

GENETIC EDITING

Martina Semlak

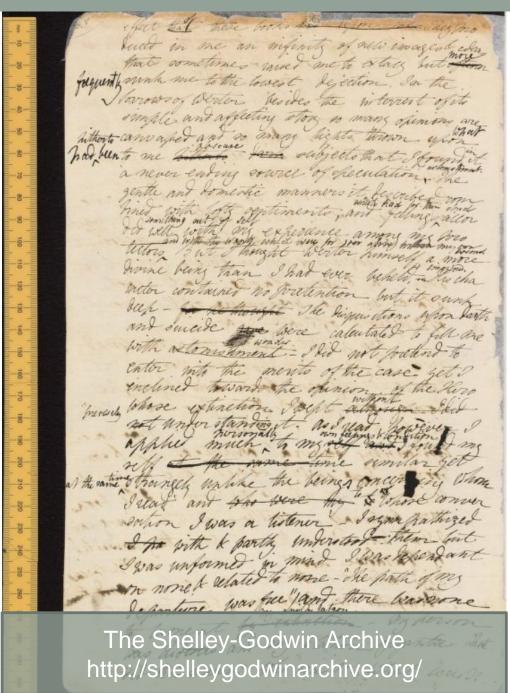
Centre for Information Modelling - Austrian Centre for Digital Humanities University of Graz











- TEXT
- DOCUMENT
- PROCESS

Critique Génétique

- French literary method, 1970s
- Post-structuralistic concept of text
- Examination of literary manuscripts / drafts
- Reconstruction of writing process in the manuscripts of the author
- ITEM (Institut des textes et manuscrits modernes), Paris, Journal "Genesis" 1992ff.

Genetic Editing and TEI

- TEI Working Group "Genetic Editions" (Special Interest Group on "Manuscripts")
- Proposal
- 2011 revision of module 11: "Representation of Primary Sources"
- Aims:
 - Transcription, showing the evolution of the text on the document
 - Reconstruction of the genesis of a text from different documents
 - Editing, i.e. the representation of the genesis of a text in an edition

Exercise I

Make an embedded transcription using the core transcriptional elements you already heard of, like:

```
<add>, <addSpan>, <corr>, <choice>, <damage>, <del>, <delSpan>, <restore>, <gap>, <sic>
```

But there are some more for tracing genetic phenomena...

Exercise material: beckett-1.xml beckett-1.jpg

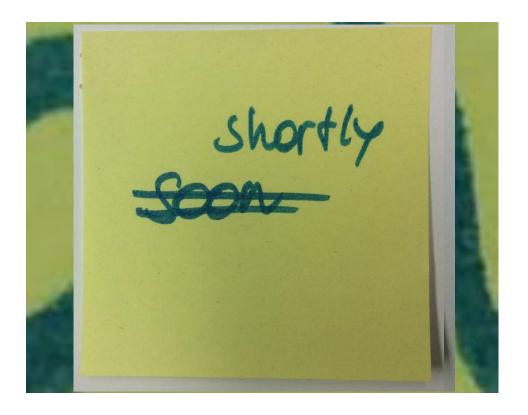
Some time after he took to his bod they came and read to him.

Came and took it in turns to read to him. Or made it up. Came every night and took it in turns to make it up for him as they went along. He did not hear them come or go. They were there without warning and without warning gone. He did not see them either. Not because his eyes were closed. For when he opened them and turned his head this way and that to look for them they were nowhere to be seen. They could of course have been where he could not see namely in the narrow space behind his bed which turn and twist his head as he might and strain as he might the corners of his eyes he could not see. Two organs so distinct in timbre and accent as to rendef most improbable if not impossible the imitation of either by the other in view of creating a false impression. Just as just possible at any moment much if not all of the above as averred so far and of whatever may happen to follow. No mention of that again. By whom? In a word by him by whom the above and whatever he may remen on to follow. No mention of him by him again.

