



Unlocking the Past with Computational Methods. Evolving Digital Humanities for Historical Research

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Unlocking the past interdisciplinarily

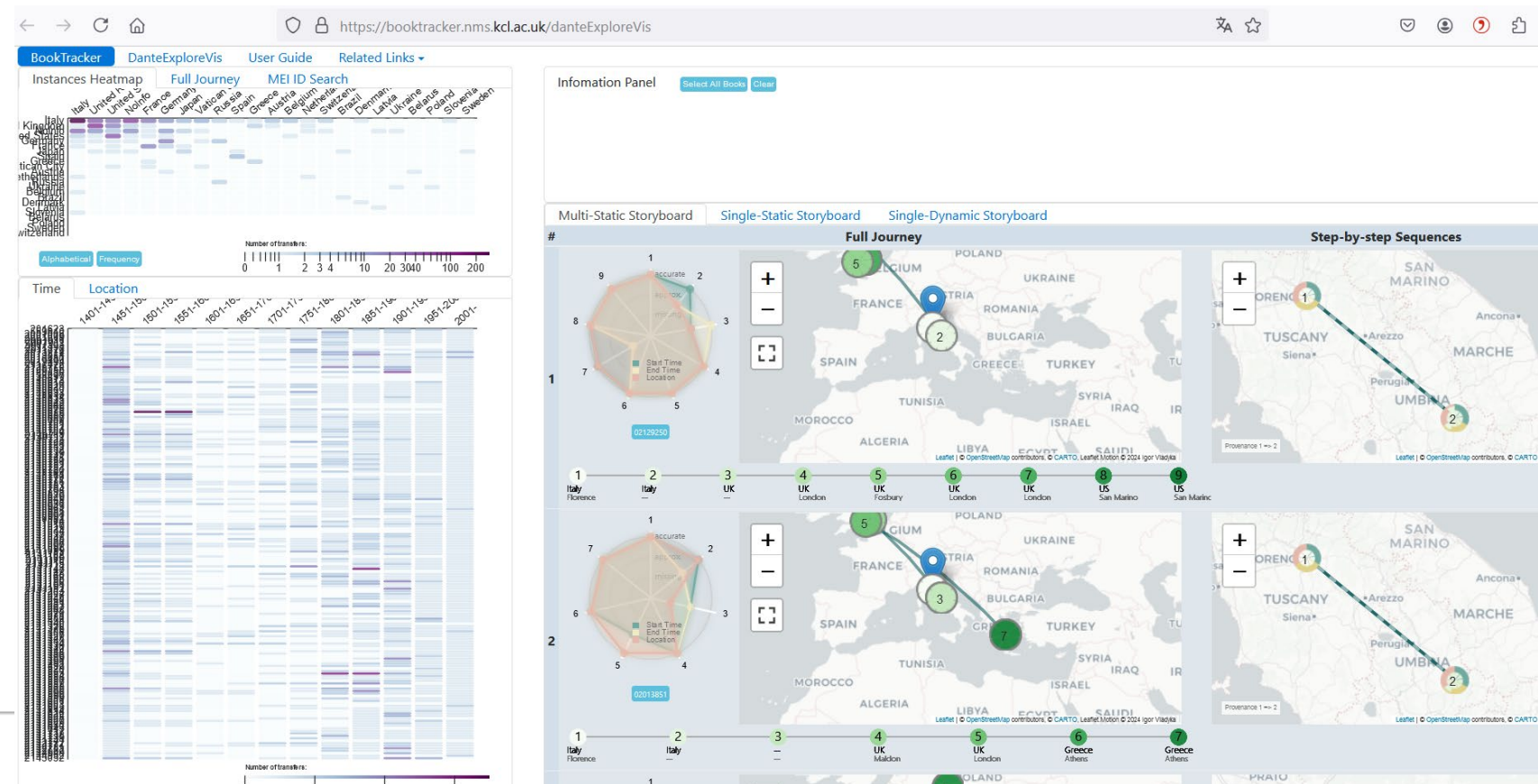
1. Enrichment in Collaboration
2. Unique Challenges Computer Science Faces in History
3. Understanding the Intellectual Rigor of Historical Research

1. Enrichment in Collaboration

How Historians and Computer Scientists Benefit Each Other

a. Tool Development with Domain Sensitivity

- Importance of historians' expertise in tool design.
- Historians' knowledge influences text analysis algorithms and visualization models.
- Adjustments to computational tools to account for linguistic evolution and fragmented data.



Dante Explore Vis
<https://booktracker.nms.kcl.ac.uk/danteExploreVis>

Example

The screenshot shows the Harvard Dataverse website interface. At the top, the browser address bar displays the URL: <https://dataverse.harvard.edu/dataset.xhtml?persistentId=doi:10.7910/DVN/L4OAKN>. The Harvard Dataverse logo is on the left, and navigation links for 'Add Data', 'Search', 'About', 'User Guide', 'Support', 'Sign Up', and 'Log In' are on the right. The main content area features the title 'ParlSpeech Dataverse' and its affiliation '(WZB Berlin Social Science Center)'. A breadcrumb trail reads 'Harvard Dataverse > ParlSpeech Dataverse >'. The dataset title is 'The ParlSpeech V2 data set: Full-text corpora of 6.3 million parliamentary speeches in the key legislative chambers of nine representative democracies'. A 'Version 1.0' badge is present. A citation box contains the citation text: 'Rauh, Christian; Schwalbach, Jan, 2020, "The ParlSpeech V2 data set: Full-text corpora of 6.3 million parliamentary speeches in the key legislative chambers of nine representative democracies", <https://doi.org/10.7910/DVN/L4OAKN>, Harvard Dataverse, V1'. Below this are links for 'Cite Dataset' and 'Learn about Data Citation Standards'. On the right, there are buttons for 'Access Dataset', 'Contact Owner', and 'Share', along with 'Dataset Metrics' showing '14,568 Downloads'. The 'Description' section states: 'ParlSpeech V2 contains complete full-text vectors of more than 6.3 million parliamentary speeches in the key legislative chambers of Austria, the Czech Republic, Germany, Denmark, the Netherlands, New Zealand, Spain, Sweden, and the United Kingdom, covering periods between 21 and 32 years. Meta-data include information on date, speaker, party, and partially agenda item under which a speech was held. The accompanying release note provides a more detailed guide to the data. (2020-03-11)'. The 'Subject' is 'Computer and Information Science; Social Sciences' and the 'Keyword' is 'Text Analysis, Parliament, Speech, Text-As-Data, Politics'.

Other Examples

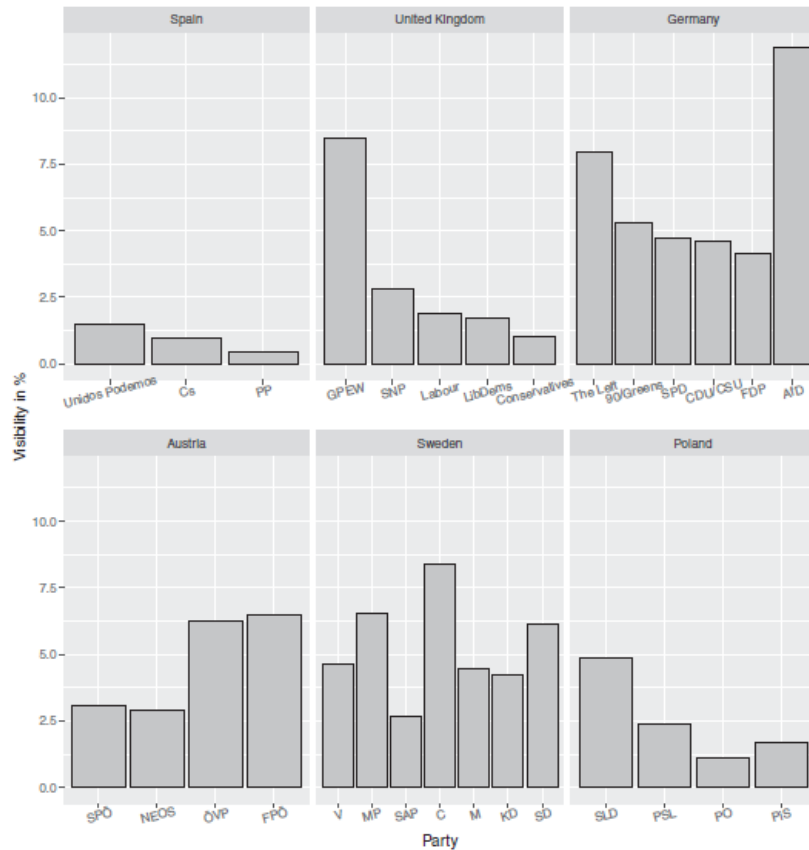


Figure 1. Migration-related status posts as a proportion of the total.
 Note: Data are percentages and shown grouped by country. Parties are shown left to right in order of the Chapel Hill left-right ideological score. For an overview see Table A1 in the Appendix.

Political migration discourses on social media:
<https://www.tandfonline.com/doi/full/10.1080/1369183X.2019.1665990>

Analysing complexity of parliamentary speeches:
https://www.awendsjo.com/posts/complex_language/

https://www.awendsjo.com/posts/complex_language/

Albert Wendsjö research posts

Analysing complexity of parliamentary speech

September 23, 2023

Introduction

In this post I'll walk through the steps of an analysis of parliamentary speech. I'll be using data from ParlSpeechV2 to assess the complexity of how politicians talk in parliaments, as well as analyse predictors of the complexity of parliamentary speech. In this post I go through how to use ParlSpeech data, and how to merge it with other sources such as ParlGov and EveryPolitician. I will then go through how to evaluate the complexity a speech using text-as-data methods, some exploratory analysis and visualization, and some statistical inference.

