Towards the documentation and analysis of scholarly interpretations
(MITE WP3)

Emilio M. Sanfilippo
ISTC-CNR Laboratory for Applied Ontology, Trento, IT
ISTC Catania, IT
emilio.sanfilippo@cnr.it
Any place for experts' interpretations?

Most of the work done in DH:

- Focuses on domain entities of different sorts (artworks, historical events, musical compositions, musical performances, literary texts, etc.)

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**Carnegie Hall Data** (SPARQL Endpoint [link](http://data.carnegehall.org/)) by CH Data Lab

Josquin des Prez's performances in Carnegie Hall Data
Any place for experts' interpretations?

Scholars and critics react to performances

Joseph Horowitz's review in the New York Times about a performance of one of des Prez's musical compositions

At the current state, the formal representation of scholarly claims is mostly left aside...

...although its fundamental role for scholars'/critics' investigations
Make it explicit (MITE)

Single literary text

→ Multiple interpretations, i.e., multiple interpretive data

In particular:

● Large quantities of data
● Highly heterogeneous from a terminological/conceptual perspective
● Supported by means of different aesthetic, cultural, and historiographical categories
● Disagreements and contradictions
Some research questions (within WP3)

How can we support the computational documentation and analysis of critical interpretations of literary texts?

How can we represent fictional literary characters within a modeling framework that takes into account multiple and possibly incompatible characters' interpretations?

How can we handle cases where (characters') interpretations are provided on the basis of different conceptual systems?
Research hypothesis

An observation language (OL):

- Designed in tandem with domain experts (scholars, critics, students)
- To extract some portions of data from the texts of scholars and critics

Goal: To document what experts publicly claim about (the contents of) literary texts, characters, etc. ..

Intuitively:

- An observational language consists of terms and relations whose intended meaning is shared among a working community
- Terms and relations stand for the attribution of properties to the entities in the discourse
Example of observations

An observation attributing to Hamlet the property of *being prince*
Decameron, Tale X, 10 (*Griselda and Gualtieri*), and its interpretations.

Observational language (first-order logic, FOL) designed to capture relations between texts as well as between characters in the texts:

- **Branca**: connects Boccaccio with *Medieval culture*; connection between B. and hagiographic narratives; similarity between *Griselda* and the *Virgin Mary*.

- **Picone**: connects B. with *chivalry* and *courtly literature* – Marie de France’s *Lais*; similarity between *Griselda* and *Fresne*, etc.

- **Candido**: connects B. with *classic culture* – Apuleius’ *Metamorphoses*; similarity between *Griselda* and *Psyche*, etc.
Preliminary work /2

Examples - based on Branca, *Boccaccio medievale*, 1996:

\[
\text{ass}(\text{bmd}, \text{sup}(\text{ass}(\text{tlx}, \text{pat}(\text{gri}))) + \text{ass}(\text{hag}, \text{pat}(\text{mary}))), \\
\text{sim}(\text{griselda}, \text{mary}))
\]

Branca's text *bmd* asserts that the observation \text{ass}(\text{tlx}, \text{pat}(\text{gri})) and \text{ass}(\text{hag}, \text{pat}(\text{mary})) supports the observation of similarity between Mary and Griselda.

Different kinds of observations:
- Assertion: \text{ass}
- Support: \text{sup}
- Similarity: \text{sim}
- Being patient: \text{pat}

Different texts:
- bmd: by Branca
- tlx: Decamerone's tale
- hag: Hagiographic sources
- `pat(griselda)`
  Griselda is observed as being patient

- `ass(tlx, pat(griselda))`
  Decameron's tale *tlx* asserts *pat(griselda)*

- `ass(bmd, ass(tlx, pat(griselda)))`
  Branca's text *bmd* asserts that according to the Decameron's tale *pat(griselda)*

- `ass(bmd, ass(hag, pat(mary)))`
  Branca's texts *bmd* asserts that according to text *hag* Mary is patient

- `ass(bmd, sup(ass(tlx, pat(gri)) + ass(hag, pat(mary)), sim(griselda, mary)))`
  Branca's text *bmd* asserts that the observation `ass(tlx, pat(gri))` and `ass(hag, pat(mary))` supports the observation of similarity between Mary and Griselda
Preliminary work /4

Introduction of various formal mechanisms to compare observations:

- **Assertion/rejection** of observations.
  - $\texttt{ass(bmd, sim(griselda, mary))}$ [Branca's thesis]
  - $\texttt{rej(bcn, sim(griselda, mary))}$ [Picone's thesis]

- **Disputability** of observations:
  - An observation is disputable, when it is asserted and rejected by different texts
  - The case of observation $\texttt{sim(griselda, mary)}$ according to Branca and Picone

Similar initiatives

**Musicology:** Research project (by Richard Freedman, Haverford College USA): CRIM - Citations: The Renaissance Imitation Mass Project ([link](#))


Discussion

**RH1:** *observational languages* - based on ontologies, formal logic, knowledge representation methods

- Shared formal languages designed with domain experts
- Adoption of logical mechanisms to analyze and compare the data
  - Limitations in expressing the nuances of natural language
Discussion

**RH1:** observational languages - based on ontologies, formal logic, knowledge representation methods
- Shared formal languages to document scholars' and critics' interpretive data
- Adoption of logical mechanisms to analyze and compare the data
  - Limitations in expressing the nuances of natural language

**RH2:** natural language sentences - combination of above methods and linguistics
- Analysis of natural language sentences through which experts express their interpretations of texts and characters
- More flexible in documenting and comparing experts' assertions in natural language
  - No (formal) observational languages
Some research challenges

1) In a scholarly text, what should we document and analyze with respect to other texts?
   ↪ Which data should we document and analyze?

2) Which existing theories or methodologies of literary interpretation can facilitate the development of observational languages?
   ↪ On the basis of which conceptual systems do we extract data?

3) How can we support the comparison of observational languages produced by different communities?
   ↪ How do we compare data about the same texts that are produced by different interpreters on the basis of different languages?
Thank you!