Genetic Editing

- Document Encoding
 - topographical view on the facsimile
 - <surface>, <zone>, <line>
- Transcription Enhancement
 - Enhanced elements for microstuctural, genetic phenomena
 - <mod>, <metamark>, <retrace>, <redo>, <undo>, @instant
 - <transpose>, <transposeGrp>
 - <alt>
- Genetic Encoding
 - Writing process "revision history"
 - <lare="listChange"><lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<lare=<la><la></li
 - @change

What are we dealing with?



```
Writing activity: process
<mod type="subst" change="#stage1"><del>soon</del>
<add>shortly</add></mod>
```

Source-oriented transcription elements

<mod> generic tag for marking any kind of

modification in the document, without

attributing a specific function to it

<metamark> any kind of written mark intended to

determine how the document should be read

<retrace> writing which has been rewritten or otherwise

fixed

<undo>, <redo> written modifications which have been reversed or reinstated

<transpose>, <transposeGrp> transposed sequences

Generic Modification < mod>

The <mod> element represents any kind of modification identified within a text at a documentary level. There is no further interpretation of the function or intention of the passage.

- @type to categorize the type of the attribute
- @rend visual aspects of the appearance
- @spanTo when modifications extends across the boundaries of some other XML element

Example: <mod>



```
<mod type="subst">
  <add>soon</add>
  <del>shortly</del>
  </mod>
```

```
came and took it in turns to read to him. Or made it up. Came
and took it in turns to make it up for him as they went
```

Metamarks <metamark>

The <metamark> element annotates marks such as numbers, arrows, crosses or other symbols, indicating how the text is to be read. These symbols are a kind of metatext, rather than forming part of the text.

@function specifies the function of the metamark (e.g. status, insertion, deletion, transposition, used)
@target identifies one or more elements to which the function indicated by the metamark applies

Example: <metamark>

```
I am that hatfaroun boy fallen askels
The tears of boolich passion yet undried
whom on cheeks,

years with all their events has for me,
Some are aftent in travel - lowe in the tear
would have after fortune.

I pass through travels and fortune of thisty
years, and become old,
Each in it dues and rome and yours,
And then as message for me comes,

The
```

```
<surface>
  <metamark function="used" rend="line"</pre>
target="#X2"/>
  <zone xml:id="X2">
    line>I am that halfgrown <add>angry</add>
       boy, fallen asleep</line>
    The tears of foolish passion yet
       undried</line>
    line>upon my cheeks.
    <!-- -->
    <line>I pass through <add>the</add> travels
       and <del>fortunes</del> of
       <retrace>thirty</retrace>
    </line>
    <!-- ... -->
  </zone>
  <metamark function="used" target="#X2">
       Entered - Yes</metamark>
</surface>
```

Example: <metamark>

```
Just as just possible at so far and of whatever me by whom? In a word by his to follow. No mention of
```

```
<zone>
    line>the imitation of either...</line>
    line>just as <metamark function="addition" rend="line" target="#X1">/</metamark> just
possible at...</line>
    </zone>
</zone type="left-margin" xml:id="X1">
         line>in the same</line>
         line>or much the same way</line>
</zone>
```

Fixation and clarification < retrace>

The <retrace> element contains a sequence of writing which has been retraced for example to clarify or fix it.

@cause distinguishes fixation, clarification or other cases of retracing.

Example: <retrace>

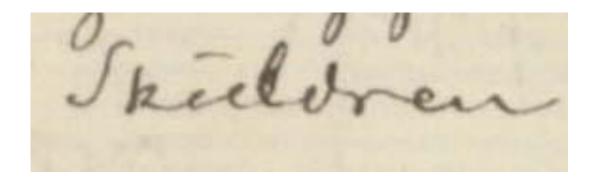
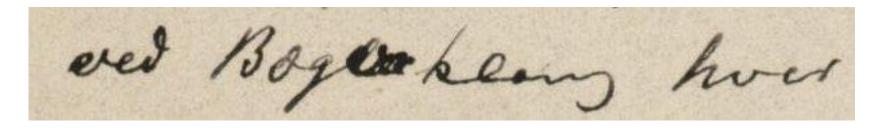


Image from a ms of Peer Gynt, Collin 2869, 4°, I.1.1, the Royal Library or Copenhagen

<line>Sku<retrace cause="unclear">I</retrace>dren</line>

Example: <retrace>



Detail from autograph ms Brand in The Royal Library, Denmark (KBK Collin 262)

Confirmation, cancellation, reinstatement of modifications: <undo> and <redo>

An alteration that has to be altered.

