

DISTANT SPECTATORS

Distant Reading for periodicals of the Enlightenment

dha go!es digital Day, Sept 24 2020

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From Spectators ...

- journalistic genre in the 18th century
- created in England; imitations and translations in Europe
- digital edition *The Spectators in the international context* <http://gams.uni-graz.at/spectators>

... to Distant Spectators

- quantitative analysis
- extend close reading expertise
- dedicated methods for languages of the 18th century

Research Questions



How have topics and narrative forms changed over time and space?



How can positive and negative expressions give insight into the overall attitude of a periodical?



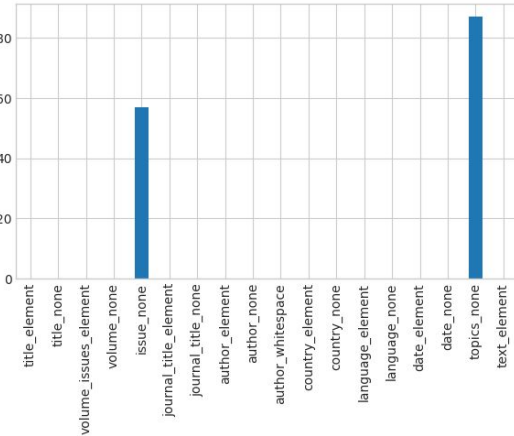
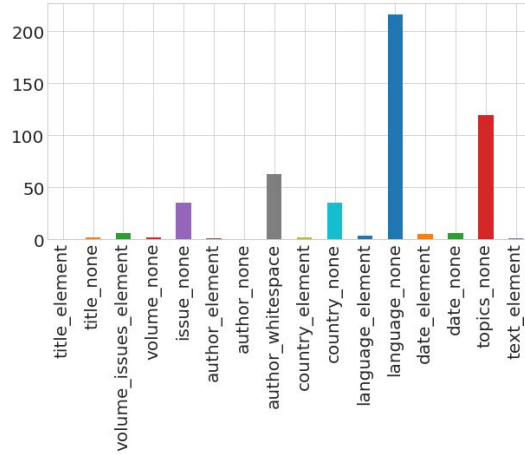
How can authorship detection help in identifying anonymous authors?



What are the stylistic peculiarities of the Spectators? Who or what was 'en vogue' at that time?

Preparatory Steps: Data Cleaning and Normalization

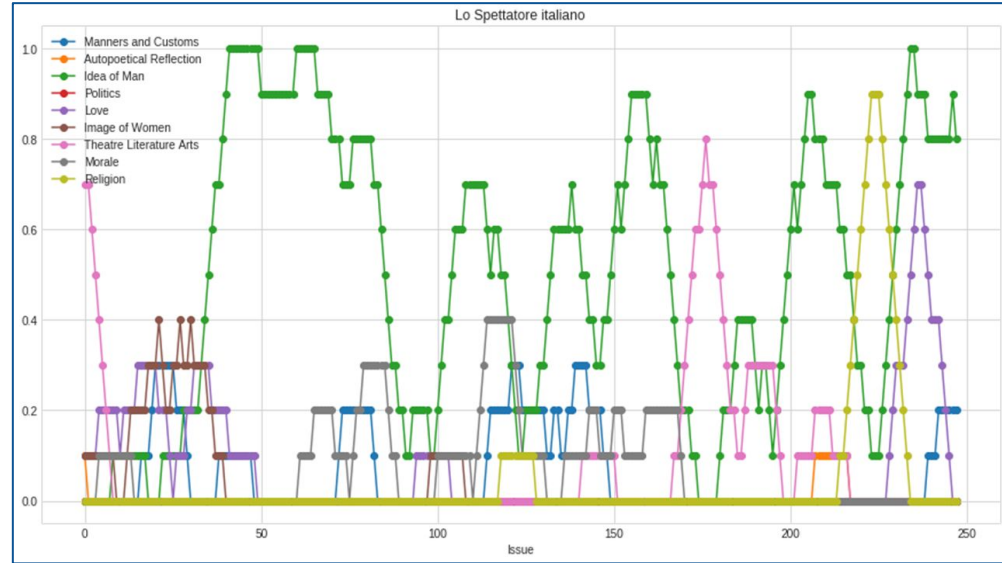
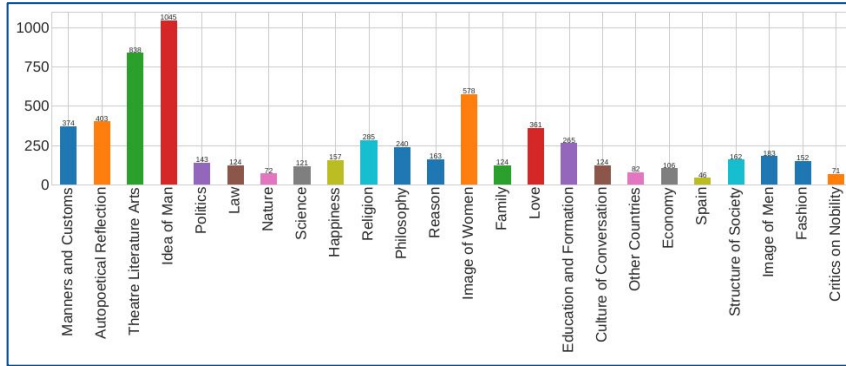
- Missing metadata