Content

- Data Preparation
- Evaluating the Complexity of Language
- Exploratory Analysis
- Statistical Analysis

Data preparation

ParlSpeech data

To start of I'll be using data from ParlSpeechV2, which is a dataset collected by [Rauh and Schwalbach \(2020\)](#). It contains parliamentary data from eight western countries, with a coverage of about 21-32 years depending on the country. To simplify matters we'll only use the Swedish data this time, but this could be



b. Ethics and Cultural Sensitivity

- Sensitive topics, such as colonialism, gender dynamics, or marginalized communities
- Ethics in Archives = Decisions in Digital Archiving
- Digital archiving = political, cultural, and social biases
- Interdisciplinary approaches

- Sensitivity beyond the archive:
 - **Ethical Digitization Practices**
 - **Cultural Sensitivity in Data Analysis**
 - **Interdisciplinary Collaboration**
 - **Bias Mitigation**

Dagstuhl Report: Computational Approaches to Digitised Historical Newspapers

<https://drops.dagstuhl.de/entities/document/10.4230/DagRep.12.7.112>

Document  <https://doi.org/10.4230/DagRep.12.7.112> 

Computational Approaches to Digitised Historical Newspapers (Dagstuhl Seminar 22292)

Authors  Maud Ehrmann, Marten Düring, Clemens Neudecker, Antoine Doucet and all authors of the abstracts in this report

Part of:  Issue: [Dagstuhl Reports, Volume 12, Issue 7](#)

 Volume: [Dagstuhl Reports, Volume 12](#)

 Journal: [Dagstuhl Reports \(DagRep\)](#)

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Publication Date: 2023-02-03



 Cite As

[Get BibTex](#)

Maud Ehrmann, Marten Düring, Clemens Neudecker, and Antoine Doucet. Computational Approaches to Digitised Historical Newspapers (Dagstuhl Seminar 22292). In Dagstuhl Reports, Volume 12, Issue 7, pp. 112-179, Schloss Dagstuhl – Leibniz-Zentrum für Informatik (2023)

Strategies: Interdisciplinary collaboration for bias mitigation

- Metadata Analysis and Annotation for Contextual Clues
- Algorithmic Detection of Language Patterns
- Cross-Referencing Multiple Sources
- Training Data Selection and Model Calibration
- User Warnings and Annotations in Outputs
- Interactive User Tools for Bias Exploration
- Ethics Committees and User Feedback

Document  <https://doi.org/10.4230/DagRep.12.7.112> 

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■ Authors ⓘ Maud Ehrmann, Marten Düring, Clemens Neudecker, Antoine Doucet and all authors of the abstracts in this report

> Part of:  Issue: [Dagstuhl Reports, Volume 12, Issue 7](#)
 Volume: [Dagstuhl Reports, Volume 12](#)
 Journal: [Dagstuhl Reports \(DagRep\)](#)

> License:  [Creative Commons Attribution 4.0 International license](#)

> Publication Date: 2023-02-03



■ Cite As

[Get BibTex](#)

Maud Ehrmann, Marten Düring, Clemens Neudecker, and Antoine Doucet. Computational Approaches to Digitised Historical Newspapers (Dagstuhl Seminar 22292). In Dagstuhl Reports, Volume 12, Issue 7, pp. 112-179, Schloss Dagstuhl – Leibniz-Zentrum für Informatik (2023)

Examples

Humanities for All



Mukurtu CMS: An Indigenous Archive and Publishing Tool

Mukurtu is a content management system and digital access tool for cultural heritage, built for and in ongoing dialogue with indigenous communities. Developed and maintained at the Center for Digital Scholarship and Curation at Washington State University, the free and open source platform is designed to meet the particular curatorial and access needs of indigenous peoples. Mukurtu offers the ability to provide differential access to community members and the general public and to create space for traditional narratives and knowledge labels that foreground Indigenous knowledge in the metadata of digitized cultural heritage materials.

PROJECT DIRECTOR(S)

Kimberly Christen

HIGHER ED INSTITUTION(S)

Washington State University
Center for Digital Scholarship
and Curation

LOCATION(S)

Pullman, WA

COMMUNITY PARTNER(S)

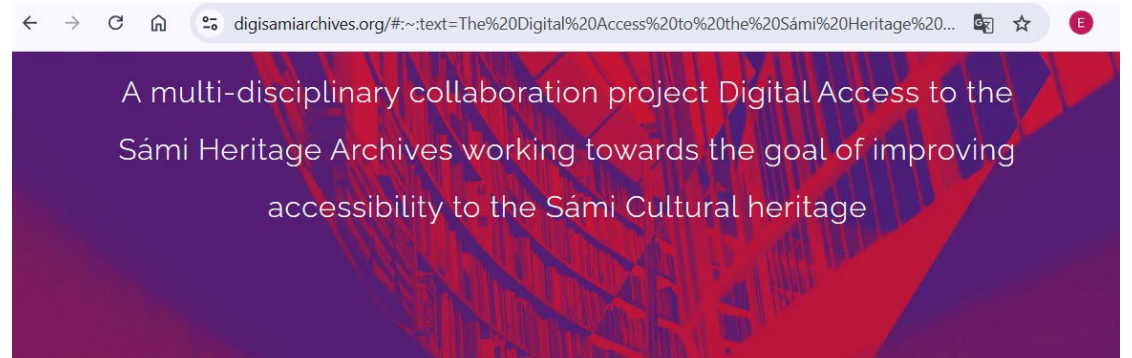
Indigenous individuals and
groups

HUMANITIES DISCIPLINE(S)

International and Area
Studies, Library Science /

Humanities for all: Mukurtu Archiv,
<https://humanitiesforall.org/projects/mukurtu-an-indigenous-archive-and-publishing-tool>

Sami Archive: <https://digisamiarchives.org/>

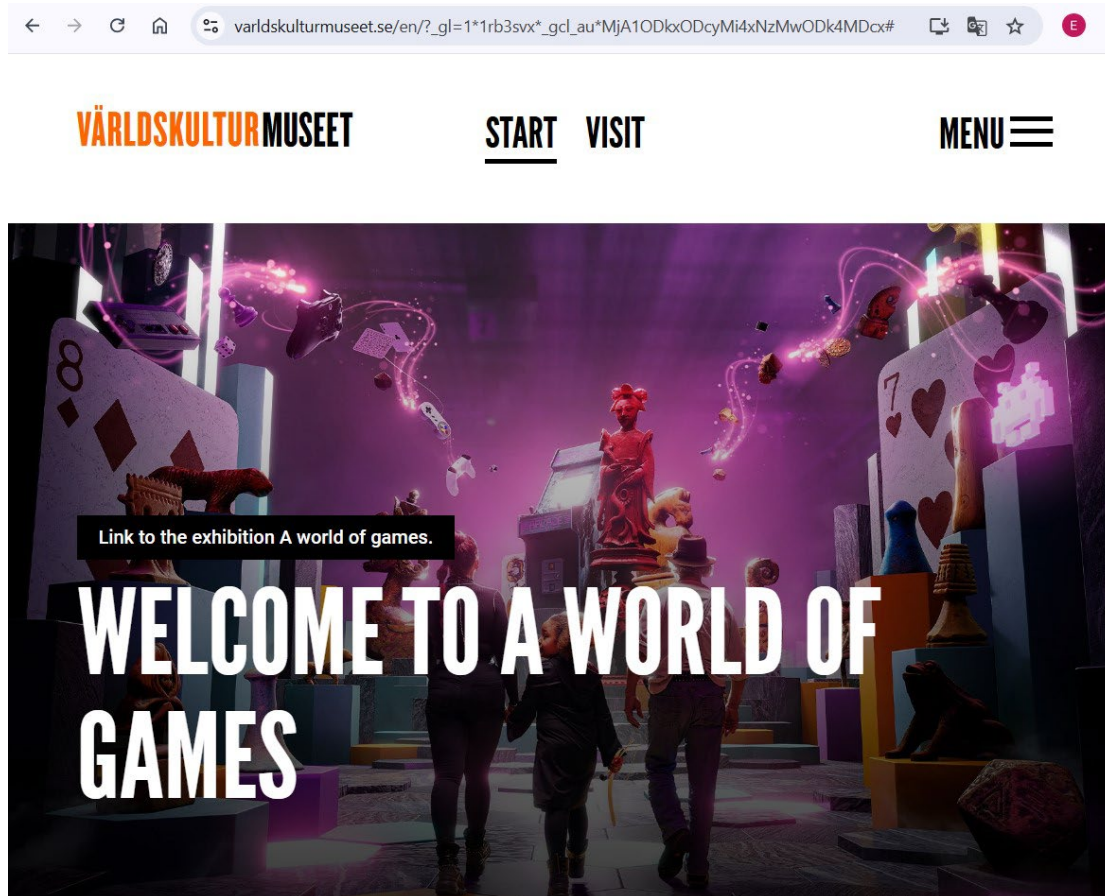


The Digital Access to the Sámi Heritage Archives project

The materials of the Sámi cultural heritage exist in several archives and collections, as due to historical reasons artefacts have also been stored in museums and