<undo> indicates one or more marked-up interventions in a document which have subsequently been marked for cancellation.

@target points to the element(s) which are to be reverted

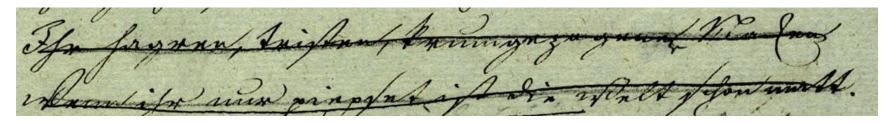
<redo> indicates one or more cancelled interventions in a document which have subsequently been marked repeated.

> @target points to the element(s) which are to be reasserted

Example: <undo>

```
This is just some sample test, we need a real example.
```

Example: <redo>



Fixation of a deletion in Goethe's Faust

```
<redo target="#redo-1" cause="fix"/>
<mod
    xml:id="redo-1"
    rend="strikethrough"
    spanTo="#anchor-1" />Ihr hagren, triften, krummgezog nen Nacken
</line>
</line>
</line>Wenn ihr nur piepſet iſt die Welt ſchon matt.<anchor xml:id="anchor-1"/></line>
```

Transpositions <transpose>

- Passages that should be moved to a different position
- Metamarks (Arrows, asterisks, numbers...)

The element <transpose> describes a single textual transposition as an ordered list of at least two pointers (<ptr>) specifying the order in which the elements indicated should be re-combined.

The element listTranspose> supplies a list of transpositions, each of which is indicated at some point in a document, typically by means of metamarks. The list can be part of the profileDesc>.

Example <transpose>

```
bør og hør
```

```
line>
  <seg xml:id="ib01">bör</seg>
  <metamark rend="underline" function="transposition" target="#ib1"</pre>
place="above"> 2. </metamark>
  og <seg xml:id="ib02">hör</seg>
  <metamark rend="underline" function="transposition" target="#ib02"</pre>
place="above">1. </metamark>
</line>
<!-- ... -->
<listTranspose>
  <transpose>
     <ptr target="#ib02"/>
     <ptr target="#ib01"/>
  </transpose>
</listTranspose>
```

Example <transpose>

```
Etait-ce donc bien celui à nouveau qui n'avait pas toujours échoué jadis dans ses tentatives de fuite et de poursuite?
```

```
line>Etait-ce donc bien
  <seg type="transposition" xml:id="trans3">celui </seg>
  <seg type="transposition" xml:id="trans4">à nouveau</seg>
  qui n'avait pas toujours échoué</line>
<line>jadis dans ses tentatives de fuite et de poursuite?</line>
<listTranspose>
  <transpose>
   <ptr traget="#trans4" />
   <ptr traget="#trans3" />
  </transpose>
</listTranspose>
```

Alternative readings <alt>

... where an author provided two or more alternative readings, but no preference is indicated.

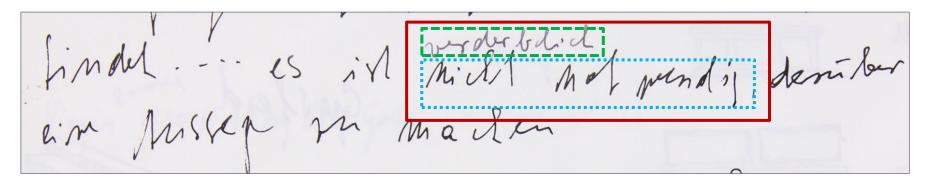
<alt> (alternation) identifies an alternation or a set of choices among elements or passages

@target attribute indicates two or more alternatives

@mode attribute states whether the two readings are exclusive or inclusive

@weights attribute defines the order of precedence

Alternative readings <alt>



"it is baneful / unnecessary to make a statement"

