NewsEye Project

Seeks Significant Scientific Advances in Several Directions

23.10.2018 HELDIG

Juha Rautiainen - The National Library of Finland Ruben Ros - University of Helsinki





NewsEye

- is an inter-, multidisciplinary and multilingual research project.
- develops tools and methods for effective exploration and exploitation of digital newspapers by means of new technologies.
- was launched in May 2018 and ends in April 2021.
- is funded by the European Union's Horizon 2020 research and innovation programme.





Consortium

Coordinator: University of La Rochelle (France)

 Prof. Antoine Doucet, Project Coordinator

Partners from 4 countries:

- France
- Austria
- Finland
- Germany.









University of Helsinki

is represented by three different research groups:

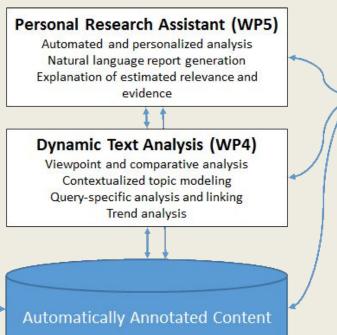
- Computer Science (Hannu Toivonen, Mark Granroth-Wilding, Leo Leppänen, Jari Avikainen)
- Digital Humanities (Mikko Tolonen, Jani Marjanen, Simon Hengchen, Ruben Ros)
- National Library of Finland (Minna Kaukonen, Kimmo Kettunen, Juha Rautiainen)





Integrated Tools and Methods

Semantic Text Enrichment (WP3) Named entity recognition and linking Stance detection Novelty and event detection **Text Recognition & Article** Separation (WP2) Article separation Automatic Text Recognition Layout analysis Digitized Newspapers



Digital Humanities Applications and Uses (WP6)

User

Interface

(WP7)

4 case studies: Media and journalism, Gender, Migration, Nationalism and revolutions

NEWS

The NewsEye project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement no. 770299.



Collections and Datasets

The project will use existing large-scale digitized newspaper collections from three national libraries.











Goal

NewsEye will change the way European digital heritage data is (re)searched, accessed, used and analysed.





Case:

The Omnipresence of the Nation

Jani Marjanen, Simon Hengchen, Ruben Ros, Mikko Tolonen





Goal:

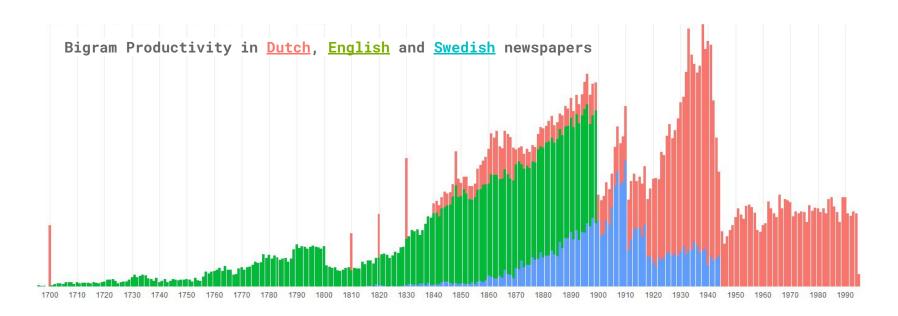
study aspects of nation building through the proliferation of vocabulary with the root "nation"

national army
bigrams → national parliament
national culture





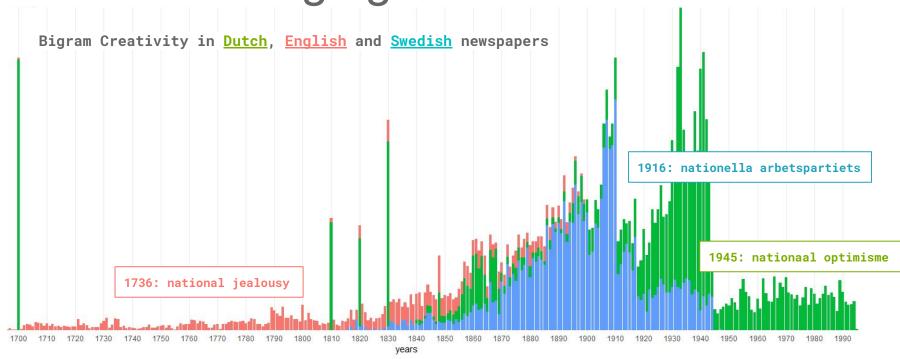
Expanding Vocabularies



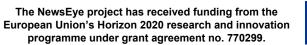




Changing Vocabularies

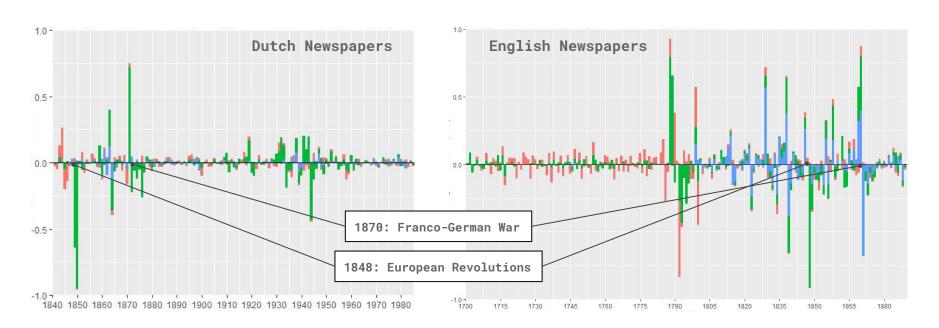








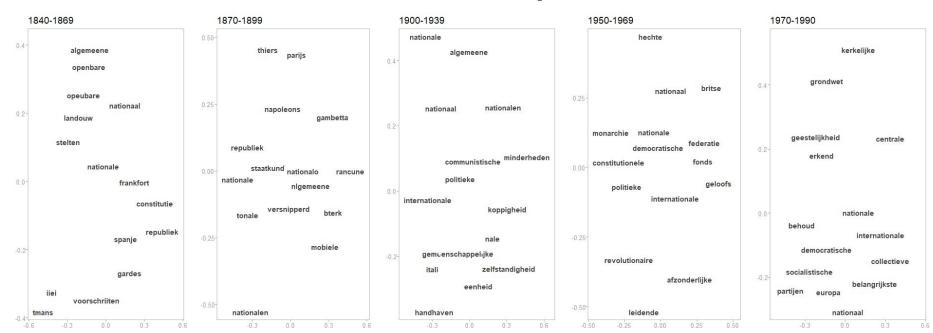
Changing Clusters of Bigrams







Next Steps



broader changes in vocabulary (word embeddings, topic modelling)





Next Steps

international referentiality in vocabulary change

In this way of looking at the question, the committee thought it neces- j sary to proclaim aloud their opinion, that there was a party which desired to display to France their Pretender and their colours — which were those of counter-revolution. The committee had every reason to believe that with this intention (he party alluded to had met in London for the purpose of opposing, at least for the future, a King to a King, a Government to a Government, and the principle of hereditary right to the principle of national sovereignty.



More About NewsEye

https://www.newseye.eu/

Twitter: @NewsEyeEU



Think Open blog:

https://blogs.helsinki.fi/thinkopen/enthusiasm-about-the-new-horizons-automatic-data-science-adapted-to-european-history-and-its-everyday-documents-newspapers/



