Representing Prosopographical Data for Problem Solving

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Prosopography - a Review

is…
- ✓ study of a group of historical figures that helps elucidate the general characteristics of types in a pre-defined population
- ✓ interested in stereotypes, generalities, common characteristics

is not…
- ✗ biography - interested in motivation
- ✗ onomastics - origin, history & meaning of personal names
- ✗ genealogy - study of pedigree
- ✗ sociography - composition and role of a social group

With prosopography, it is possible to achieve a more accurate description of types of roles and relationships that exist in historical contexts, than would be possible with the analysis of a small number of individuals.

Problem solving : Data Representation

Semantic Data Model

Describes "real world" entities and their properties, including relationships, for a given domain

- human-readable
  - aid to communication and common understanding
- basis for machine-readable data representation
  - logical data model (implementation-specific e.g. relational database, object classes)
  - semantic data model - linked data (RDF)

Three Steps to Semantic Data Model

1. **Define research objectives & constraints**
2. Define entities of interest
3. Define data model

Key themes in prosopography:
- ✓ reveal **connections** between historical individuals
- ✓ utilise a **simplified description** of individuals, their roles and their relationships
- ✓ concerned with the **general external features** of individuals, what they have in common
- ✓ gather together a **large number of descriptions** about individuals

Three Steps to Data Model

1. Define research objectives & constraints
2. **Define entities of interest**
3. Define data model

A prosopographical study is primarily concerned with **individuals, their characteristics and relationships**:

✓ Person
  ✓ identifiers
  ✓ personal name
  ✓ event person participant in
  ✓ role in event
  ✓ relationship to people, groups, organisations, and creative works
✓ Assertions

Three Steps to Data Model

1. Define research objectives & constraints
2. **Define entities of interest**
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The model should focus on the kinds of events typically central to the life of an early modern intellectual, such as
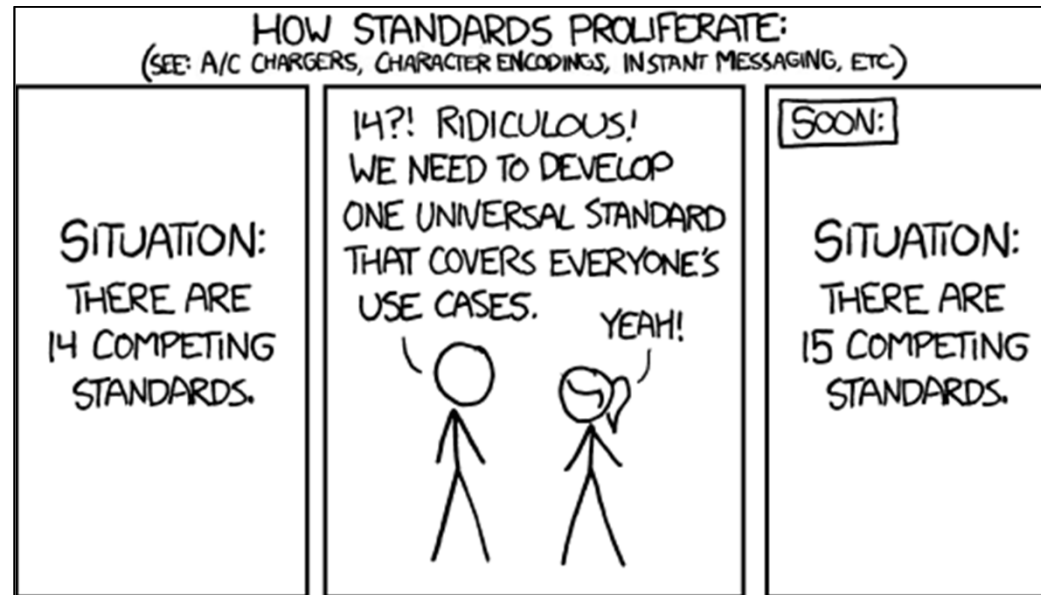
- schooling
- university study
- social contact
- travel
- membership in
- learned societies (formal and informal), and
- professional activities

Three Steps to Data Model

1. Define research objectives & constraints
2. Define entities of interest
3. **Define data model**

Written/graphical representation of entities and their properties

Semantic Data Model Development

Review existing work to model people and networks, including RDF vocabularies: Relationship, Bio, CIDOC CRM

Reuse existing RDF vocabularies if possible to aid data interoperability, reduce development time, increase reuse of RDF data model
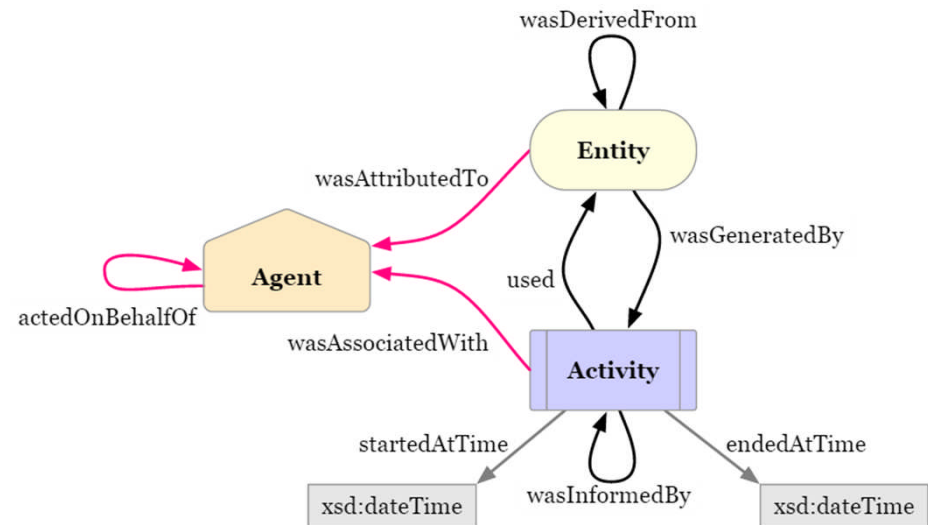
Semantic Data Model Development

Requirement : Relationships in Context

Describe relationship in context in terms of an activity

Review use of W3C PROV-O, to describe relationships in context

Requirement : Qualification of Assertions

Important for data interoperability

review use of PAV ontology and nanopublication RDF representation

Capture information about the provenance of assertions, such as author, creation date, textual source, version

Summary

Describing prosopographical data using **common data model**(s) and making that **data available** in a form so that it can be **shared**, and **integrated** with other data, offers many **new opportunities** for humanists.

A **correct interpretation** of these data, due in part to the **qualitative nature** of the data, and also the **complexity** of the inter-relationships in the network, **provenance** of data, is **dependent on the expertise of the humanist**, and his/her **interpretation of the findings**.

Q&A

Thank you!