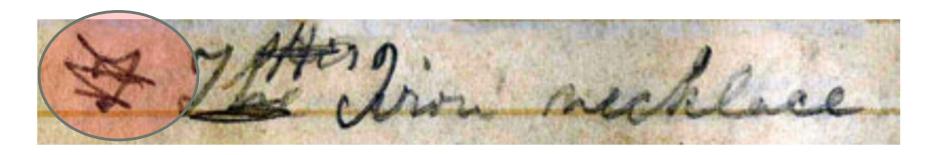
```
<add place="above" type="alternative" xml:id="alt2">verderblich</add>
<seg type="alternative" xml:id="alt1">nicht notwendig</seg>
darüber</line>
<alt target="#alt1 #alt2" mode="incl" weights="0.5 0.5" />
<eline>eine Aussage zu machen</or>
```

Instant Corrections @instant

- The attribute @instant indicates an immediate correction of an original writing by the author.
- @instant may be used on any element which is a member of the att.editLike class.
- The value true indicates that the addition or deletion is considered to belong to the same alteration as its parent element.

É little Birds are playing

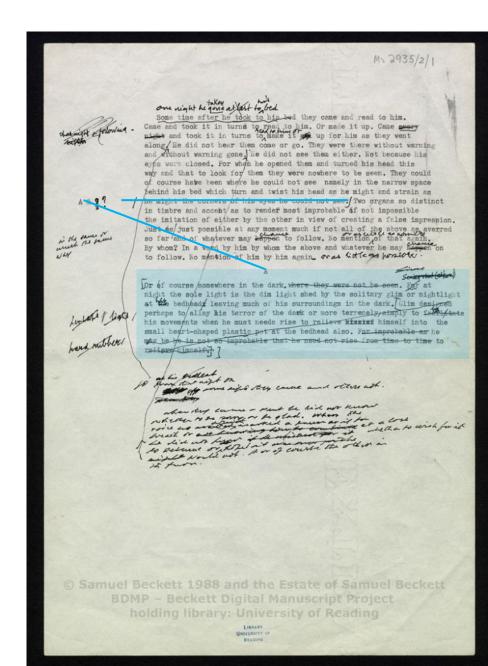
Instant Corrections



Exercise IIa

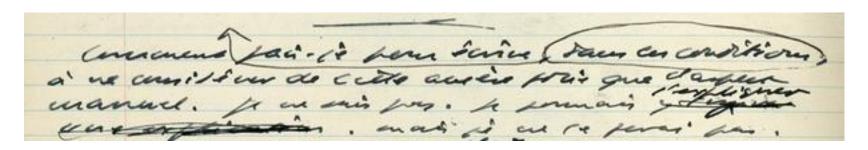
Use the new elements <mod>, <metamark>, <alt>, @instant to encode the manuscript from Beckett.

Exercise material:
beckett-2.xml
beckett-1-manuscript.jpg
beckett-1-topographic.jpg



Exercise IIb

This manuscript contains a transposition, try to encode it by using <transpose> and listTranspose>. Put the list of transpositions in the cprofileDesc>.



Exercise material: transpose.xml transpose.jpg

Exercise IIc

This manuscript contains interventions (additions, delections) and cancellations of interventions. Try to encode it by using <mod>, , <add> and <undo>.

Henri Gegen stende bøingen einen Ook ler vor.

Stage 1: Ein Gegenstand bringt einen Ort hervor.
An object yields a place.

Stage 2: Gegenstände bringen Orte hervor. Objects yield places.

Stage 3: Gegenstände bringen einen Ort hervor. Objects yield a place.

Exercise material: undo.xml, undo.jpg

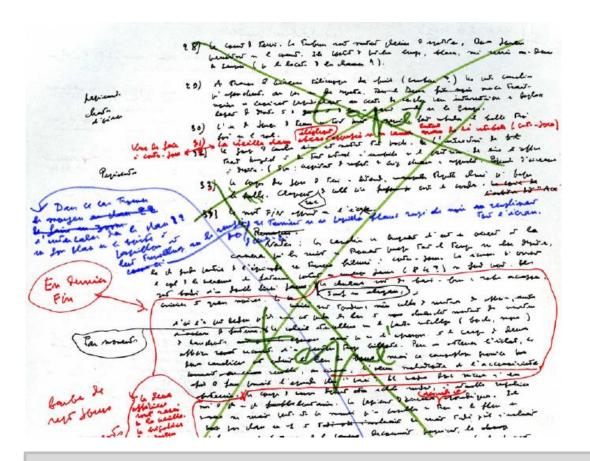
Recording the genesis of a text

Writing process ("revision history")

- listChange> groups a list of revision phases
 - @order whether the order of the change elements is significant or not
- <change> describes a single revision phase
 - @xml:id to identify the stages

The list of revision phases is part of the creation> in the TEI Header:

Recording the genesis of a text



Let us hypothesize that the different colours of ink here are associated with different layers (stages, phases...)

