

# Digital Humanities

DIGITAL HUMANITIES FOR MEDIEVAL PHILOSOPHICAL SOURCES

## 0. Presentation

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HME2415

<https://www.mihaimaga.ro/dh/>

- 1 Course 1: Introduction to Digital Humanities
- 2 Course 2: Semantic encoding
- 3 Course 3: Critical editing
- 4 Course 4: Principles of TEI-XML
- 5 Course 5: Representation of manuscripts in TEI
- 6 Course 6: Representation of textual variation in TEI
- 7 Course 7: Representation of source apparatus in TEI
- 8 Course 8: Visualisation of digital editions
- 9 Course 9: Integration and digital processing
- 10 Course 10: Artificial intelligence

- 1 What does DIGITAL HUMANITIES mean?
  - a technique
  - a philosophy
- 2 History of DIGITAL HUMANITIES
- 3 Domains of DIGITAL HUMANITIES

- 1 Visual representation vs. semantic representation
- 2 The semantic paradigm in the digital world
- 3 Utility of semantic encoding: integration, interfaces, data processing

## 1 Methods of approach for critical editions

- Best manuscript method
- Eclectic method
- Stemmatic (lachmannian) method
- Unoriented (material) method

## 2 Types of critical editions

- Facsimile type edition
- Eclectic edition
- Literary (critical) edition
- Diplomatic edition
- Material edition

## 3 Elements of a critical edition:

Introduction, Text, Critical apparatus

## 1 The XML format

- XML syntax: tag, attribute, text, declaration, comment

## 2 About TEI<sup>1</sup>

- The TEI Consortium P5 Guidelines and the document structure
  - <http://tei-c.org/>

### XML

```
<?xml version="1.0"?>
<TEI xmlns="http://www.tei-c.org/ns/1.0">
  <text>
    <p xml:id="par01" lang="la">Hic est textus editionis.</p>
  </text>
</TEI>
```

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<sup>1</sup>Text Encoding Initiative

**1** Indication and description of manuscripts

- manuscript identifier: place, library, shelf number
- description parts: physical, historical, contents, bibliography

**2** Instruction set for describing manuscripts

**<msDesc>** manuscript description block

**<msIdentifier>** identifier: <settlement>, <repository>, <idno>...

**<head>** heading

**<msContents>** manuscript contents block: <msItem>, <locus>, <title>...

**<physDesc>** physical description: <objectDesc>, <supportDesc>, <dimensions>, <layoutDesc>...

**<history>** manuscript history: <origin>, <provenance>, <acquisition>...

**<additional>** additional information

**<msPart>** information about a section of the manuscript

## 1 Differences between manuscript copies

- variants of redaction
- copyist errors

## 2 Describing textual variations in TEI:

<app> apparatus

<lem> lemma

<rdg> reading

## 3 Encoding methods:

**LRM** Location-referenced Method

**DEPAM** Double End-Point Attachment Method

**PSM** Parallel Segmentation Method

## 4 Statistics and counters



## 1 Ontologies and trees

- tree-structured data
- objects, classes ontologies

## 2 Describing the elements of a textual reference

- references to author, title, work, section...: <title>, <author>...
- bibliographies: <bibl>...
- other types of references

## 3 Attaching the references

- inline
- using pointers

- 1 Conversion to classic format
  - typesetting rules for editions
  - specialized DTP:  $\LaTeX$
- 2 Interactive interfaces
  - web interfaces: client-side, server-side
  - native applications
- 3 Inclusion of manuscript images
  - TEI instructions set: <facsimile>, <surface>, <zone>, <graphic>
  - image attachment: inline, pointer
- 4 Pitfalls of the visual

- 1 Indices and concordance tables
- 2 Query languages: XQuery, XPath
- 3 Search in text: simple, wildcard, stemmatized, lemmatized
- 4 Lemmatization, normalization, dictionaries
- 5 Digital corpora
- 6 Data-mining

- 1 What is artificial intelligence (AI) and machine learning (ML)?
- 2 Algorithms and models in ML
- 3 Training and prediction in ML
- 4 Classification of approach types in ML