- Inconsistent normalization

- "Cicero" vs. "Cicero, Marcus Tullius" vs. "Cicero, Marcus Tullius."
- Workflow to unify normalization:
- XML → Extract metadata of given type → unify → XML

Preparatory Steps: Preliminary Analysis of Data



How Have Topics and Narrative Forms Changed Over Time and Space?

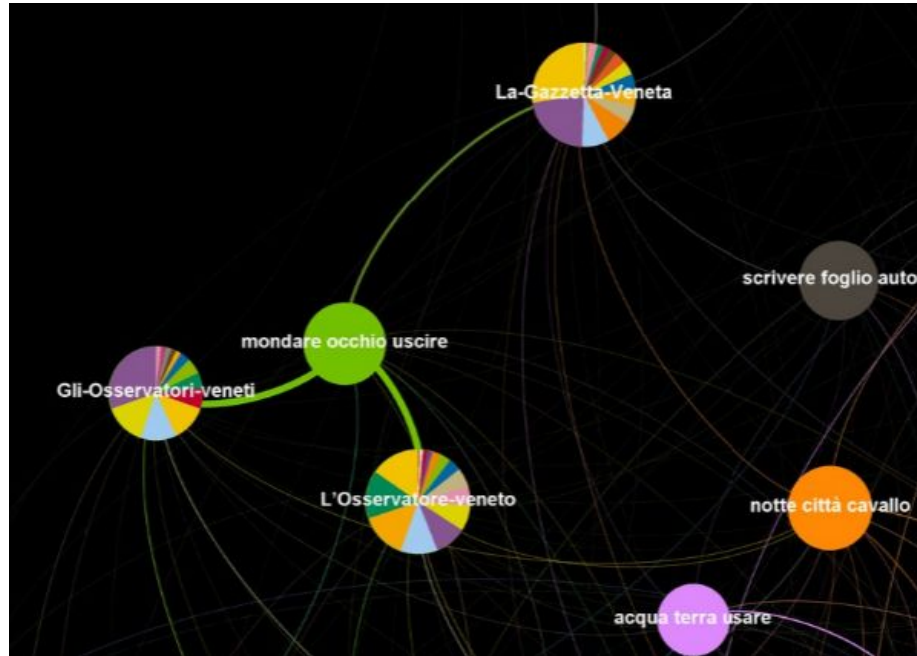
Achievements

- uncovering hidden thematic structures using topic modeling
- comparing topics and manually assigned subjects
- analyzing topic prevalence over time
- analyzing topic closeness and co-occurrence in periodicals