Documenting the layers

```
cprofileDesc>
  <creation>
    <listChange ordered="true">
       <change xml:id="stage-1">First layer, in black ink</change>
       <change xml:id="stage-2">Second layer, in red</change>
       <change xml:id="stage-3">Corrections and révisions, in
         blue</change>
       <change xml:id="stage-4">Deletions and usage notes in
         green</change>
    </listChange>
  </creation>
</profileDesc>
```

Associating a layer with a part of the transcript

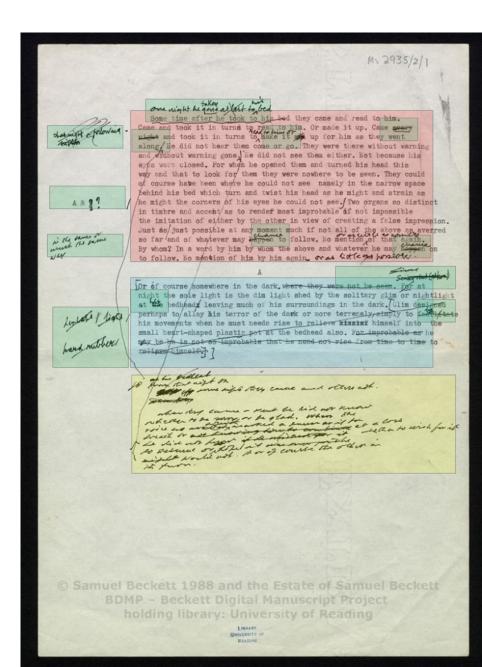
```
<change xml:id = "stage-)">First layer, in black ink</change>
<change xml:id = "stage-2" > Second layer, in red</change>
<zone xml:id="zone1" change="#stage-1">
  28) le court de tennis. Les tribunes sont ... Deux joueurs
  <!-- ... -->
  <p
  line>fois sur le sol
  <zone change=("#stage-2")</pre>
    <line>Vue de face
    <line> à contre jour</line>
    <metamark function="add"/>
    <line>la vieille dame ... dans le vestibule (contre-jour)
  </zone>
  <!-- -->
</zone>
```

Exercise III

Let us assume that the Beckett manuscript has at least four different writing stages: (1) the first typewritten block, (2) the second typewritten block (which is an insertion), (3) the handwritten corrections and (4) the handwritten additions on the bottom which were written in a hasty hand compared to the other handwritten corrections.

Try to annotate the different layers using <listChange>, <change> and @change. Describe the appearance of the different stages.

Exercise material: beckett-3.xml beckett-3.jpg



To conclude...

- The process to create the document is at least as important as the text it contains
- The text can be determined by the document
- The text can be graphically represented
- Patches (newspaper clippings, fotographs), cut outs, drawings etc.