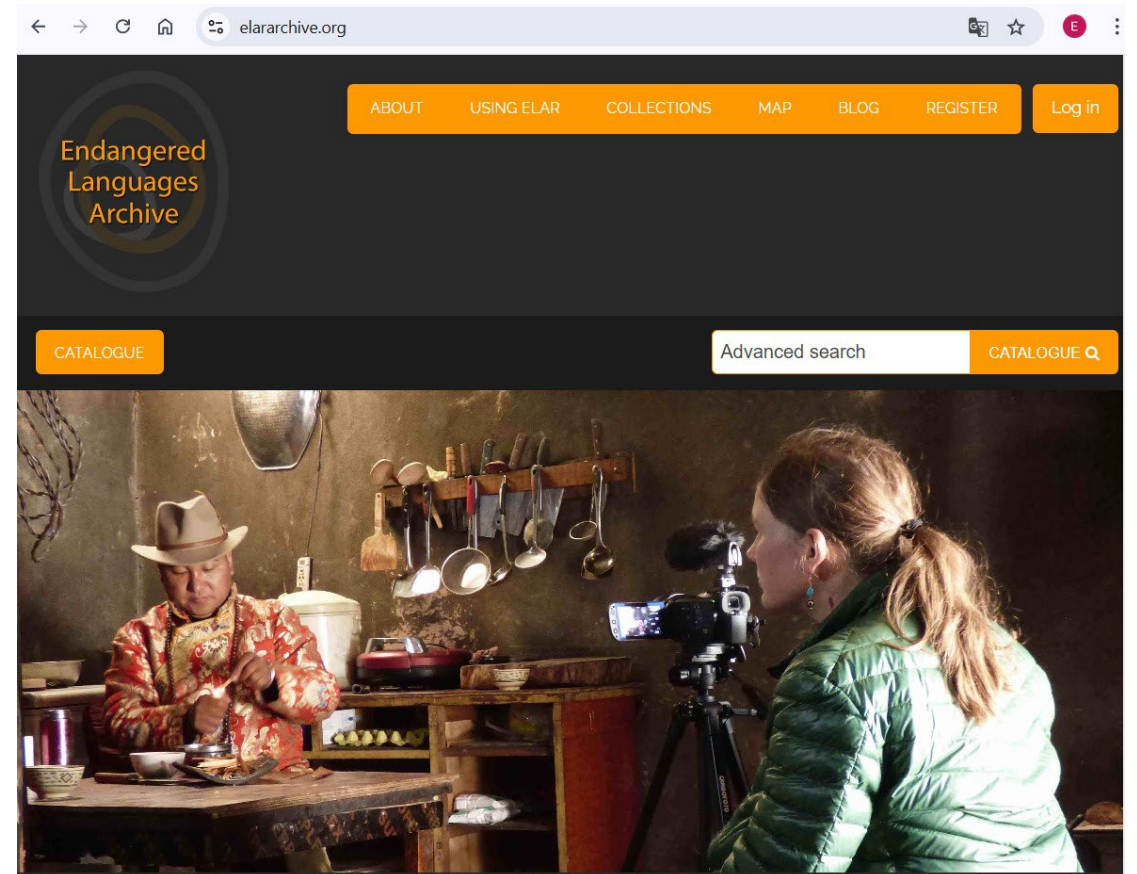


Other examples



Museum of World Culture,
<https://www.varldskulturmuseerna.se/en/#>

Endangered Languages Archive (ELAR):
<https://www.elararchive.org/>



c. Modelling Uncertainty and Complexity

Digitizing History

- Sources are often incomplete, fragmented, or contradictory
- Unlike the structured data sets computer scientists are used to, historical data is handling uncertainty
- provisional evidence and ambiguous interpretations, which may shift as new discoveries are made

Examples

Statistical Monitoring of European Cross-Border Physical Electricity Flows Using Novel Temporal Edge Network Processes: <https://arxiv.org/abs/2312.16357>

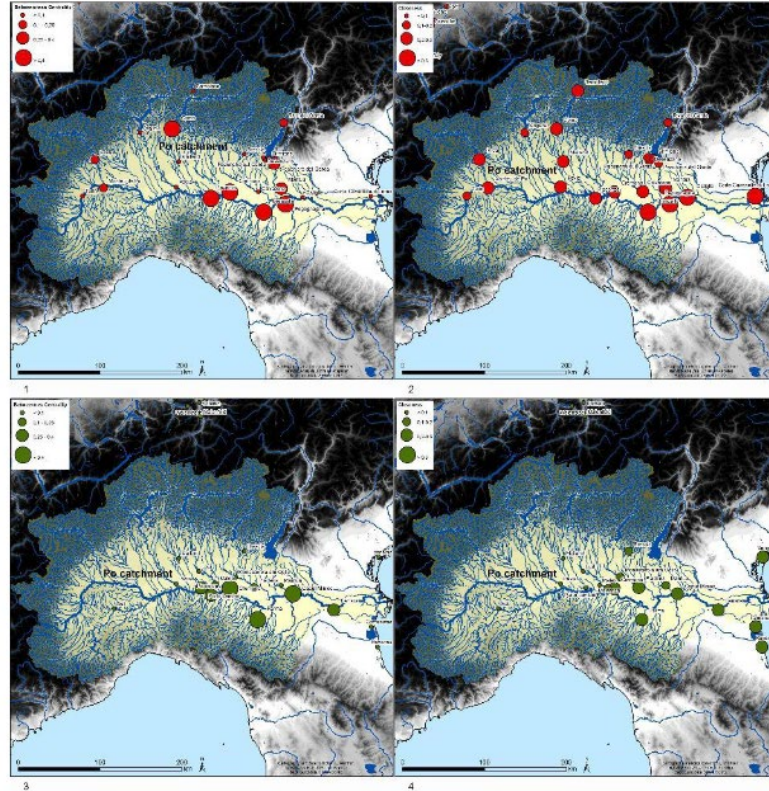
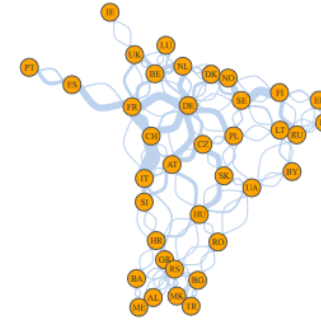
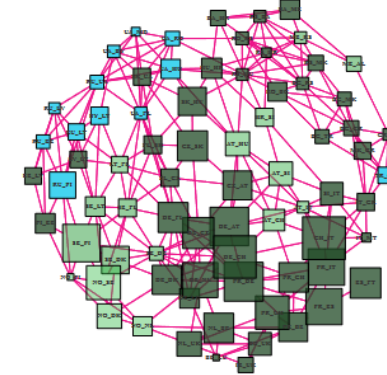


Fig. 4 Nodes in the network model of riverine transport in the Po catchment: **1** In period I (1st-5th cent. CE) sized according to their betweenness centrality. – **2** In period I (1st-5th cent. CE) sized according to their closeness centrality. – **3** In period II (6th- early 11th cent. CE) sized according to their betweenness centrality. – **4**. In period II (6th- early 11th cent. CE) sized according to their closeness centrality. – (Cartography and Data Collection L. Werther, Universität Jena; Network Analysis J. Preiser-Kapeller, ÖAW).



(a) The edge thickness implicates the strength of the flow.

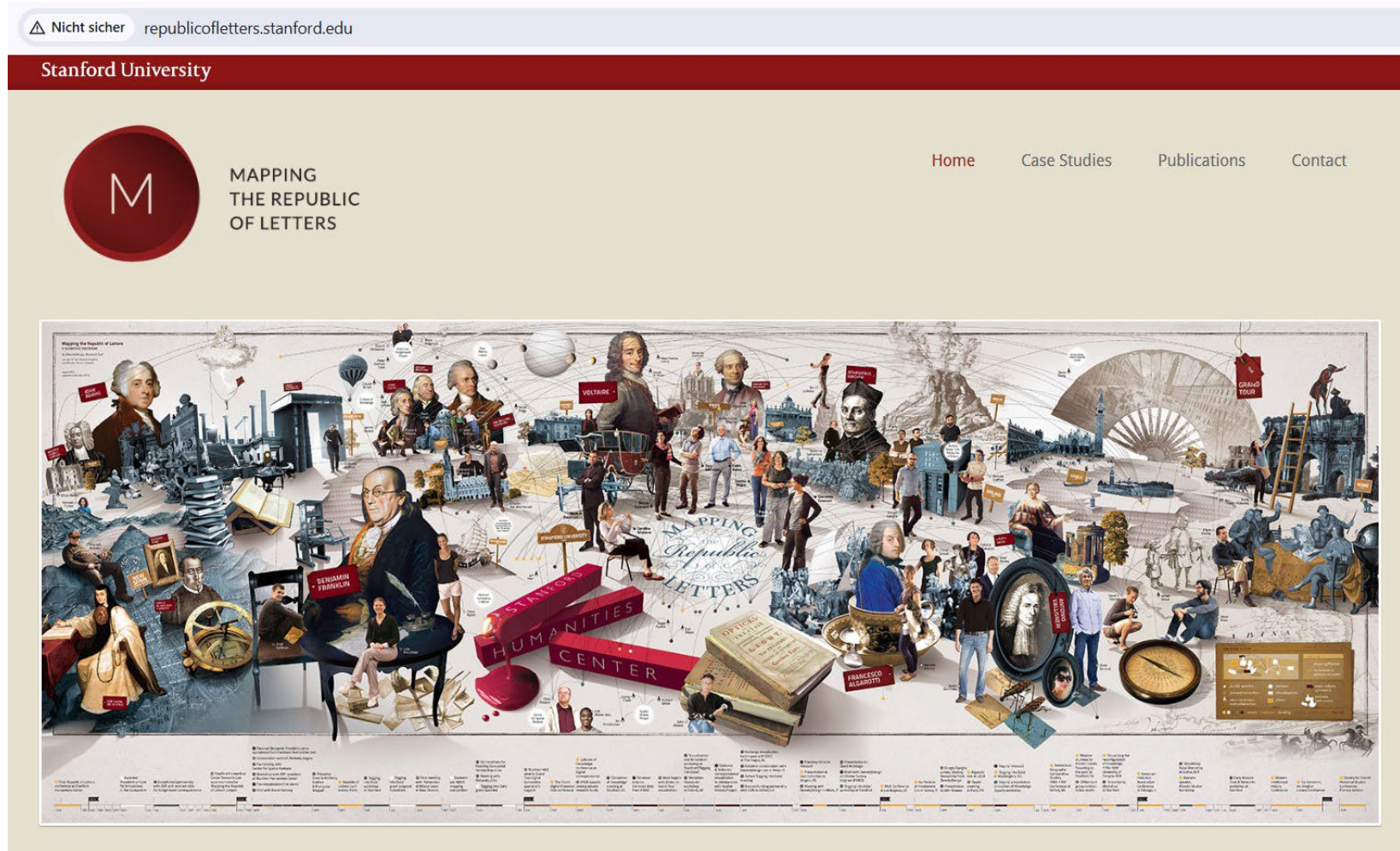


(b) The size of the nodes implicates the strength of the electricity exchange and the colour its proportion of electricity generated with renewable energy sources (light green corresponds to the higher proportion, blue corresponds to the missing information).

