

Library Labs at KBR:

Digital Research Lab, CAMille, Data Science Lab and LabEL

Julie M. Birkholz (KBR, UGhent), Brecht Deseure (KBR, ULB),
Isabelle Gribomont (KBR, UCLouvain), Tan Lu (KBR, VUB)

Library Labs at KBR:

- Long-term partnerships between KBR (Royal Library of Belgium) and Belgian universities in the context of FED-tWIN mandates funded by BELSPO
- The Labs work together and in collaboration with academics, the ICT department and the management team of the library to expand the library collections and/or exploit their research potential



CAMille

Center for Archives on Media and Information
in Belgium

A digital portal for research into journalism

- Digitise newspapers, periodicals and archives relating to Belgian journalism
- Create a hub for access to digital resources about journalism inside and outside of KBR

A database of Belgian journalists

- Create a prosopographic database of Belgian journalists since 1830
- Enhance linked authority data for Belgian journalists
- Reconstruct journalistic careers and networks

Research into history of Belgian journalism

- Study critical discourse about journalism and journalists
- Develop digital research methods: OCR, article segmentation, automatic recognition of signatures,..



Data Science Lab

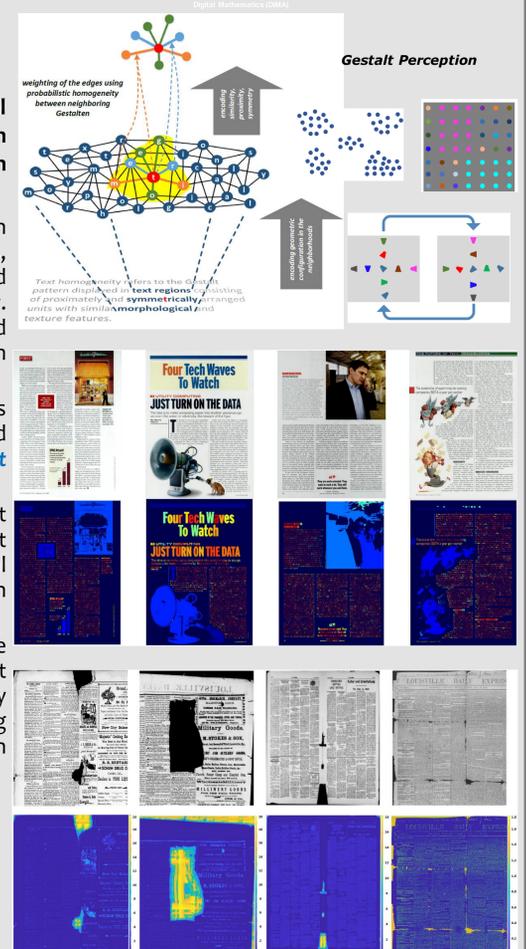
Recognition and Comprehension of Cultural Heritage Collections based on both Mathematical Modelling and Data Driven Methods

➤ Thanks to the ongoing digitization efforts, rich digital resources, such as images of manuscripts, historical newspapers, etc. are being produced especially in the cultural heritage sector. However, a large portion of the produced images is yet to be exploited to unlock the rich (text and non-text) information contained

➤ Human perceptual recognition of images containing textual content can be modelled based on the conceptualization of **text homogeneity**

➤ A probabilistic graph modeling of text homogeneity can be applied for accurate text region recognition, this also inspires perceptual driven layout recognition of documents with complex layouts

➤ The same text homogeneity can also be modelled around individual pixels and a joint global and local modeling of text homogeneity can be applied for advanced document parsing (e.g. the recognition of random damages in historical documents)



Digital Research Lab - A lab for text and data mining research on KBR's digitised and born-digital collections.

- to facilitate text and data mining research on KBR's diverse, multilingual digitised and born-digital collections.

- stimulating the (re)use and research of these digital sources, data and metadata of these collections.

- specifically the use of computational tools such as **text and data mining**, and **digital humanities research** on KBR's collections.

- long-term cooperation with the Ghent Centre for Digital Humanities, Ghent University.

- Coordinator of the KBR Virtual Lab – future data-on-demand service



LabEL A lab for the study, collection, preservation and dissemination of Belgian born-digital literature

Acquisition, archiving and sustainability

- Create a network with authors and publishers to encourage the growth of the collection.
- Develop strategies to address technological obsolescence.
- Preserve this part of the Belgian cultural heritage.

Visibility and accessibility

- Bring this artform into the spotlight with exhibitions and events.
- Provide access to researchers and library users through the library catalogue.

Research

- Analyse the characteristics of the Belgian production in the national and international contexts.
- Develop multimodal digital analysis methods.