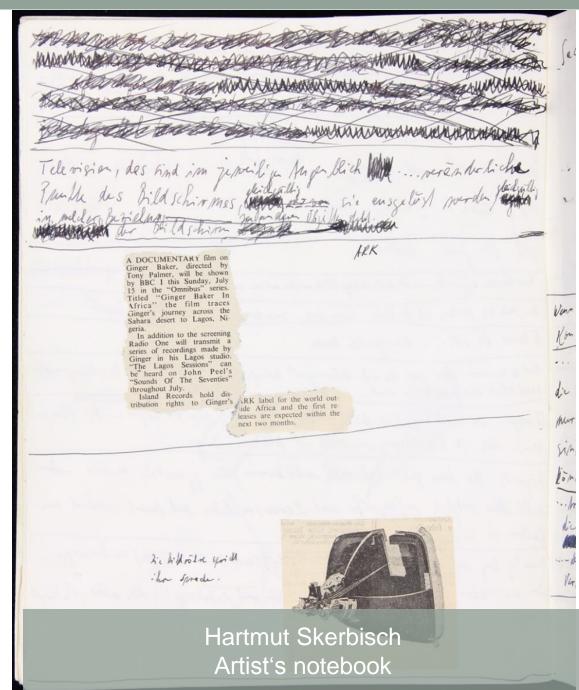




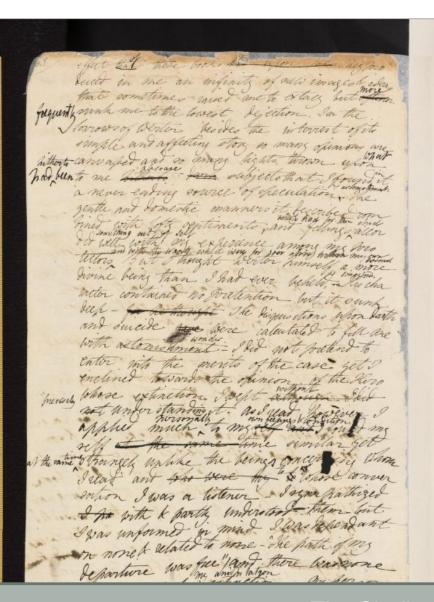
http://gams.uni-graz.at/vase



Guillaume Apollinaire Poem



The presentation of a digital genetic edition...