Fig. 8: Conventional representation of the cumulated cross-border physical electricity flow in the year 2019 (a) and new representation (b) following the description in Section 3.1.2.

Connecting Harbours: A Comparison of Traffic Networks Across Ancient and Medieval Europe: <https://arxiv.org/pdf/1611.09516>

Example



The Republic of letters: <http://republicofletters.stanford.edu/>

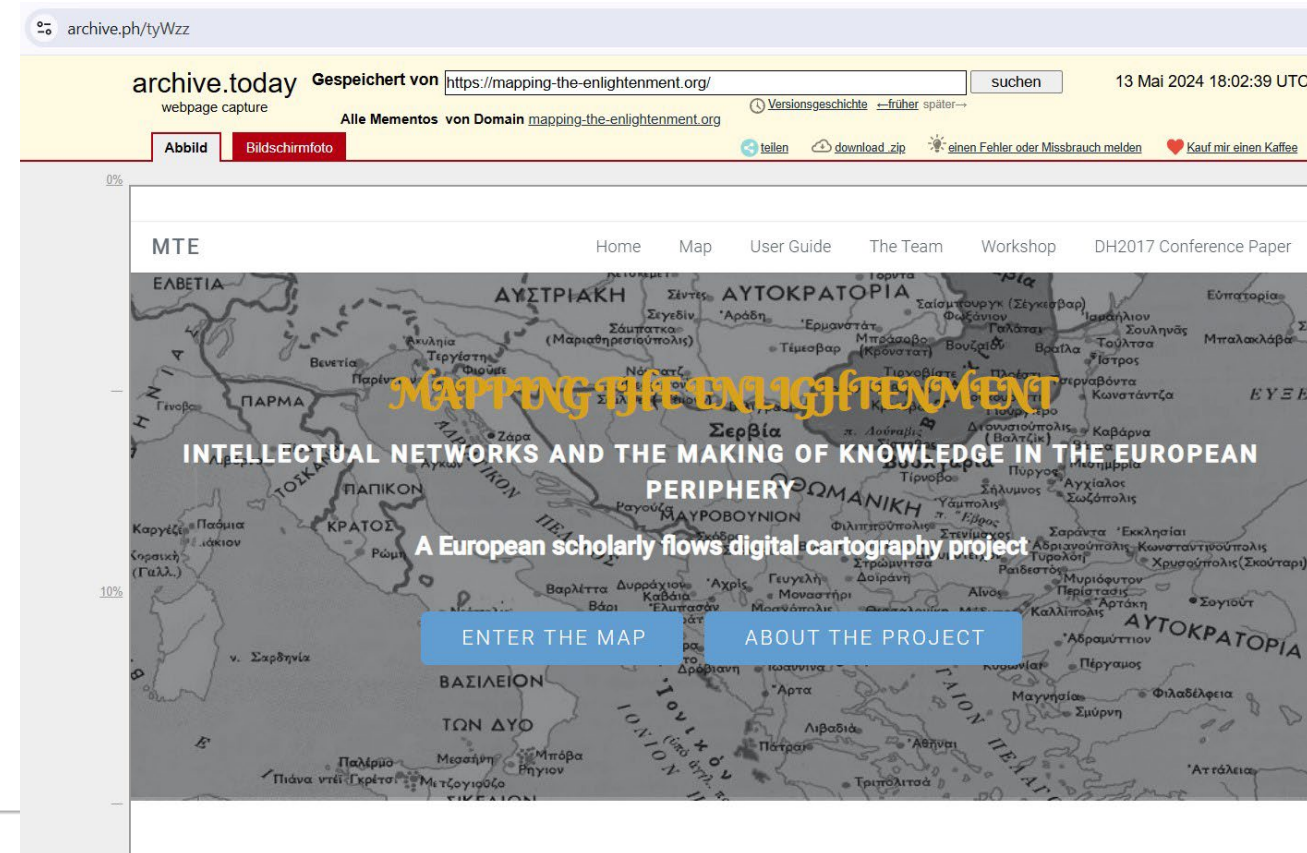
2. Unique Challenges Computer Science Faces in Digital History

How to deal with uncertainty

a. 1. Inconsistent, Fragmented, and Ambiguous Data

- Technical expertise and understanding the context
- Preserving gaps
- Train machine learning models
- Uncertainty detection, e.g., in Historical Databases

Example: Mapping the enlightenment:
<https://archive.ph/tyWzz>



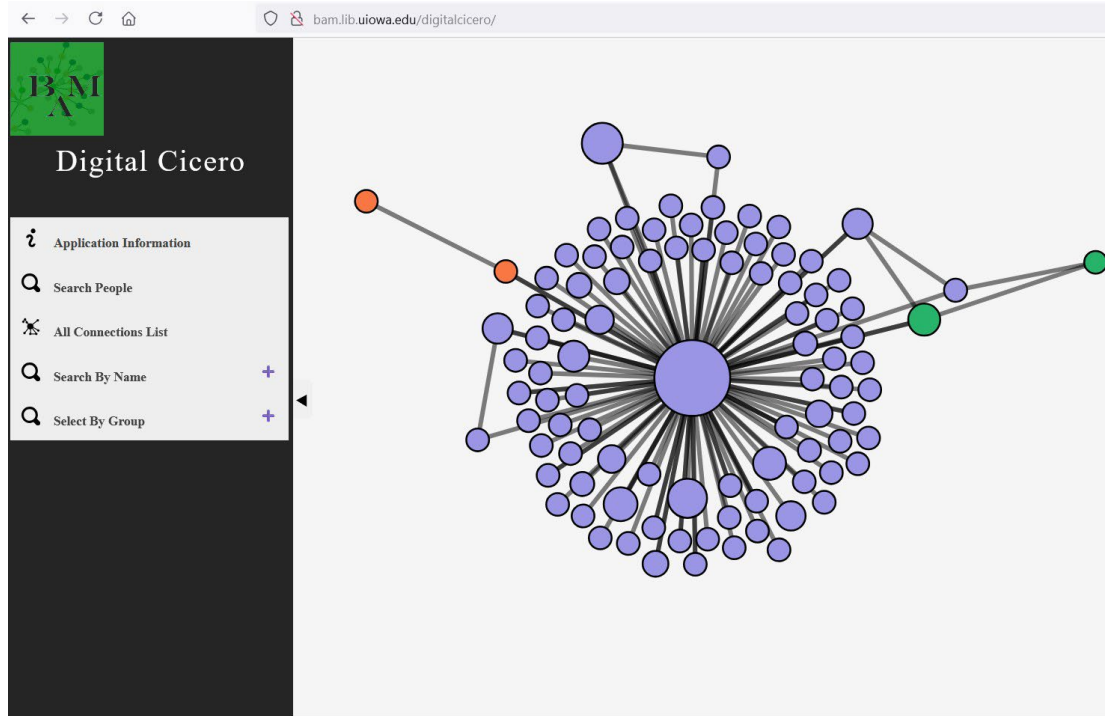
b. Historical Bias Interpretation

- Bias in Big Data
- Support representativeness and bias by enriching computational analysis
- framework to contextualize the politics of digital heritage preservation

The screenshot shows the homepage of the Bias in History project website. The URL is <https://www.bias-in-history.eu>. The page features a navigation menu with links for 'Meet the Team!', 'Future Activities', 'Past Activities', and 'Contact'. A main heading reads 'Welcome to the Bias in History project website!'. Below this, a paragraph describes the project as an interdisciplinary study of historical bias in magic lantern slides, police reports, and children's literature from 1800 to 1940. A section titled 'WHAT CAN ARTIFICIAL INTELLIGENCE TELL US ABOUT HISTORICAL BIAS?' includes a diagram of '4 intersectional axes of bias' (Communication, Education, Regulation, and a fourth unlabeled axis) and a list of AI technologies used, such as multimodal image classification, data-driven bias detection, and interdisciplinary methods like philosophy and digital humanities.

The screenshot shows an article on the Huygens Institute website. The URL is <https://www.huygens.knaw.nl/en/huygens-institute-tackles-historical-bias-in-d>. The article is dated 25-06-2024 and is titled 'Huygens Institute tackles historical bias in datasets'. It discusses an NWO grant awarded to the Huygens Institute to address bias and subjectivity in historical datasets. The article mentions that the project is part of an international network and aims to establish ethical guidelines for AI systems working with historical data. A quote from project leader Lodewijk Petram states: 'In this way, society will get more nuanced and diverse representations of the past – representations that include the voices and experiences of those who have historically not been heard or heard less'. The article also lists related research projects like 'GLOBALISE' and related employees such as Dr. Manjusha Kuruppath, MSc Mrinalini Luthra, and Dr. Lodewijk Petram.

