PLIN064 Úvod do digital humanities

Zuzana Nevěřilová xpopelk@fi.muni.cz

Centrum zpracování přirozeného jazyka, B203 Fakulta informatiky, Masarykova univerzita

18. září 2019

Organizational notes

Digital Humanities: Description, Key Activities

Practical Hands On: Text Analysis

DH Examples

Organizational notes

- interactive lectures
- hands on, mostly as Python Notebooks
- final project: processing of DH data of your choice
- short presentation

Computer technology has mediated in the development of formal methods in humanities scholarship. Such methods are often much more powerful than traditional research with pencil and paper. They include, for instance, parsing techniques in *computational linguistics*, the calculus for expressive timing in *music*, the use of exploratory statistics in *formal stylistics*, visual search in art history, and data mining in history. Although scientific progress is in the first place due to better methods, rather than solely due to better computers, new advanced methods strongly rely on computers for their validation and effective use. Put in a different way, if you are going to compare two texts, you can do it with traditional pencil and paper; but if you are going to compare fifty texts with each other, you need sound computational methods.

[de Smedt et al., 1999] (emphasis by ZN)

Digital Humanities

- new modes of scholarship
- collaborative
- trans-disciplinary
- computationally engaged

...a new view on traditional objects in humanities

Digital Humanities

- new modes of scholarship
- collaborative
- trans-disciplinary
- computationally engaged

...a new view on *traditional objects* in **humanities** but also a study of *digital objects* from the point of view of the **humanities**

Knowledge Discovery

introspection, intuition (pen & pencil)

 \Downarrow

data-driven research

Knowledge Discovery

introspection, intuition (pen & pencil)

 \Downarrow

data-driven research

4V = velocity, volume, veracity, variety

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)

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)

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 . . .
- history
- cultural analytics: trends in cultural change
- social studies
- genealogy

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

Organizational notes

Czech Academy of Sciences

<https://digitalhumanities.cz/>

LINDAT/CLARIN, DARIAH-CZ

Burdick, A., Drucker, J., Lunenfeld, P., Presner, T., and Schnapp, J. (2012).

Digital_Humanities.

The MIT Press.

de Smedt, K., Gardiner, H., Ore, E., Orlandi, T., Short, H., Souillot, J., and Vaughan, W. (1999). Computing in humanities education: A European perspective.

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