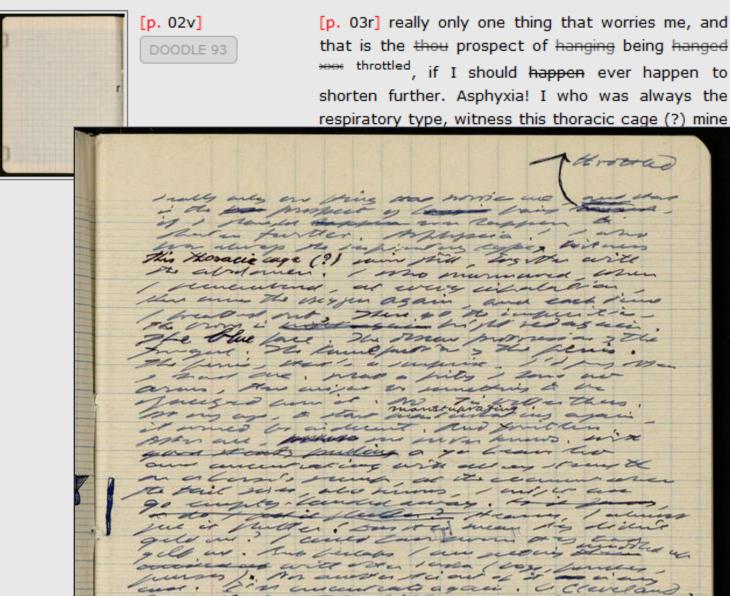
8

8

```
<surface xmlns="http://www.tei-c.org/ns/1.0" xmlns:sga="http://sga.mith.org/ns/1.0" xml:id="ox-ms</pre>
abinger c57-0038" ulx="0" uly="0" lrx="5368" lry="7104" part0f="#ox-ms abinger c57">
  <graphic url="../../images/ox/ox-ms abinger c57-0038.tif"/>
  <zone type="pagination" rend="bordered"><line>63</line></zone>
  <zone type="main">
   line>effect <mod>
        <del rend="strikethrough">that</del>
       <add place="superlinear" hand="#pbs">of</add>
      </mod> these books <mod>
       <del rend="strikethrough">had upon me</del>
       <add place="superlinear"><unclear reason="illegible">produced</unclear></add>
      </mod>. They pro</line>
    line>duced in me an infinity of new images & ideas</line>
   < sometimes raised me to extacy but < mod spanTo="#c57-0038.01"/>
      <del rend="strikethrough">oftenor</del>
      <add place="superlinear">more</add>
   </line>
   <anchor xml:id="c57-0038.02"/><anchor xml:id="c57-0038.01"/> sunk me to the lowest
      dejection. In the</line>
   <line>Sorrows of Werter besides the interrest of its</line>
   line>simple and affecting story so many opinions are</line>
   <adobe="superlinear">what</add><anchor xml:</pre>
id="c57-0038.03"/></line>
    <line>to me <del rend="strikethrough">hitherto</del>
       <del rend="strikethrough">dark</del>
       <add place="superlinear" hand="#pbs">obscure</add>
      </mod> subects that I found <mod>
       <add place="sublinear"><metamark function="insert">^</metamark></add>
       <add place="superlinear">in</add>
      </mod> it</line>
   < a never end source of speculation. < add hand="#pbs" place="superlinear">&amp;
       astonishment.</add> The</line>
    <line>gentle and domestic manners it described com</line>
   line>bined with lofty sentiments, and feelings <mod>
       <add place="sublinear"><metamark function="insert">^</metamark></add>
       <add place="superlinear" hand="#pbs">which had for their object </add>
       <add place="sublinear" hand="#pbs">something out of self</add>
      </mod> accor</line>
    line>ded well with my experience among my pro</line>
   <line>tectors. <mod>
       <add place="sublinear"><metamark function="insert">^</metamark></add>
       <add place="superlinear" hand="#pbs">and with the wants which were for ever alive within m
         own <add place="sublinear" hand="#pbs">bosom.</add></add>
      </mod> But I thought Werter himself a more</line>
    line>divine being than I had ever beheld, <mod>
       <del rend="strikethrough">-</del>
        <add place="superlinear" hand="#pbs">or imagined.</add>
```

Samuel Beckett. Digital Manuscript Project

http://www.beckettarchive.org/



d d io e e

in bright red again.
e. The tumefaction
en I had one. What
e squeezed from it.
manstuprating
again,

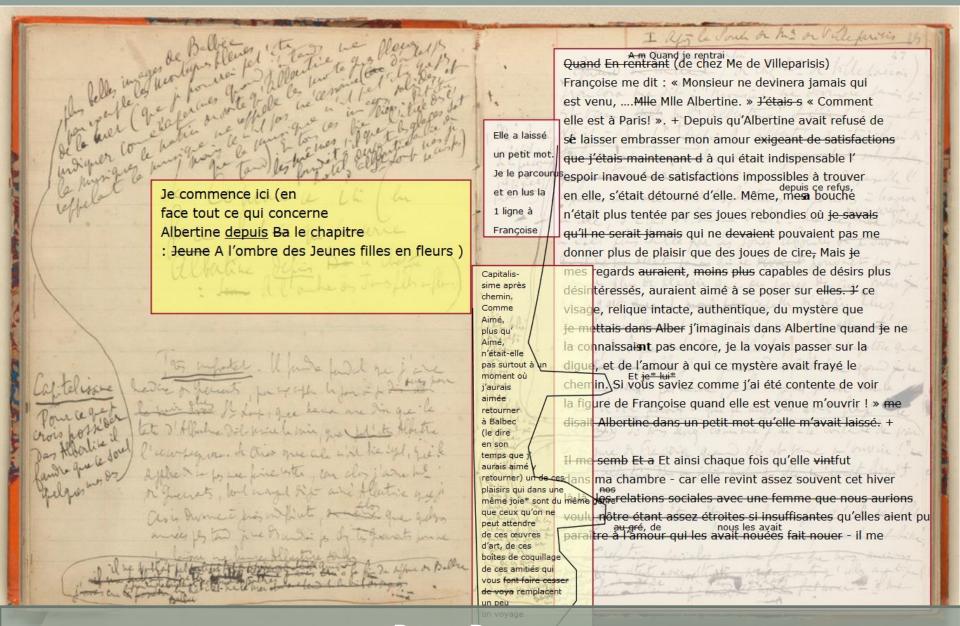
one never knows.

otrating with all my
the tail rises, who

94] Is it xxx, x do

es this mean they
But perhaps I am
Ga (bags, pouches,
Ge. I'll concentrate
Gation, please, finish
Guble they've taken,
Gis over. They've

enough sufficiently to stand now on elf. And I add, in a



Proust Prototype http://research.cch.kcl.ac.uk/proust_prototype/

Thank you for your attention!

The presentation is based on material from L. Burnard, E. Pierazzo & The Oxford Team