Examples



Digital Cicero, <http://bam.lib.uiowa.edu/digitalcicero/>

Alcide, <https://alcidedigitale.fbk.eu/>

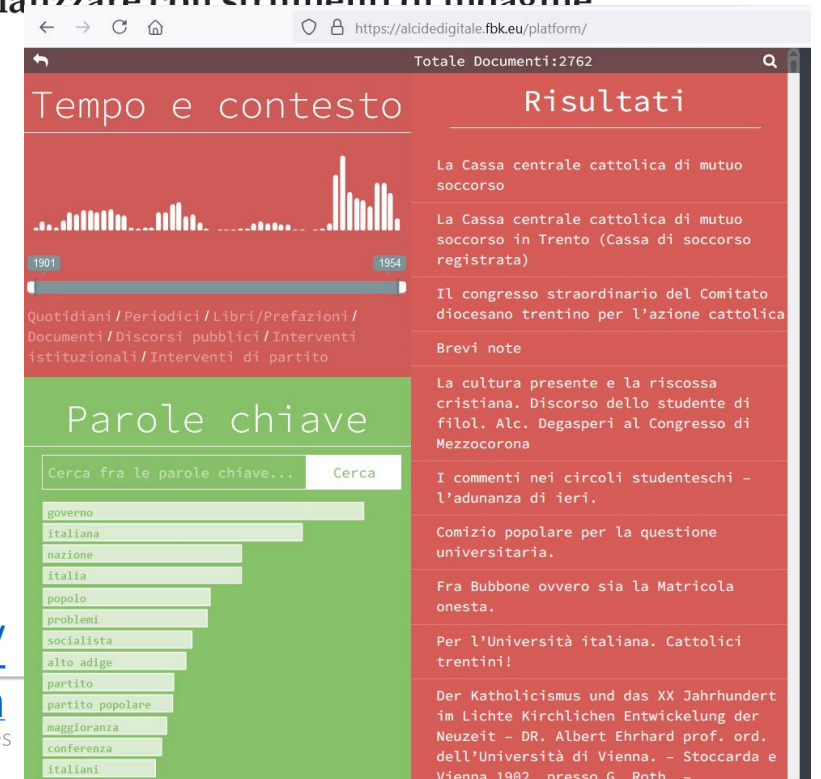
Alcide Plattform, <https://alcidedigitale.fbk.eu/platform>

GdR TAL CNRS « Traitement Automatique des Langues et les Humanités Numériques » // Pfanzer // 7 Nov 2024 La Rochelle Université

Alcide

Un viaggio negli scritti di De Gasperi

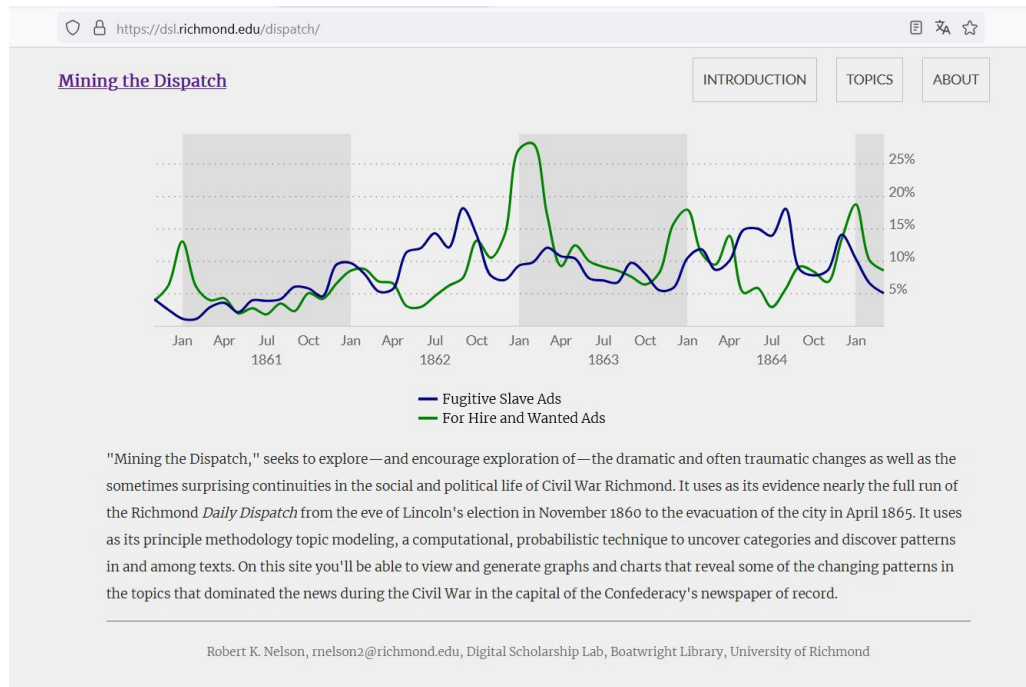
Nella vita di Alcide De Gasperi la parola ha avuto un ruolo centrale. Lo testimoniano le migliaia di articoli di giornale, saggi, interventi politici e discorsi istituzionali intorno a cui si è sviluppata la sua attività politica. Scritti e discorsi che oggi possiamo analizzare con strumenti di indagine innovativi.



c. Contextualizing Data Beyond Patterns

- Historical reasoning
- Contextualization
- Historical Causal inference

The Digital Panopticon, <https://www.digitalpanopticon.org/>



Mining the Dispatch, <https://dsl.richmond.edu/dispatch/>

The screenshot shows the homepage of the Digital Panopticon website. At the top, there is a search bar with the text "Search for names, offences, places, Record ID or Life Archive ID" and a "Search" button. Below the search bar, there is a section titled "Tracing London Convicts in Britain & Australia, 1780-1925". This section contains a paragraph of text about the website's capabilities and a link to "visualisation gallery". Below this, there is a section titled "Did male and female convicts get different types of tattoos?" with two buttons: "Change visualisation" and "View as histlist". At the bottom, there is a paragraph of text about pie charts comparing tattoo popularity. On the right side, there is a "Life of the week" section featuring a portrait of Mina Jury and a "Data visualisations" section with a small chart.

Examples



The screenshot shows the website for the French Revolution Digital Archive (FRDA) at <https://frda.stanford.edu>. The header features the Stanford Libraries (BnF) logo and the title "French Revolution Digital Archive". The main content area is titled "Archives parlementaires / Parliamentary archives" and includes a small image of a book cover. Below the title, a paragraph describes the archive as a chronologically-ordered collection of sources on the French Revolution, covering the years 1787-1794. It mentions that the texts are searchable using ARTFL's PhiloLogic 4 and are marked up with TEI. A second section is titled "Images de la Révolution française / Images of the French Revolution".

The French Revolution Digital Archive, <https://frda.stanford.edu/>

Heidelberg Center for Transcultural Studies,
<https://www.hcts.uni-heidelberg.de/en/research/projects>



The screenshot shows the website for the Heidelberg Center for Transcultural Studies (HCTS) at <https://www.hcts.uni-heidelberg.de/en/centre>. The header includes the website name and navigation links for "CENTRE", "RESEARCH", and "STUDIES". There are also logos for the Heidelberg Center for Transcultural Studies and the University of Heidelberg.



CENTRE

The Heidelberg Centre for Transcultural Studies was founded in 2013 as host to the Cluster of Excellence "Asia and Europe in a Global Context: The Dynamics of Transculturality". Since the end of the Cluster Asia and Europe in 2019, the HCTS has continued to foster research and teaching with a transcultural agenda.



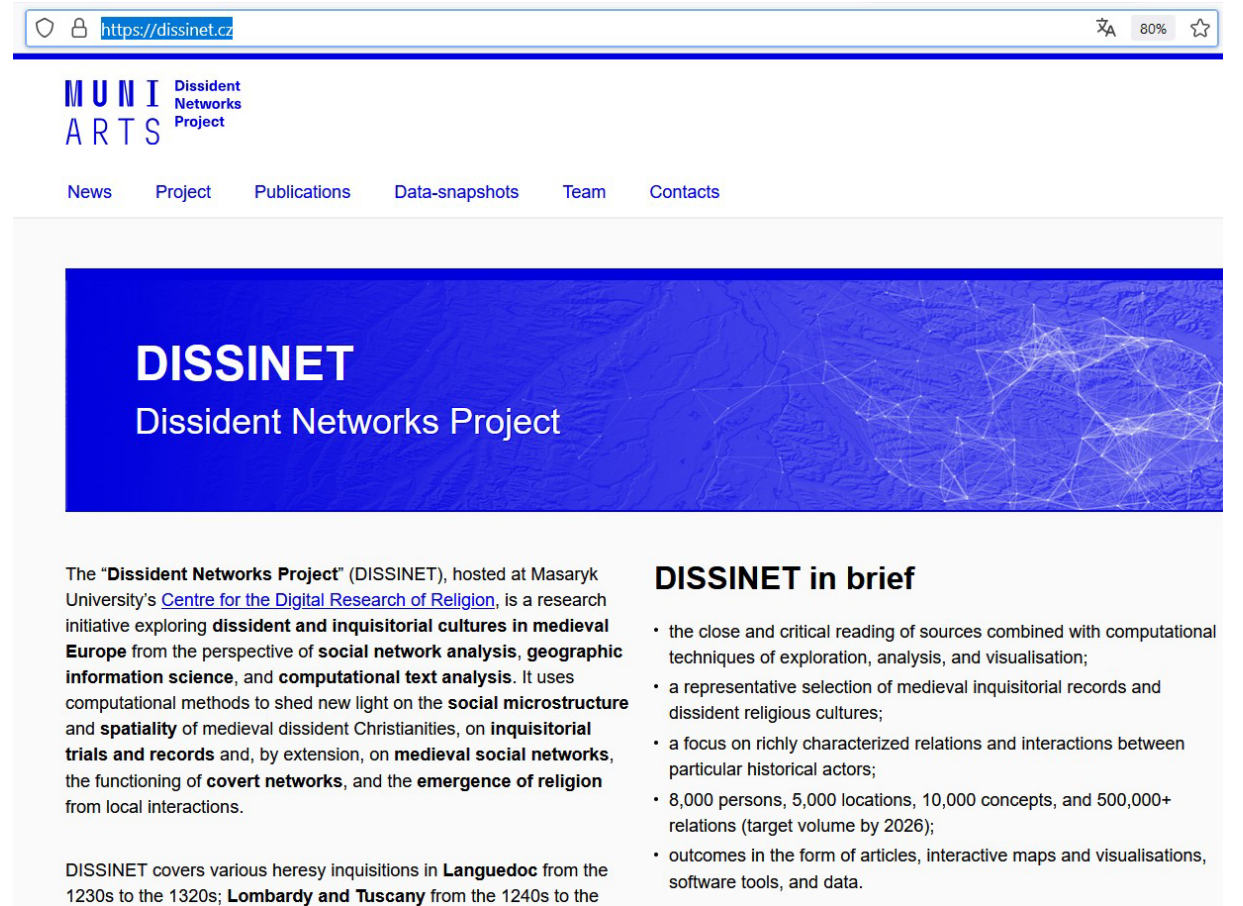
3. Understanding the Rigor of Historical Research

How to do digital source criticism

a. Source Criticism

- Authenticity of Sources
- Read between the lines
- External and internal source criticism
- Distortions over time
- Changes in language
- Source Critical data models and visualizations and multimodal context

Dissident Networks Project, <https://dissinet.cz/>



The browser address bar shows <https://dissinet.cz/>. The website header includes the logo **MUNI ARTS** Dissident Networks Project and navigation links: [News](#), [Project](#), [Publications](#), [Data-snapshots](#), [Team](#), [Contacts](#).