Ongoing

- analyzing narrative forms

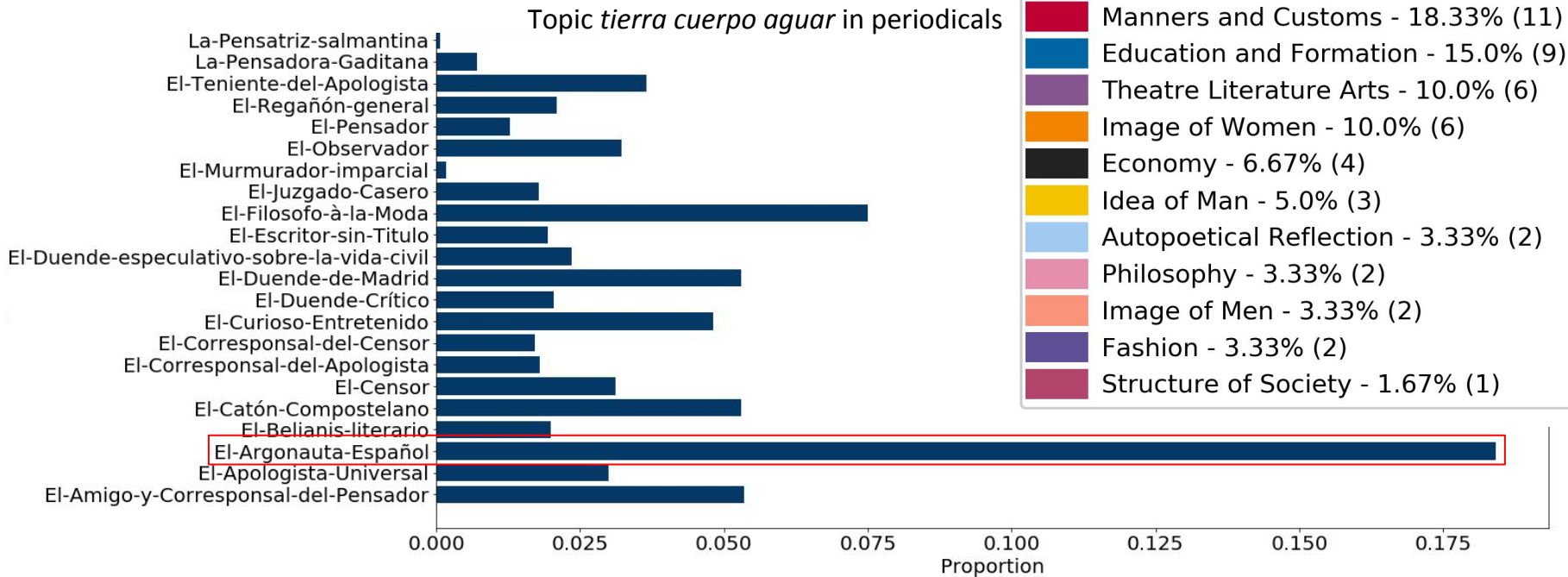
How Have Topics and Narrative Forms Changed Over Time and Space?



close clustering of
Gli Osservatori veneti,
L'Osservatore veneto, and
La Gazzetta Veneta
by Gasparo Gozzi

How Have Topics and Narrative Forms Changed Over Time and Space?

- dominance *Science* in *El Argonauta español*



How Can Positive and Negative Expressions Give Insight Into the Overall Attitude of a Periodical?

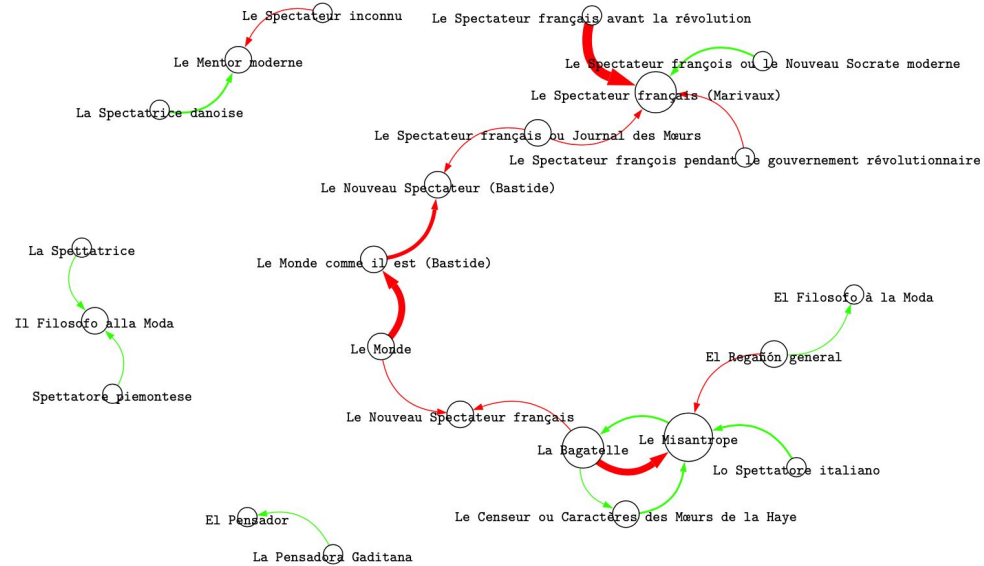
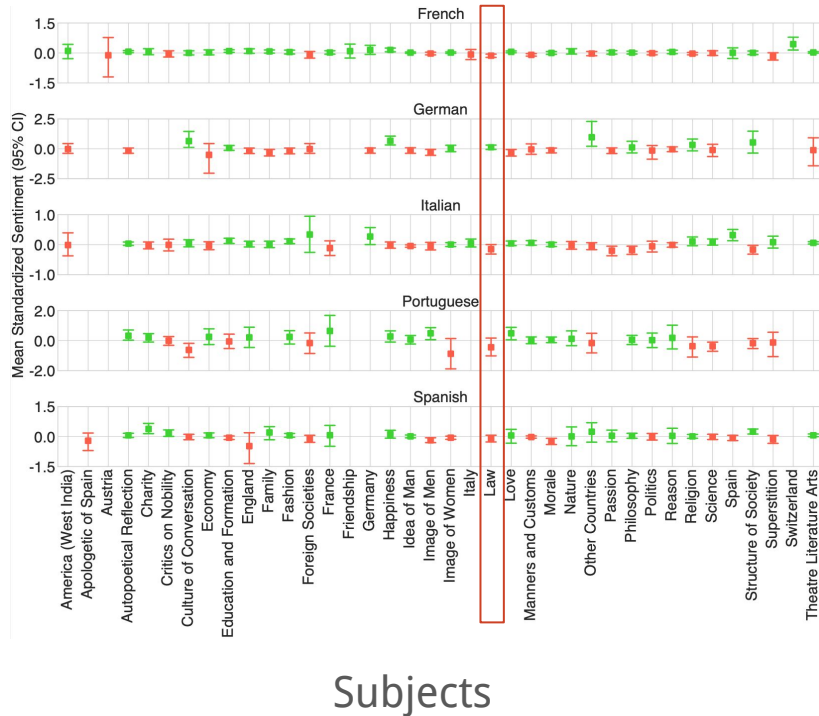
Achievements

