

# WHAT SHOULD EVERY STUDENT LEARN ABOUT DIGITAL METHODS?



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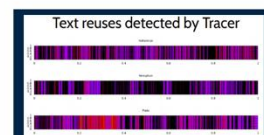
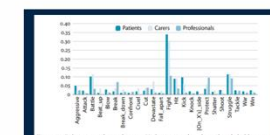
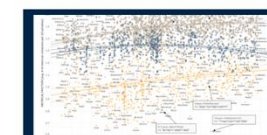
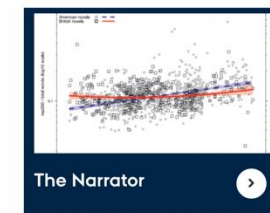
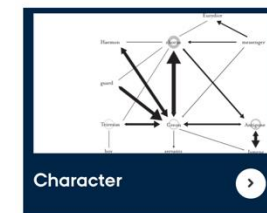
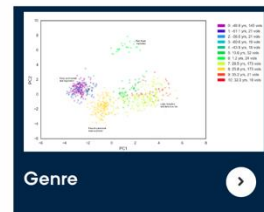
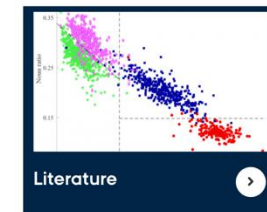
# AGENDA

- Need to know? Nice to know?
- Comparative literature as an example
- Generative AI as a surprise addition
- Conclusion

## Digital Literary Studies – A Companion Guide

[Topics](#) [AI tools](#) [Resources](#) [About](#) [Feedback](#)

### Topics



# FIELD SPECIFIC CHANGES

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- History: Digitalization of sources
  - Languages: Translation technologies
  - Media studies: New data sources
  - Archeology: New tools for collecting data
  - Musicology: Production and data
  - Art history: Visual analysis
- 
- Each comes with a different kind of necessity



# INGREDIENTS FOR RESEARCH BASED TEACHING OF DIGITAL HUMANITIES

- Necessity as a driver
- Faculty heroes
- Faculty agreement
- A conversation on the aims of discipline
- Different modes of studying
- Balancing knowledge and competencies



## Terms of Service, data handling and GDPR

When working with subject specific digital methods, you might run into issues concerning sensitive data or copyright, and we highly recommend that you contact technical support for assistance. Do this as early as possible, so that you can plan your project, and make sure that your data will be handled correctly. The technical support can also help you with issues such as understanding terms of service and checking if data from specific webpages are okay to use. If you are ever in doubt about any of this, **please ask the technical support staff at your institution.**

## Key topics and inspiration

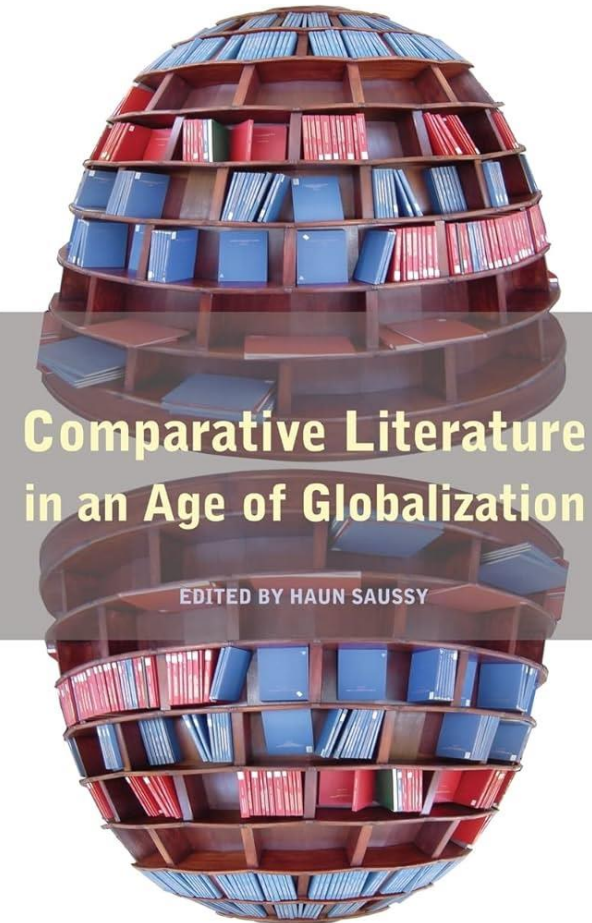
Below, you will find a number of resources introducing key course topics that you may need in order to develop and implement digital elements into your teaching. Ranging from an understanding of how to work with data, skills within statistics and text analysis, to introductions of agent-based modelling and machine learning, the resources below are meant for inspiration and further exploration. These are just some of the methods and topics that are supported within the project and is meant for a starting point for further dialogue about the possibilities within specific subjects and fields.



