#UNCERTAINTY

The OED defines #Uncertainty among others as the "quality of being uncertain in respect of duration, continuance, occurrence, etc." and as "liability to chance or accident". Also included in the definition is "the quality of being indeterminate as to magnitude or value; the amount of variation in a numerical result that is consistent with observation". The definitions relate, among others, to vagueness in the sense of not knowing and, in economics, to risk by a lack of predictability. *

Thus, while uncertainty in general is a core phenomenon in all fields of research, its meaning is especially ambivalent in digital humanities when the quality of not knowing and a quantifiable category of uncertainty in a statistical sense, meet in communication.

Most mixed methods projects address this at one or the other level, sometimes discerning #Uncertainty from vagueness especially in the context of linguistics. They underline #Uncertainty as intrinsic or inherent to data; its transformation and interpretation (HerCoRe, Digital Plato; cf. also DhiMu, ArchiMediaL) or address having varying levels or qualities of #Uncertainty either as a result of #Quantification (DhiMu) or as an outcome of #Machine Learning (ArchiMediaL).

The concept of #Uncertainty denotes significant epistemic challenges, but despite its ambiguous role in digital humanities and mixed methods processes, it does not seem to affect communication between the parties involved.

* "Uncertainty, n.". in: *Oxford English Dictionary* (OED), first published 1921; most recently modified version published online March 2022, https://www.oed.com/ [accessed: 25.10.2022].

Title: HerCoRe – Hemeneutic and Computer-based Analysis of Reliability, Consistency and Vagueness in Historical Texts
Team: Cristina Vertan (digital humanities, computational Linguistics)-PI, Alptug Güney (Turcology), Walther v. Hahn (German Computational Linguistics, Digital Humanities), Ioana Costa – University of Bucharest (Latin and Romanian Linguistics), Rafael Quiros Marin (GIS-Application and Web Frontend), Miguel Pedegrosa (Web Frontend), Anja Zimmer (mathematical foundation fuzzy logic) Corpus, Yavuz Köse –University of Vienna (Turkology)
Mutlilingual corpus: Two most important works of Dimitrie Cantemir (humanist of the 18th century) "Description of Moldavia" and "History of the Growth and Decay of the Ottoman Empire" in Latin, German (original translations from the 18th century) and Romanian
Field of Study: Turcology, Balkan /Romanian History
Institution: University of Hamburg
Methods: data modelling (Graph, RDF-Triple, Objects), natural language processing, hermeneutics, source manual analysis, ontology development, software development, annotation, fuzzy reasoning
Tools: Protégé (Ontology), OrientDB (Database) , WebLicht (Language Technology), CDG-Parser (Language Technology), HistAnno (in project developed Annotation tool) (Annotation), Oxygen (XML Edit). Eclipse (Software development)
Technology: OWL, Java EE, Javascript , Document and Graph Databases, Leaflet, SPARQL