- sentiment over time, subjects and narrative forms
- sentiment between periodicals, countries, authors
- word networks to find common sentiment words

Ongoing

- dedicated Sentiment Dictionaries for the languages of the 18th century

How Can Positive and Negative Expressions Give Insight Into the Overall Attitude of a Periodical?



How Can Authorship Detection Help in Identifying Anonymous Authors?

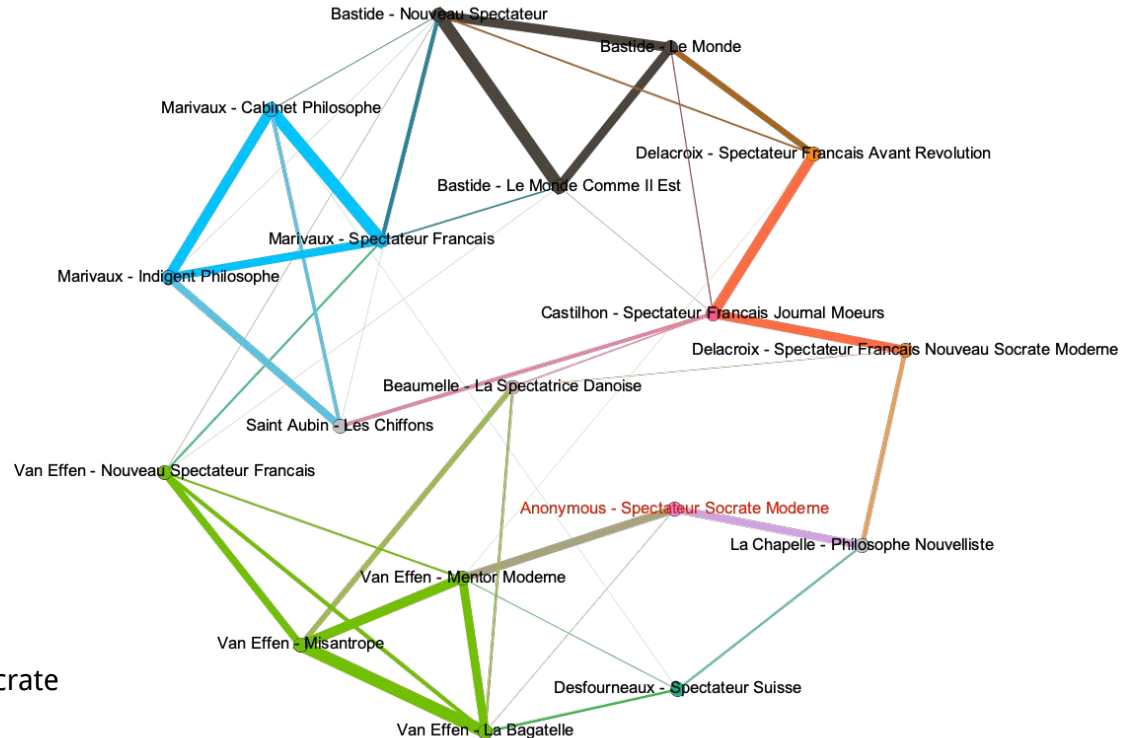
Achievements

- conducted research on collaborative authorship in *El Censor*
- research on anonymous authorship of French periodicals
- research on anonymous translations of English key texts

Ongoing

- further investigation on collective authorship
- comparison of word characteristics
- authorship verification

How Can Authorship Detection Help in Identifying Anonymous Authors?