# COMPARATIVE LITERATURE

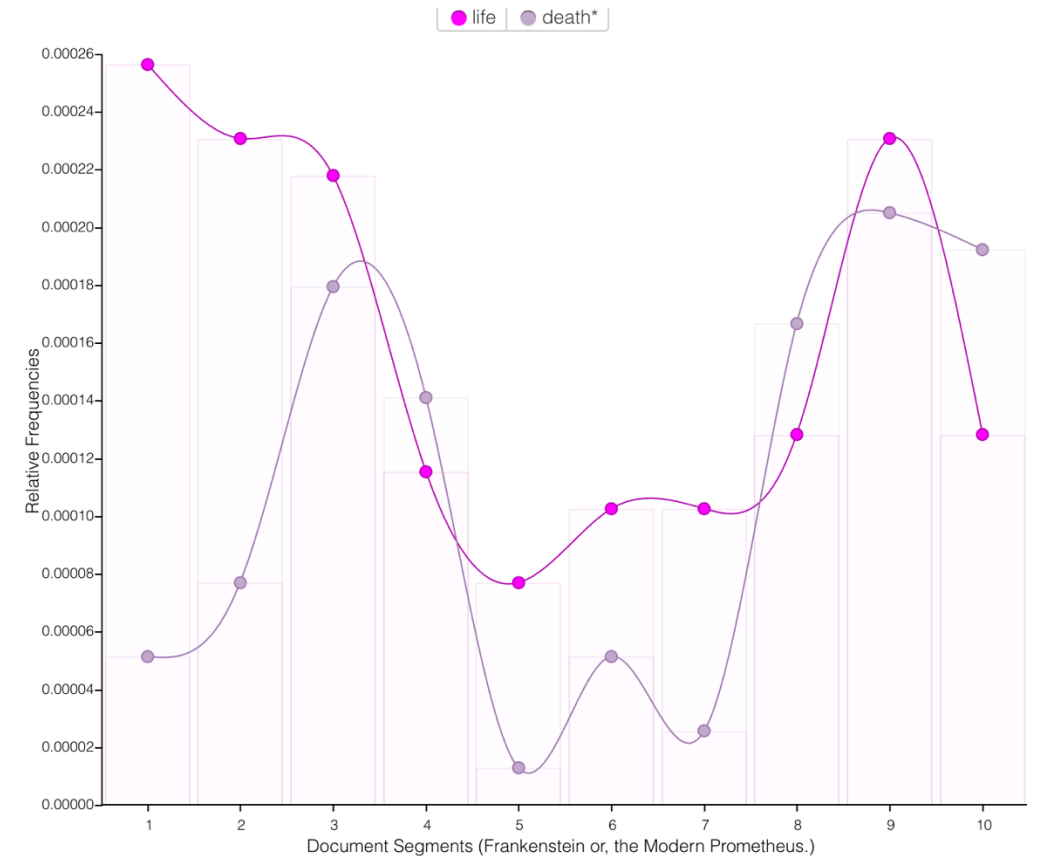
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- Assisted text analysis
- Authorship attribution
- Literary culture data
- Advanced corpus analysis



