PLIN064 Úvod do *digital humanities*

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Practical Hands On: Text Analysis

DH Activities

DH Examples

Further Steps in this Course

Analog and Digital Documents

Activities I

Fundamental Activities (not only in DH):

- curation – selection and organization in an interpretive framework
- analysis – processing of text or data & visualization
- editing – keeping track of authenticity, origin, transmission, production
- modeling – assumption about knowledge specific to the subject (e.g. in case of analyzing correspondence, a *timeline*)

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Activities II

Digital Activities:

- digitization,
- classification,
- description,
- metadata organization,
- navigation

[Burdick et al., 2012]

DH Examples I

Text

- linguistics: synchrony and diachrony
- language variations: dialects, slang, pidgin ...
- language and social groups
- literary texts: authors, eras, areas
- cross-lingual discourse
- discourse analysis: event extraction, communication studies
- names: toponymy, ethnonymy, demonymy ...
- information science
- history
- cultural analytics: trends in cultural change
- social studies

DH Examples II

Visual art

- new media
- virtual reality
- museology: curation, preservation, access
- archaeology: 3D modeling
- architecture

Multi-modal

- anthropology: sound + video of human activities
- analysis of video-games and other born-digital objects

Internet of Things

- sensor data

DH in Czechia

LINDAT/CLARIAH-CZ at FF

<https://it.muni.cz/phil/lindat-clariah>

Czech Association for Digital Humanities

<https://www.czadh.cz/>

Czech Academy of Sciences

<https://digitalhumanities.cz/>

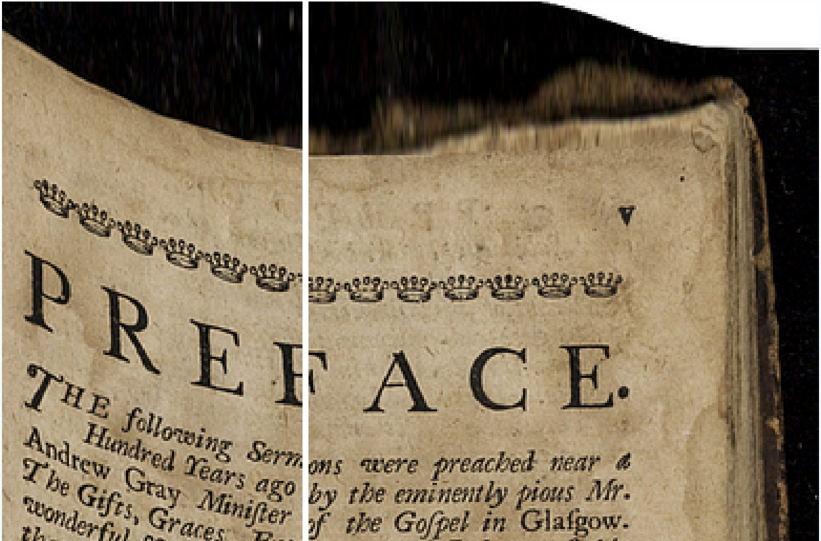
LINDAT/CLARIN, DARIAH-CZ

Further Steps in this Course

- Digital documents
- Analogue documents and digitization
- “Raw” data, enriched data, metadata
- Data sources
- Data science projects
- Data processing in Python
- Evaluation, presentation of results, visualization

Analog and Digital Documents: Preprocessing

Making (historical) analog document digital



PREFACE.

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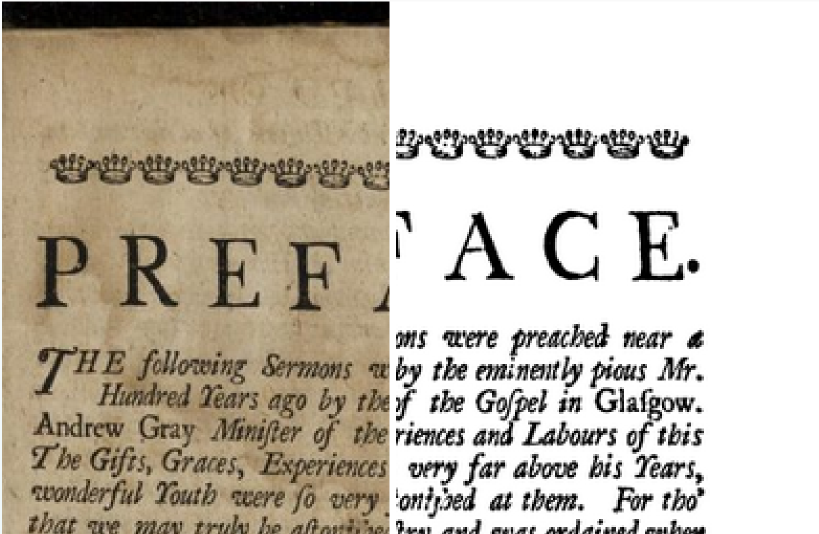

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Optical Character Recognition (OCR)

1. Recognition of the area with text
2. Recognition of character shapes
3. Probability of a character in a context or other characters
4. Issues: different fonts, language-specific characters, noise

multi-layer PDFs

Software

Preprocessing: BIQE, Book Restorer

OCR: ABBY, InftyReader, Tesseract

neural network based OCR (Cloud service)

Analog and Digital Documents: Overview

- analog documents: historical artifacts
- digital documents: digital copy of analog documents
- retro-digital documents: originally analog document that were scanned and OCRed
- born-digital documents: artifacts that were created originally as digital documents

Czech experts: Digitalizační centrum Knihovny AV ČR v.v.i.

Burdick, A., Drucker, J., Lunenfeld, P., Presner, T., and Schnapp, J. (2012).
Digital_Humanities.
The MIT Press.

Terras, M., Nyhan, J., and Vanhoutte, E. (2013).
Defining Digital Humanities: A Reader.
Ashgate Publishing Company, Brookfield, VT, USA.