by person b of the property that person a thinks is the property that makes x individual
- ...

The process of identification, I

- identification is an action ...
- ... carried out by an agent/subject ...
- ... on an object
- the result of the action is the naming of the property that identifies the object (i.e., the class instantiated by the object)

The process of identification, II

- if the agent is the object, then identification is a process of self-categorization or affiliation ...
- ... engaged in by an agent acting (more or less) autonomously
  - i.e., free of logical constraints

Properties of acts of identification, I

1. subjectivity
   - objective: what is the identity of object x
   - intersubjective: what most people think is the identity
   - subjective:
     - what I think is the identity
     - what I think most people think is the identity
     - what I think you think is the identity

Properties of acts of identification, II

2. singularity (of the object)
   - elementary: a single object
   - collective: multiple objects, grouped
3. intentionality (of the object)
   - persons
   - things
4. singularity (of the agent/subject)
   - elementary: a single agent
   - collective: multiple agents, grouped

Properties of acts of identification, III

5. identity relation of the subject to the object
   - self
   - other
6. power of the subject relative to the object
   - dominant
   - subordinate
Properties of acts of identification, IV

7. particularity
   • numerical: distinguishing particular things
   • qualitative: distinguishing kinds of things

8. intrinsicality of the identifying property
   • intrinsic to the object
   • extrinsic to the object

Empirical research questions

• What (kinds of) processes (affective, behavioral, cognitive) are involved in individuals’ affiliating with and prioritizing particular identities?
• What (kinds of) factors affect individuals’ affiliating with and prioritizing particular identities?
• In what ways and to what extents do individuals’ affiliations with and prioritizations of particular identities affect decision-making, action?

KO

• cf. Joe Tennis (2008): “KO ... is the field of scholarship concerned with the design, study, and critique of the processes of organizing and representing documents that societies see as worthy of preserving.”
• another working definition: KO is the practice (and theory) of building KOSs that work well

General KO research questions

• the design question: How ought subjects, and the relations between them, to be represented in a KO system?
  • [answer: In the ways that evaluations tell us are best]
• the (meta)evaluation question: How do we evaluate?
  i.e., How do we decide how subjects, and the relations between them, ought to be represented in a KO system?

Two conceptions of the goal of KO

• cf. (e.g.) Raya Fidel’s (1994) identification of two conceptions of the goal of indexing:
  • document-centered
  • user-centered
• two conceptions of the goal of KO:
  • description-oriented
  • retrieval-oriented

Description-oriented KO

• goal: to produce a representation/model of the “universe of knowledge” (or a part of it)
• evaluation criteria:
  • internal
    • coherence; richness; simplicity; elegance
  • external
    • correspondence with the way things really are
    • correspondence with the way someone thinks things are
“Correspondence with the way someone thinks things are”

- different people see reality in different ways
- every KOS is “biased” in the sense that every KOS reflects the view of reality of its designer(s)
- Can any KOS either (i) simultaneously reflect the views of everyone, or (ii) simultaneously reflect the views of every one of its users?
- that it should, is an expression of a **communitarian** (rather than contractarian) principle of **social justice**

The just KOS

- the just KOS is one that supports the distribution of cultural resources ...
- ... without violating the **rights** or liberties of particular **groups** or communities and their members
  - especially minorities and other groups that have historically been oppressed by those in power
- (desirability ≠ possibility)

Retrieval-oriented KO

- goal: to help KOS users [indexers and searchers]
  (a) improve the quality of access to resources/documents, and (b) benefit from that access
- evaluation criteria:
  - effectiveness
  - efficiency
  - usability

Factors affecting effectiveness

- two conceptions of the **priority** of factors:
  - objectivist
  - user-oriented

Objectivist evaluation

- key measure = the degree of match / **correspondence** between
  (i) the model of reality constructed by the KOS designer and
  (ii) reality itself