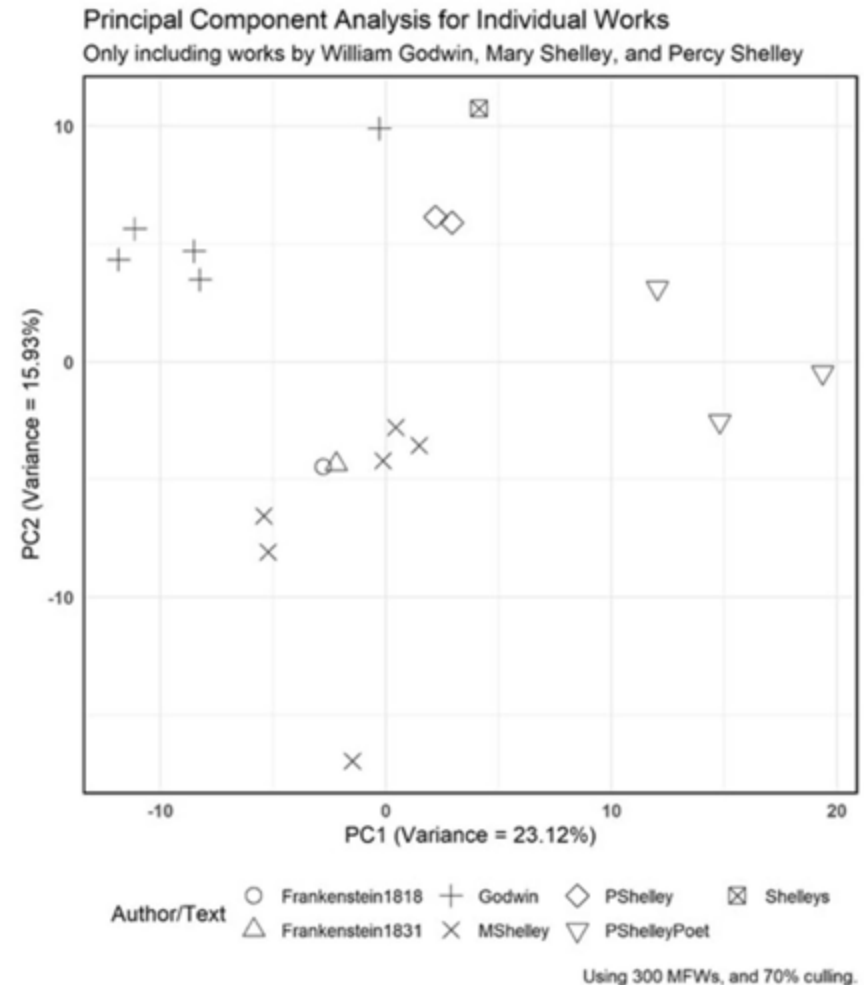
# ASSISTED TEXT ANALYSIS: VOYANT

- Graphic user interface
- Simple metrics
- But also advanced functions



# AUTHORSHIP ATTRIBUTION: STYLO

- More complicated: software installation, more complicated math behind the results
- But still fairly easy to use and encourage experimentation with own sources





# LITERARY CULTURE: MULTIPLE SOURCES

- Many more sources for understanding context and influence
- Translations, references, social media mentions and rating, etc.
- Obvious use in understanding the book market and wider literary culture
- Humanists should not be blind for numbers – and they typically don't want to be that

Statistics on Index Translationum database

	<b>"TOP 50" Target Language</b>	
1	<b>Spanish</b>	84
2	<b>German</b>	56
3	<b>French</b>	52
4	<b>Japanese</b>	19
5	<b>Portuguese</b>	16
6	<b>Italian</b>	14
7	<b>Catalan</b>	13
8	<b>Danish</b>	13
9	<b>Dutch</b>	12
10	<b>Hungarian</b>	8
11	<b>Swedish</b>	8
12	<b>English</b>	7
13	<b>Polish</b>	7
14	<b>Chinese</b>	6
15	<b>Czech</b>	6
16	<b>Greek, Modern (1453-)</b>	6
17	<b>Serbian</b>	6
18	<b>Norwegian</b>	5
19	<b>Norwegian, Bokmål</b>	5
20	<b>Basque</b>	4
21	<b>Estonian</b>	4
22	<b>Finnish</b>	4
23	<b>Hebrew</b>	4
24	<b>Romanian</b>	4
25	<b>Russian</b>	4
26	<b>Slovak</b>	4
27	<b>Bulgarian</b>	3
28	<b>Croatian</b>	3
29	<b>Slovenian</b>	3



# ADVANCED CORPUS ANALYSIS

- Important to learn about even if the methods cannot be tried out in class
- Getting enough understanding to be able to critique
- And with generative AI lowering the bar for engaging in computational work, the field is changing