DISSINET

Dissident Networks Project

The “**Dissident Networks Project**” (DISSINET), hosted at Masaryk University’s [Centre for the Digital Research of Religion](#), is a research initiative exploring **dissident and inquisitorial cultures in medieval Europe** from the perspective of **social network analysis, geographic information science, and computational text analysis**. It uses computational methods to shed new light on the **social microstructure** and **spatiality** of medieval dissident Christianities, on **inquisitorial trials and records** and, by extension, on **medieval social networks**, the functioning of **covert networks**, and the **emergence of religion** from local interactions.

DISSINET covers various heresy inquisitions in **Languedoc** from the 1230s to the 1320s; **Lombardy and Tuscany** from the 1240s to the

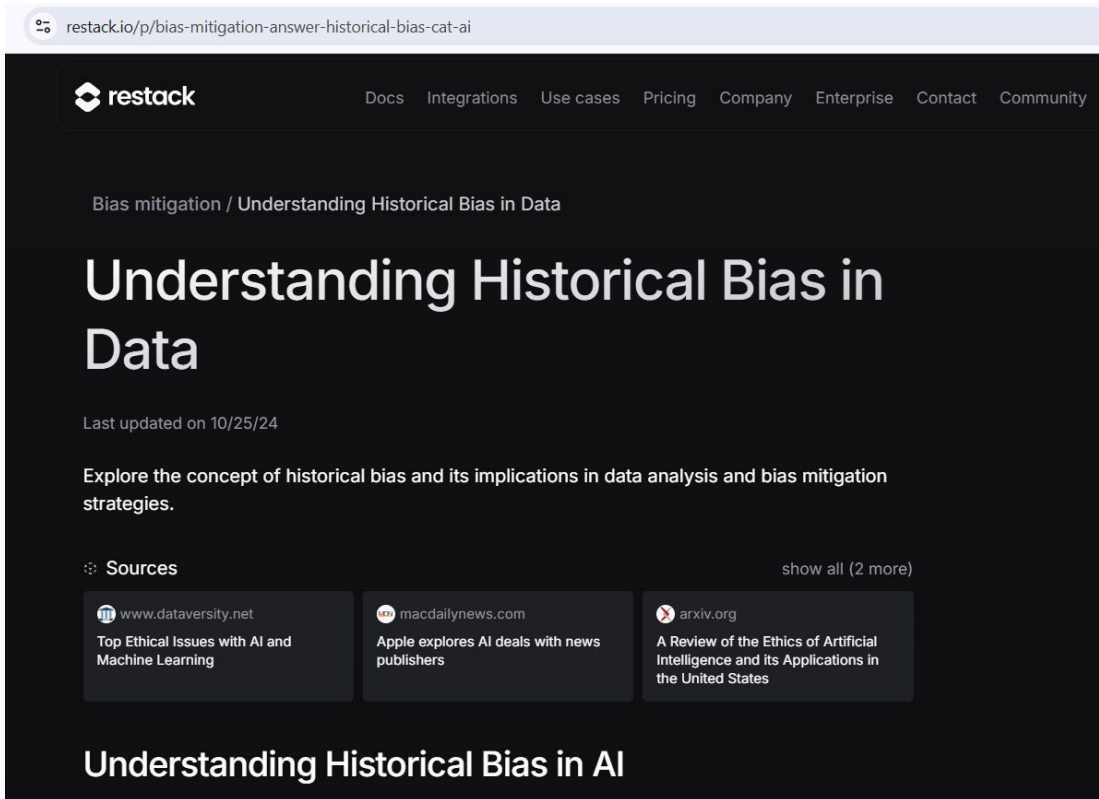
DISSINET in brief

- the close and critical reading of sources combined with computational techniques of exploration, analysis, and visualisation;
- a representative selection of medieval inquisitorial records and dissident religious cultures;
- a focus on richly characterized relations and interactions between particular historical actors;
- 8,000 persons, 5,000 locations, 10,000 concepts, and 500,000+ relations (target volume by 2026);
- outcomes in the form of articles, interactive maps and visualisations, software tools, and data.

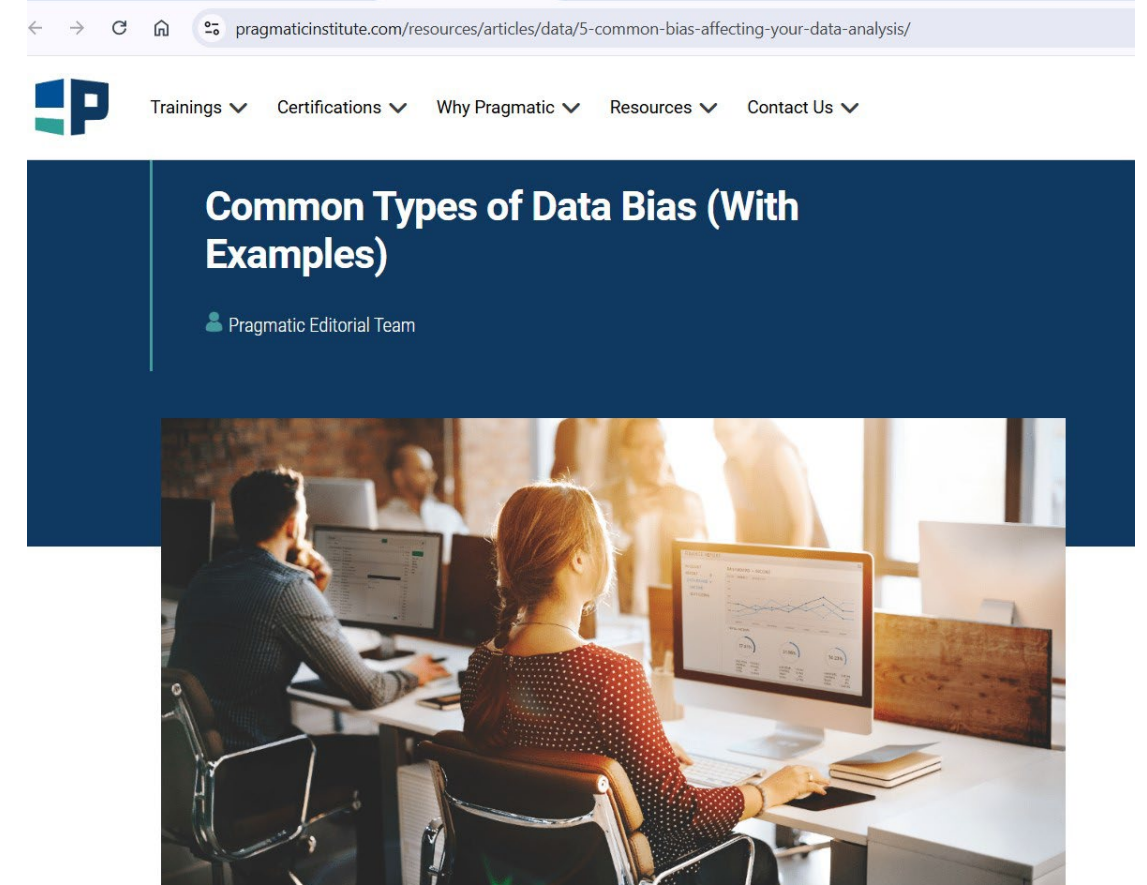
Examples: Understanding Historical Bias in Data

Common Types of Data Bias,

<https://www.pragmaticinstitute.com/resources/articles/data/5-common-bias-affecting-your-data-analysis/>



The screenshot shows a web browser with the URL restack.io/p/bias-mitigation-answer-historical-bias-cat-ai. The page header includes the Restack logo and navigation links: Docs, Integrations, Use cases, Pricing, Company, Enterprise, Contact, and Community. The main content area features the title "Understanding Historical Bias in Data" and a sub-header "Bias mitigation / Understanding Historical Bias in Data". Below the title, it states "Last updated on 10/25/24" and provides a brief description: "Explore the concept of historical bias and its implications in data analysis and bias mitigation strategies." A "Sources" section lists three references: www.dataversity.net (Top Ethical Issues with AI and Machine Learning), macdailynews.com (Apple explores AI deals with news publishers), and arxiv.org (A Review of the Ethics of Artificial Intelligence and its Applications in the United States). At the bottom of the article preview, the text "Understanding Historical Bias in AI" is visible.



The screenshot shows a web browser with the URL [pragmaticinstitute.com/resources/articles/data/5-common-bias-affecting-your-data-analysis/](https://www.pragmaticinstitute.com/resources/articles/data/5-common-bias-affecting-your-data-analysis/). The page header includes the Pragmatic logo and navigation links: Trainings, Certifications, Why Pragmatic, Resources, and Contact Us. The main content area features the title "Common Types of Data Bias (With Examples)" and the author "Pragmatic Editorial Team". Below the text, there is a photograph of a woman sitting at a desk in a modern office, working on a computer. The office environment is bright and professional, with other people visible in the background.