User-oriented evaluation

- key measure = the degree of match/correspondence between
  (i) the (explicit) model of reality constructed by the KOS designer, and
  (ii) the (implicit) model of reality constructed by the KOS user [indexer or searcher]
- cf. user-centered indexing: key measure = indexer/searcher consistency
Prospects for a taxonomy of kinds of relations

- cf. Rebecca Green 2008: “Relationships are at the very heart of knowledge organization.”
- two ways of distinguishing relations:
  - identify properties of the entities being related
  - identify intrinsic properties of the relations themselves

Kinds of entities being related

- worlds: states of affairs
- works: propositions; concepts
- words: documents
- persons
- ... etc.
- (bundles of properties?)

Relations in themselves

- kind / instance
- whole / part
- genus / species
- this / that
- ... etc.

Aboutness, I

- Subject A is about
- similar
- Doc 1 is about Doc 2
- Subject A is about
- Subject B

Aboutness, II

- Subject A is about
- similar
- Doc 1
- Subject B
- similar
- Doc 2
- Work A
- instantiates
Work-instantiation, II

- Doc 1 instantiates Work A
- Doc 2 instantiates Work B

Relevance, I

- Doc 1 is relevant to Subject A
- Doc 2 is relevant to Subject B

Relevance, II

- Doc 1 is relevant to Subject A
- Doc 2 is relevant to Subject B

Aboutness = relevance

- aboutness, (work-instantiation,) and relevance are equivalent in structure
- an understanding of identity is helpful in analyzing that structure

Subjects aren’t natural kinds

- subjects (and works) are nominal kinds
- subjects are not properties of documents: they are properties of intentional acts
- judgments of aboutness, (work-instantiation,) and relevance are arbitrary and subjective

Identity is the goal of KO, I

- aim of IR: to produce identity between sets of aboutness judgments and sets of relevance judgments
- aim of indexing: consistency between the aboutness judgments made by indexer a with respect to subject x at time t₁, and the relevance judgments made by searcher b with respect to subject x at time t₂
Identity is the goal of KO, II

- aim of KO: **consistency** between the KO system designer’s view of the world (i.e., the aggregate of the extensions of all subject classes, and the relations between them), and the KO system user’s view

The challenge for KO

- there are many views of the world! ...
- ... so KO systems must be **dynamic and adaptive**

Two classes of relation-types

- **set** (class / kind / type)
  - **element** (instance / token)
  - e.g., aboutness; relevance
- **set** (class / kind / type)
  - **set** (class / kind / type)
  - e.g., genus-species; broader–narrower subject

Inter-class relations

<table>
<thead>
<tr>
<th>Facet A</th>
<th>Facet B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject A1</td>
<td>Subject B1</td>
</tr>
<tr>
<td>Doc 1 Doc 2</td>
<td>Doc 2 Doc 3</td>
</tr>
<tr>
<td>Subject A1 Doc 1</td>
<td>Subject B1 Doc 2</td>
</tr>
<tr>
<td>Subject A1 Doc 2</td>
<td>Subject B1 Doc 3</td>
</tr>
</tbody>
</table>

Question ...

- Is the set of relation-types commonly instantiated in KO systems adequate for the representation of relationships between classes of (documents about) people?

Identities as subjects

- some subjects of documents are the identities of the persons to whom the documents are relevant
- one way in which people’s views of the world vary is in their images of personal/social identities ...
- ... which intensifies the challenge for KO
Recap: General KO research questions

- the **design** question: How ought subjects, and the relations between them, to be represented in a KO system?
  - answer: In the ways that evaluations tell us are best
- the **(meta-)evaluation** question: How do we evaluate?
  i.e., How do we decide how subjects, and the relations between them, ought to be represented in a KO system?

Specific KO research questions

- the **design** question: How ought identities-as-subjects, and the relations between them, to be represented in a KO system?
  - answer: In the ways that evaluations tell us are best
- the **(meta-)evaluation** question: How do we decide how identities-as-subjects, and the relations between them, ought to be represented in a KO system?