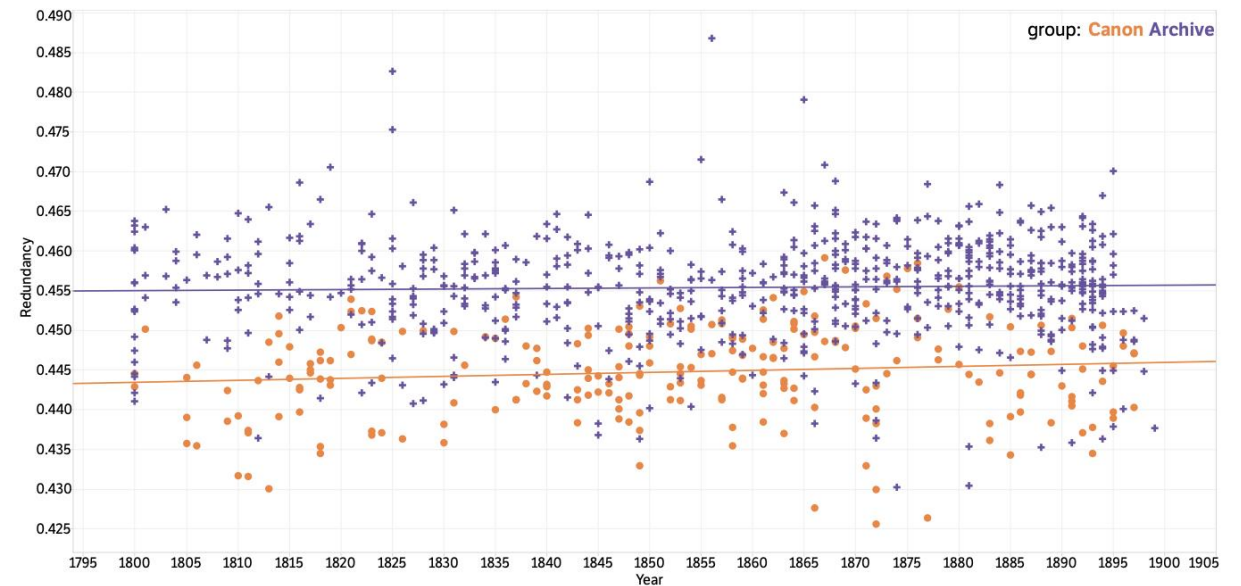


Figure 4.1. Measuring redundancy, 1800-1900

Purple crosses indicate archival novels, orange circles canonical ones



# GENERATIVE AI

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- From hard to easy
- Too easy?
- New questions?
- Experiments with "impossible" questions
- Most of all a tool



Generative AI can assist students in performing more advanced analysis in several ways:

1. Data processing and exploration: AI can quickly analyze large datasets, identify patterns, and generate visualizations, allowing students to focus on interpreting results rather than manual data processing.
2. Literature review: AI can summarize and synthesize information from multiple sources, helping students gain a broader understanding of a topic and identify key themes or gaps in research.
3. Hypothesis generation: By analyzing existing data and research, AI can suggest potential hypotheses or research questions for students to explore further.
4. Predictive modeling: AI can create and test complex predictive models, enabling students to explore sophisticated statistical techniques and machine learning algorithms.
5. Natural language processing: For text-based analysis, AI can perform sentiment analysis, topic modeling, and other advanced linguistic analyses.
6. Simulation and scenario analysis: AI can generate and run multiple scenarios, helping students understand complex systems and the potential outcomes of different variables.
7. Interdisciplinary connections: AI can identify connections between different fields of study, encouraging students to think more holistically about their research topics.
8. Writing assistance: While students should always do their own writing, AI can offer suggestions for improving structure, clarity, and argumentation in academic papers.
9. Personalized learning: AI can adapt to a student's learning style and pace, providing tailored explanations and examples to enhance understanding of complex concepts.
10. Error checking: AI can review calculations, code, or logical arguments to help students identify and correct mistakes in their analysis.

Would you like me to elaborate on any of these points or discuss how they might apply to a specific field of study?



# CONCLUSION

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- Field specific and faculty-depended
- Consider return on investment
- But also necessity
- Students are eager for new perspectives
- And backing up ideas with numbers