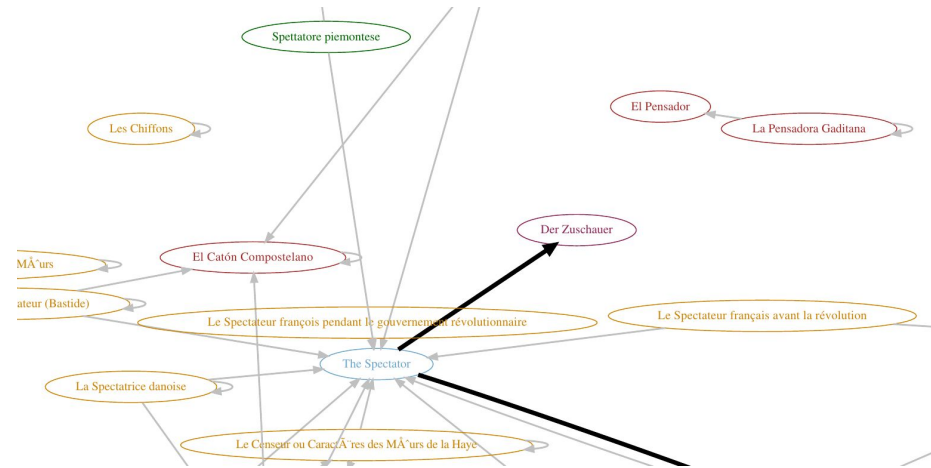
Le Spectateur ou le Socrate moderne, 1714-1726

What are the stylistic peculiarities of the Spectators?

Who or what was 'en vogue' at that time?

Ongoing

- quantitative:
 - text lengths
 - dictionary sizes
 - word frequencies (e.g., Zipf's law)
 - text complexity (e.g., entropy rate)
 - mentioning of persons, places, works, etc.
- qualitative:
 - consideration of narrative forms, subjects, etc.



Publications

Koncar, P.; Fuchs, A.; Hobisch, E.; Geiger B. C.; Scholger M.; Helic D. (2020): **“Text sentiment in the Age of Enlightenment: an analysis of spectator periodicals”**. Appl Netw Sci 5, p. 33. <https://doi.org/10.1007/s41109-020-00269-z>.

Koncar P.; Helic D. (2020); **“Text Sentiment in the Age of Enlightenment”**. In: Cherifi H.; Gaito S., Mendes J.; Moro E.; Rocha L. (eds) Complex Networks and Their Applications VIII. COMPLEX NETWORKS 2019. Studies in Computational Intelligence, vol 882. Springer, Cham. https://doi.org/10.1007/978-3-030-36683-4_29.

Fuchs, A.; Geiger, B.; Hobisch, E.; Koncar, P.; More, J.; Sarić, S.; Scholger, M. (2020): **“Das Theater mit dem Theater: Thementransfer in den Spectators”**. In: Abstract for Digital Humanities im deutschsprachigen Raum, Paderborn, Deutschland, p. 291-292.. <https://doi.org/10.5281/zenodo.3666690>.

Fuchs, A.; Geiger, B.; Hobisch, E.; Koncar, P.; Sarić, S.; Scholger, M. (2019): **“Distant Spectators: Mining TEI-encoded periodicals of the Enlightenment”**. In: Abstract for TEI Conference and Members’ Meeting, Graz, Österreich. <https://doi.org/10.5281/zenodo.3451439>.

Fuchs, A.; Geiger, B.; Hobisch, E.; Koncar, P.; Sarić, S.; Scholger, M. (2020): **“Behind the Scenes of the Spectators: Uncovering Anonymous Authors in Periodicals of the Enlightenment”**. In: Digital Humanities conference 2020 (ed.): Book of Abstracts. Ottawa. Digital Humanities conference 2020, p. 574, https://dh2020.adho.org/wp-content/uploads/2020/07/574_BehindtheScenesoftheSpectatorsUncoveringAnonymousAuthorsinPeriodicalsoftheEnlightenment.html.

Thanks for your attention!

Distant Spectators



<http://gams.uni-graz.at/dispecs>



#DiSpecs



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