Understanding Historical Bias in Data and AI,
<https://www.restack.io/p/bias-mitigation-answer-historical-bias-cat-ai>

Further Examples


1. Confirmation bias
2. Selection bias
3. Historical bias
4. Survivorship bias
5. Availability bias
6. Outlier bias

23 sources of data bias for #machinelearning and #deeplearning,
<https://www.datasciencecentral.com/23-types-of-bias-in-data-for-machinelearning-and-deeplearning/>

Home » Technical Topics » Data Science

23 sources of data bias for #machinelearning and #deeplearning

ajitjaokar | June 30, 2020 at 8:02 am



In the paper A survey on bias and fairness in machine learning.- the authors outline 23 types of bias in data for machinelearning. The source is good – so below is an actual representation because I found it useful as it is

full paper link below

1) Historical Bias. Historical bias is the already existing bias and socio-technical issues in the world and can seep into from the data generation process even given a perfect sampling and feature selection. An example of this type of bias

b. Narrative Construction

- Historians as Digital Storytellers
- Multimodal narration

https://www.digitalhumanities.org/dhq/vol/13/3/000414/000414.html

2019.13.3 | XML | PDF | Print

Narrelations — Visualizing Narrative Levels and their Correlations with Temporal Phenomena

Hannah Schwan <hannah_dot_schwan_at_fh-potsdam_dot_de>, University of Applied Sciences Potsdam
 Janina Jacke <janina_dot_jacke_at_uni-hamburg_dot_de>, University of Hamburg
 Rabea Kleymann <rabea_dot_kleymann_at_uni-hamburg_dot_de>, University of Hamburg
 Jan-Erik Stange <janerikstange_at_me_dot_com>, ATLAS.ti
 Marian Dörk <doerk_at_fh-potsdam_dot_de>, University of Applied Sciences Potsdam

Abstract

We present findings from interdisciplinary research at the intersection between literary studies, information visualization, and interface design. Despite a growing interest in text visualization among literary scholars, so far, narrative visualizations are not designed to support the particular tasks involved in narratological analysis and often fail to reveal nuanced narratological features. One major outcome of our iterative research and design process is *Narrelations*, a novel visualization technique specifically suited for analyzing and interpreting narrative levels of a story and temporal aspects of its narrative representation. The visualization provides an overview of the nesting and distribution of narrative levels, integrates the representation of temporal phenomena, and facilitates the examination of correlations between these aspects. With this research we explore how collaboratively designed visual encodings and interaction techniques may allow for an insightful analysis at a high level coupled with a close inspection of text passages. We discuss prior work relevant to our research objectives and explain the specific characteristics of narrative levels and temporal aspects of narrative representation. After describing the research process and design principles, we apply the visualization to a test corpus of eight annotated German short stories and demonstrate its heuristic value for literary analyses and interpretations. In particular, we explore the intricate connections between the literary content of the novellas and their narrative form.

Import Datei auswählen Keine ausgewählt

Lili
 Das waren unbeständige Frühlingstage, die ich im Mai des Jahres 1873 in der Heimat antraf. Ich kam aus dem Süden, dem Land der Sonne und der Sorglosigkeit, daheim hingen Wolken am Himmel, umlagerte die Sorge das Leben. Und doch war es Mai. Aber alle bösen Eigenschaften, welche der Volksmund dem oft so lieblichen April nachsagt, hatte diesmal der vielbelobte Wonnemond entfesselt und dabei herrschte sommerliche Schwüle, die sich dann und wann in Gewitterschauern über der blühenden, kaum zu frohen Dassen erwecken Erde entlod.

Eine Gewitterstimmung fand ich auch in den Kreisen meiner Bekannten und Freunde und bald sollte ich erfahren, daß solche Schwüle auch im Leben der Gesellschaft gar oft Entladungen von vernichtender Wirkung zur Folge hat. Das Gewitter hieß Krisis des

NARRATIVE LEVELS

Speakers

- »Ich«
- Erich
- Lili
- Anton
- Portier
- Geschäftsführer
- Kinder

Transgression

- Illocutionary boundary
- Actually crossed
- Not crossed
- Virtually crossed
- Non

Narrative Maps, <https://arxiv.org/abs/2009.04508>

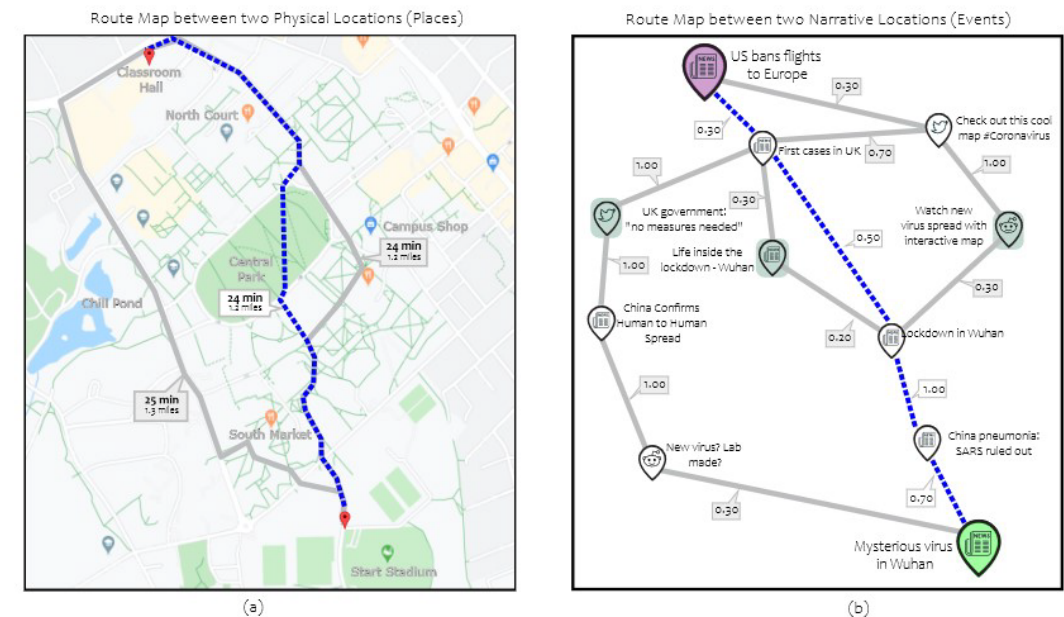
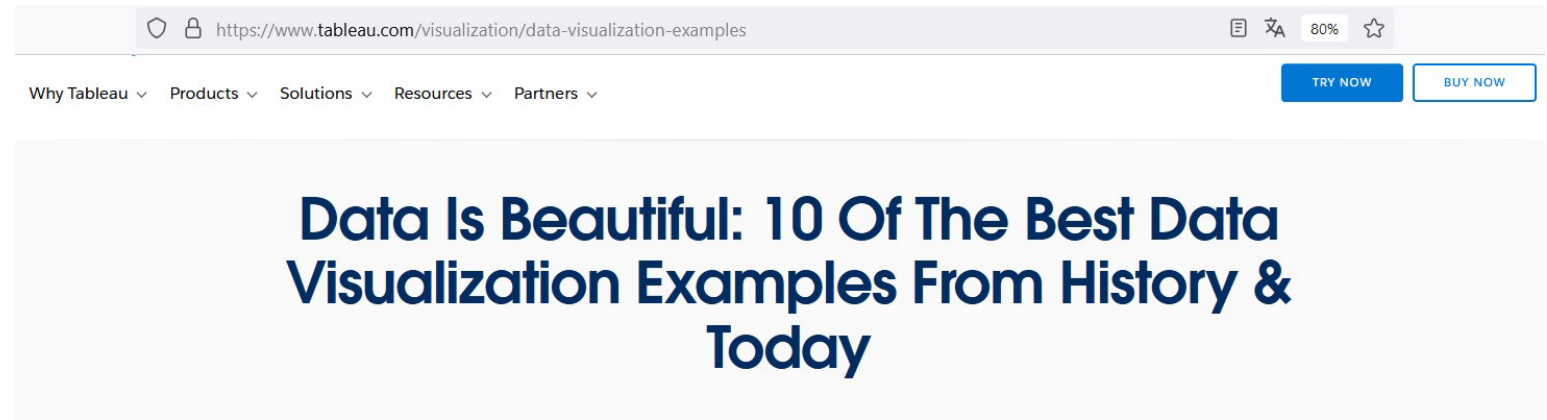


Fig. 1. Illustration of the Route Map Metaphor. (a) A route map showing how to get from Start Stadium to Classroom Hall. (b) A narrative route map showing how to get from the Mysterious Virus in Wuhan event (starting event) to the US banning flights to Europe (ending event). We highlight some representative landmarks for each route in the narrative map.

Narrelations,

<https://www.digitalhumanities.org/dhq/vol/13/3/000414/000414.html>

Examples in Tableau



The screenshot shows a web browser window with the URL <https://www.tableau.com/visualization/data-visualization-examples>. The navigation menu includes 'Why Tableau', 'Products', 'Solutions', 'Resources', and 'Partners'. There are 'TRY NOW' and 'BUY NOW' buttons. The main heading is 'Data Is Beautiful: 10 Of The Best Data Visualization Examples From History & Today'.

Data is Beautiful,
<https://www.tableau.com/visualization/data-visualization-examples>

While data visualization often conjures thoughts of business intelligence with button-down analysts, it's usually a lot more creative and colorful than you might think. There are many wide-ranging applications from business dashboards to public health visualizations to pop culture trend breakdowns. Great and beautiful data visualization requires graphic design and storytelling skills in addition to great analysis skills.

