

# Digital Humanities

DIGITAL HUMANITIES FOR MEDIEVAL PHILOSOPHICAL SOURCES

## 6. Representation of textual variation in TEI

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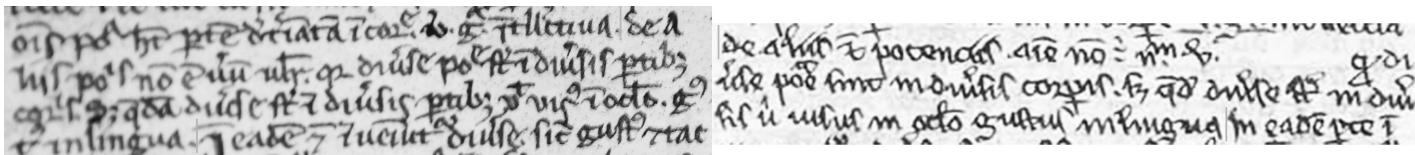
### Course outline

1.	Differences between manuscript copies .....	2
2.	Describing textual variations in TEI .....	2
3.	Encoding methods .....	3
4.	Statistics and counters .....	3
	Homework .....	4

## 1. Differences between manuscript copies

- The text of a work differs at the level of manuscript copies
  - sometimes the same text survives in multiple variants of redaction
  - transcribing the texts, the copyists make changes and mistakes
- The critical edition must render the text variations because
  - the edited text is reconstructed based on variants
  - the textual variations are important for the tradition

Example of differences:



A = Alba Iulia, Biblioteca Bathyanum, Ms. I.143, f. 30rb

P = Praha, Národní knihovna České republiky, IV.D.13, f. 23rb

<p>de aliis · potentiiis · non est verum universaliter, quia diversæ potentiae sunt in diversis partibus corporis. Sed quædam diversæ sunt in diversis partibus, ut visus in oculo, gustus in lingua;</p>	<p>de aliis etiam potentiiis animæ non est nullum v. [ lac. ], quod diversæ potentiae sunt in diversis corporis. Sed quædam diversæ sunt in diversis, ubi visus in oculo, gustus in lingua;</p>
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### Segmentation and alignment of variants

A	de	aliis	·	potentiis	·	non	est	verum	universaliter
P	de	aliis	etiam	potentiis	animæ	non	est	nullum	v. + lac.

A	quia	diversae	potentiae	sunt	in	diversis	partibus	corporis
P	quod	diversae	potentiae	sunt	in	diversis	·	corporis

A	Sed	quaedam	diversae	sunt	in	diversis	partibus	ut	visus
P	Sed	quaedam	diversae	sunt	in	diversis	·	ubi	visus

A	in	oculo	gustus	in	lingua
P	in	oculo	gustus	in	lingua

### Classical (printed) critical apparatus

- 1 de aliis etiam potentiiis animae  
non est verum universaliter, quia  
diversae potentiae sunt in diversis  
partibus corporis. Sed quædam  
5 diversae sunt in diversis partibus,  
ut visus in oculo, gustus in lingua;

1 etiam] om. A || animae] om. A ||  
2 verum universaliter] nullum v. P; lac.  
add. P || quia] quod P || 4 partibus]  
om. P || 5 partibus] om. P || 6 ut] ubi  
P

## 2. Describing textual variations in TEI

TEI elements for critical apparatus encoding

- <app> parent element for entries in the critical apparatus
- <rdg> contains a single reading within a textual variation
- <lém> contains the lemma (or base text, accepted text)
- <witDetail> gives further details for the manuscript/-s

The elements <rdg>, <lem> and <witDetail> must have the attribute `wit="#_"` which specifies the identifier for the manuscript/-s attesting the variant preceded by #. Multiple identifiers are separated by space (`wit="#A #B #C"`). The identifier is specified in the witness list (the attribute `xml:id` from <witness>). To mark omission, a single tag may be used (<rdg wit="#\_"/>)

- Other elements for the critical apparatus:

<supplied>	text supplied by the editor	(…)
<unclear>	cannot be clearly transcribed	<i>dub.</i>
<damage>	damaged ms. zone	†
<del>	text marked as deleted in ms.	<i>del., exp., eras.</i>
<gap>	portion which was not transcribed for various reasons	

## TEI Example

### TEI-XML

```

<p>
    de aliis
    <app>
        <lem wit="#P">etiam</lem>
        <rdg wit="#A"/>
    </app>
    potentiis
    <app>
        <lem wit="#P">anima</lem>
        <rdg wit="#A"/>
    </app>
    non est
    <app>
        <lem wit="#A">verum universaliter</lem>
        <rdg wit="#P">>nullum <unclear>v.</unclear></rdg>
        <witDetail wit="#P" type="lacuna">lac. add.</witDetail>
    </app>,
    <app>
        <lem wit="#A">quia</lem>
        <rdg wit="#P">quod</rdg>
    </app>
    diversae potentiae sunt in diversis
    <app><lem wit="#A">partibus</lem><rdg wit="#P"/></app> corporis.
</p>

```

## 3. Encoding methods

- **location-referenced** method

the apparatus is stored separately (or within the text) and is linked to the text with the `loc` attribute

```

<p n="parI">de aliis etiam potentiis ...</p>
...
<app loc="parI 3"><lem wit="#P">etiam</lem><rdg wit="#A"/></app>

```

- **double-end-point-attached** method

the apparatus is linked to the text through anchors and through the `from` and `to` attributes

```

<p>... non est <anchor xml:id="i1"/>verum universaliter<anchor xml:id="i2"/>, quia ...</p>
...
<app from="#i1" to="#i2"><lem wit="#A">verum universaliter</lem><rdg wit="#P">>nullum v.</rdg></app>

```

- **parallel-segmentation** method

the text is divided into segments, each with its apparatus

```

<p>... potentiis <app><lem wit="#P">anima</lem><rdg wit="#A"/></app> non est ...</p>

```

## 4. Statistics and counters

Having the critical apparatus semantically encoded, it is to extract automatically the textual variations of each manuscript.

- the variations can be processed statistically for global appreciation of their type and number
- the list of variations is used to make up the *stemma codicum*
- the text of a witness can be automatically reconstructed

## Homework

Encode in TEI the differences between the following textual variants:

Accepted text xml:id="A"	Textual variant xml:id="V"
Omnis doctrina est de rebus vel de signis. Veteris ac novae legis continentiam diligenti indagine etiam atque etiam considerantibus nobis, praevia Dei gratia innotuit sacrae paginae tractatum circa res vel signa praecipue versari. Ut enim egregius doctor Augustinus ait in libro De doctrina Christiana, “omnis doctrina vel rerum est vel signorum”. Sed res etiam per signa discuntur.	Quamvis doctrina est de rebus vel de signis vel etc. Veteris ac novae legis continentiam diligenti indagine etiam considerantibus nobis praevia Dei gratia innotuit circa res vel signa praecipue versari etc. Ut enim auctor eximius Augustinus ait in libro suo De doctrina christiana, “omnis doctrina vel rerum” etc. Sed res etiam per signa dicetur.