



IMPRESS

BEYOND IDEOLOGICAL CONFLICT: RELIGION AND
FREETHOUGHT IN THE BELGIAN MEDICAL PRESS (1840-1914)

Digital Approaches towards
Serial Publications (18th-20th
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AIMS

1. highlight the scientific potential of 19th-century medical heritage and stimulate future digital research by providing a methodological model of analysis

digitization of three major Belgian medical journals, 1840-1914:

- *Bulletin de l'Académie Royale de Médecine de Belgique*
- *Journal de Médecine, de Chirurgie et de Pharmacologie*
- *Journal des Sciences Médicales de Louvain*

selection criteria:

- inherent scientific and patrimonial importance
- specific research questions

AIMS

2. reconsider the role of ideological conflict in 19th-century Belgian medicine

- study ideological views of Catholic and liberal physicians within scientific exchange: clashes and/or willingness to bypass ideological disagreements
- analyze development of professional and/or scholarly identities: common and/or ideologically specific

Selection of 4 medical subfields where ideological difference was at play:

- mental health
- gynecology
- family medicine
- public health

DIGITAL TOOLS

Why?

- Implicit character of ideology in the medical field; fine-grained and large-scale analysis of language is needed to correct equation of 19th medicine with liberalism

How?

- automatic information retrieval: topic modeling in order to create subcorpora (*Mallet* program).
- text mining, among others:
 - calculation of word/lemma frequencies
 - principle component analysis (PCA) to retrieve correlated term-frequencies
 - automatic analysis of word embeddings (word2vec models) to reveal the contexts in which words appear, and to detect changes over time in those embeddings.

INTERNATIONAL RESEARCH CONTEXT

- Bibliothèque numérique [Medic@](#) (Bibliothèque Interuniversitaire de Santé, Paris): online library in the history of medicine
- ['Mining the History of Medicine'](#) (University of Manchester): development of tools for semantically-oriented research, i.e. to record semantic shifts of medical concepts (19th-20th centuries)
- ['Translantis'](#) (Utrecht University): Digital Humanities Approaches to Reference Cultures: The Emergence of the US in Public Discourse in the Netherlands, 1890-1990', with a sub-project 'Negotiating health and illness', using general and medical press

CHALLENGES

- [4-year project constraints: parallel timing digitization – research]
- digitization: part of a larger effort to preserve scientific heritage versus specific research needs of the project
- investing in digital expertise versus reliance on ‘external’ expertise
- impact of selection of digital tools: path dependence
- need to look beyond the digital corpus
- need to complement digital analysis with contextualized, hermeneutical textual interpretation