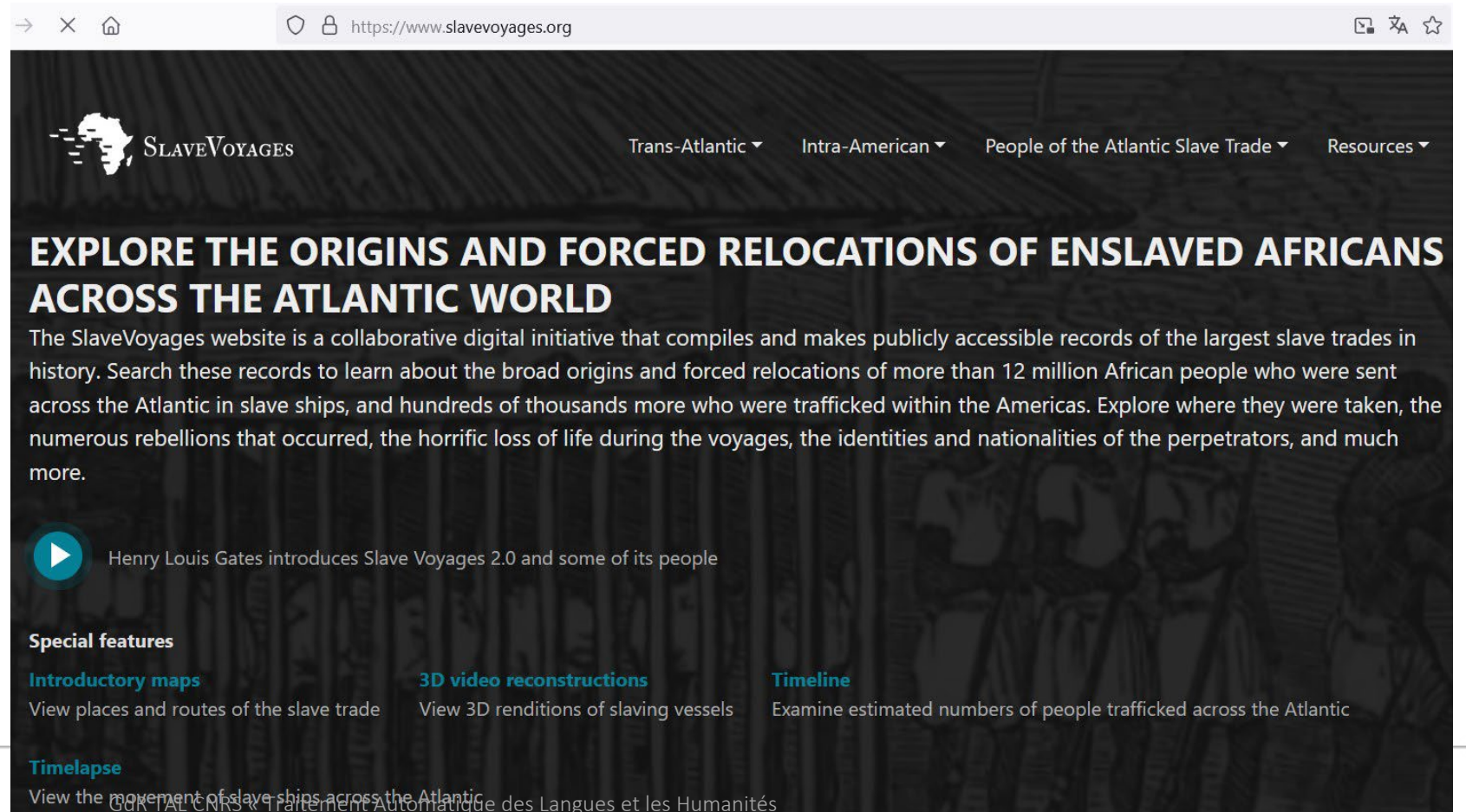
In this article, we're going to highlight some of the most influential, most interesting, and most revealing visualizations out there. We'll look at some notable historical examples first and then fast forward and discuss some more contemporary visualizations. Also, be sure to check out our [detailed guide to data visualization](#) or check out some of our [favorite examples](#).

In this article, we'll cover:

- [What is data visualization?](#)
- [The best data visualization examples](#)
 1. [Napoleon March Map](#)
 2. [1854 Broad Street Cholera Outbreak Map](#)
 3. [Causes of Mortality in the Crimean War](#)
 4. [New Chart of History](#)

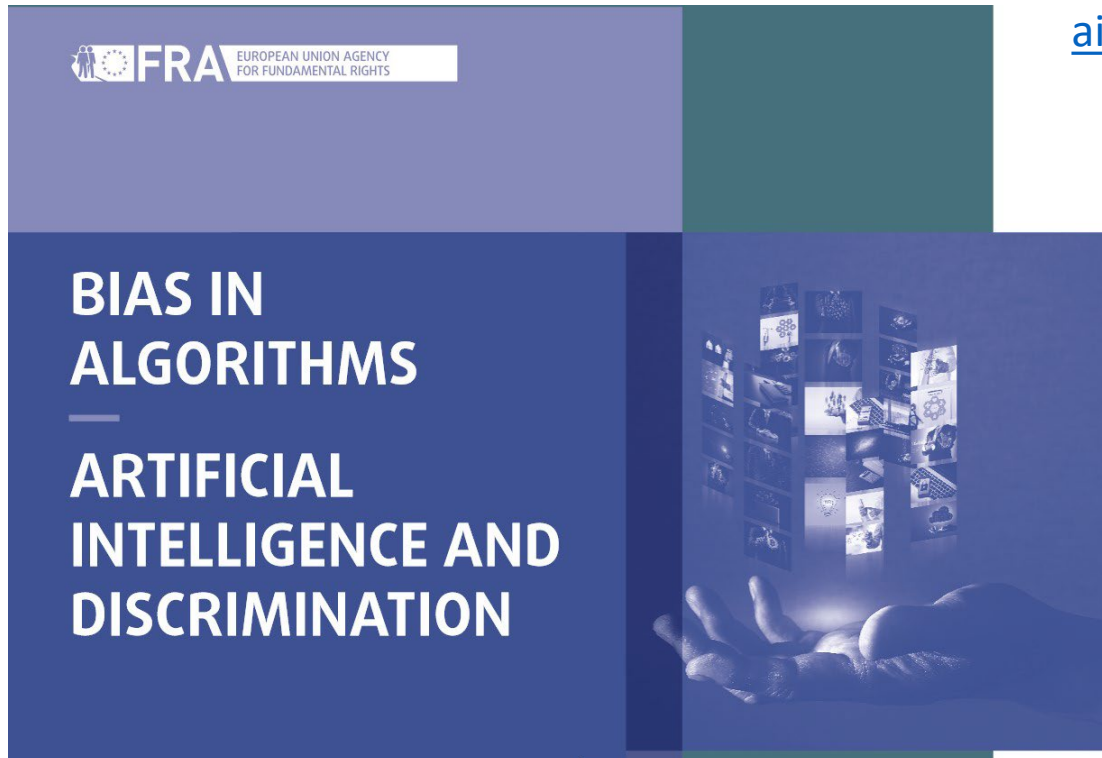
3. Temporal and Cultural Sensitivity

- What one time was true, may no longer be so
- Also: diverse perceptions of time



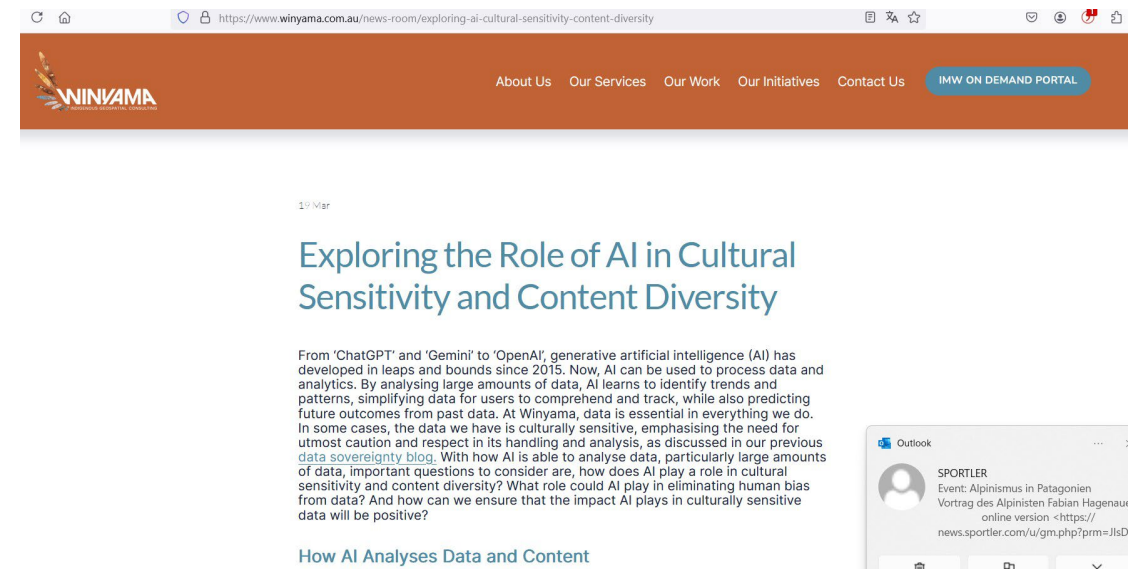
The Transatlantic Slave Trade Database,
<https://www.slavevoyages.org>

Examples – again bias



Bias in Algorithms,
https://fra.europa.eu/sites/default/files/fra_uploads/fra-2022-bias-in-algorithms_en.pdf

Exploring the Role of AI in Cultural Sensitivity and Content Diversity, <https://www.winyama.com.au/news-room/exploring-ai-cultural-sensitivity-content-diversity>



Conclusion: Do historians still need CS?

- Collaboration is important
- Interdisciplinarity can unlock the past
- Mitigating historical bias = not repeat the mistakes of the past?



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