Recap: Criteria for goodness of representation

- **description-oriented**
  - intrinsic: coherence, richness, simplicity, elegance
  - extrinsic: correspondence, justness
- **retrieval-oriented**
  - effectiveness, efficiency, usability

Factor affecting effectiveness

- one component of any strategy designed to maximize the degree of inter-categorizer consistency is ...
  - ... to ensure that categorizers’ **self-identities** are **reproducible** in the KOS

A bill of rights for autonomous KOS users?

- I have the right ...
  - ... to find resources that are relevant to any one or any combination of my **multiple** personal identities —as effectively, efficiently, and easily (i) as I would find resources about any other subject, and (ii) as anyone would find resources about any of their personal identities
  - ... to use, and expect others to understand, my own vocabulary in communicating about identities-as-subjects —without hurting effectiveness, efficiency, or ease of retrieval
  - ... to describe identities-as-subjects, including my own, **differently** in different situations and at different times —without hurting effectiveness, efficiency, or ease of retrieval

Complexities

- **multifacetedness** of personal identities
- individual differences in prioritization of facets
- intra-facet **mixedness**
- intra-facet multidimensionality
- **vagueness**
Multifacetedness of personal identities

- every person may have “multiple identities” ...
- ... in the sense that each person may simultaneously affiliate with multiple classes, each of which is defined by a property instantiating a different facet
- e.g.: age; gender; nationality; etc.

Individual differences in prioritization of facets

- different persons prioritize their affiliations in different ways, at different times
- different persons who have the same set of multiple identities may have different “defining characteristics”
- e.g., a person who self-identifies as a middle-class, racially-mixed, lesbian woman may self-identify most strongly as a middle-class person or as a racially mixed person or as a lesbian or as a woman or as a middle-class woman or ...

Intra-facet mixedness

- every person may have “multiple identities” ...
- ... in the sense of affiliating with multiple classes defined by different properties in the same facet
- e.g., a racially mixed person may self-identify as a person of one race and as a person of another race, at different times or even at the same time

Intra-facet mixedness, II

- Maria Root’s “A bill of rights for racially mixed people”: “I have the right ...
- ... to have loyalties and identification with more than one group of people
- ... to identify myself differently in different situations
- ... to change my identity over my lifetime—and more than once
- ... to identify myself differently than strangers expect me to identify
- ... not to keep the races separate within me
- ... to create a vocabulary to communicate about being multiracial”

Multidimensionality

- some facets aren’t “simple” or unidimensional
- e.g., sexual orientation?
  - one dimension: homosexuality through heterosexuality?
  - or two: homosexuality, and heterosexuality?

Vagueness

- the boundaries of the classes with which persons affiliate are vague
- it is seldom clear where one non-natural class ends and another begins
- non-natural classes are not constructed on the basis of shared properties but on the basis of family resemblances
- cf. Wittgenstein, Rosch, Lakoff, Williamson
Desirability ≠ possibility

- Can KOSs deal with the multifacetedness, differences in prioritization, mixedness, multidimensionality, vagueness of identities-as-subjects ...  
- ... in ways that protect the rights of users?

Methods of representing relationships

- traditional library classification: hierarchies
- facet analysis: hierarchies + facets
- critical-theoretic KO: ???
  - IR?
  - tagging?

What the Third Way™ is not about

- removing humans from the process  
- rejecting vocabulary control

What the Third Way™ is about

- advocacy for a “new” kind of structure for representing the relations among documents  
- encouraging people to look at different kinds of relationship (cf. Rebecca Green, DDC)  
- engaging seriously with the challenges for KO presented by analyses of identity and identity-forming processes

Prospects for a philosophy of documentation / KO

- Margaret Egan & Jesse Shera: social epistemology (SE) as a normative foundation for information service design  
- Luciano Floridi: SE alone can’t provide a complete philosophy of information  
- Can metaphysics and ethics of identity fill the gaps?

Thank you.

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