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### IBX Image Based XML for Digital Projects in the Humanities

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# IBX: Image Based XML for Digital Projects in the Humanities

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# Outline

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- Electronic Editions
- XML, Image-Based XML
- Image-Based XML (IBX) tool
- Digital Projects in the Humanities

# Electronic Editions

The screenshot displays a web browser window titled "Electronic Beowulf - Student Edition". The interface is divided into several sections:

- Navigation:** A menu bar with "File", "Options", "Search", and "Help". Below it, "Left/Top" and "Right/Bottom" navigation controls allow users to move between manuscript pages (e.g., "MS 129r, BL 132r" and "Edition 129r, 1-21").
- Manuscript Image:** On the left, a photograph of a manuscript page (MS 129r) is shown, featuring the beginning of the text: "HWAET WE GARDENA IN GEARD...".
- Text Transcription:** On the right, a digital transcription of the manuscript text is provided, with line numbers (5, 10, 15) and a line-by-line breakdown of the text. The transcription includes Old English words and their modern equivalents in parentheses, such as "þeodcýninga þrym gefrunon." and "Hu ða æþelingas elle(n) fremedon!".
- Transcript Search:** A search window is open on the right, titled "Transcript Search". It features a search bar, a keyboard layout for Old English characters (Æ, æ, Ð, ð, Þ, þ, á, æ, é, í, ó, ú, ý), and options for "Case sensitive" and "Combined search". The search range is set from folio 129r, line 1 to folio 198v, line 22. The number of instances found is 0.

# XML, Image-Based XML

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- eXtensible Markup Language (XML)
  - markup language (does HTML ring a bell?)
  - one can choose tag names
- XML vs. HTML:
  - HTML: focus on presentation
  - XML: focus on structure

# XML, Image-Based XML

- HTML

`<html>`

`<h3>`Midnight in the Garden of Good and Evil`</h3>`

`<i>`a novel by `<b>`John Berendt`</b></i><br>`

`<h4>`Chapter I`</h4>`

He was tall, about fifty, with darkly handsome...

`</html>`

# XML, Image-Based XML

- XML

**<book>**

**<title>**Midnight in the Garden of Good and Evil**</title>**

**<genre>**novel**</genre>**

**<author>**John Berendt**</author>**

**<chapter>**

**<chapter-title>**Chapter I**</chapter-title>**

He was tall, about fifty, with darkly handsome...

**</chapter>**

**</book>**

# XML, Image-Based XML

---

- HTML: document rendering instructions
- XML
  - document structure/description
  - allows **multiple** presentations of the **same** document



# XML, Image-Based XML



200  
201  
202 Comment l'amant veit le iardin  
203  
204 Quant i'euz ung pou avant ale  
205 Si vy ung vergier grant et le  
206  
207 Enclos d'ung mur hault bataille  
208 Pourtrait dehors et entaille  
209  
210 A maintes riches pourtraitures  
211 Les ymages et les figures

199 **<figure coords="d:r,67,522,330,778">**[Figure: Small minia  
200  
201  
202 **<lg type="rubric"><head type="rubric">Co<expan>m</es  
203 **<lg type="couplet">**  
204 **<l n="129">** **<word><hi rend="init2line-gold">Q</hi>u**  
205 **<l n="130">** **<word>Si</word> <word>vy</word> <w**  
206 **<lg type="couplet">**  
207 **<l n="131">** **<word>Enclos</word> <word>d</word>**  
208 **<l n="132">** **<word>Pourtrait</word> <word>dehors</****

# XML, Image-Based XML



200  
201  
202  
203  
204  
205  
206  
207  
208  
209  
210  
211

Commant l'amant veit le iardrin  
Quant i'euz ung pou avant ale  
Si vy ung vergier grant et le  
Enclos d'ung mur hault bataille  
Pourtrait dehors et entaille  
A maintes riches pourtraitures  
Les ymages et les figures

199 **<figure coords="d:r,67,522,330,778">**[Figure: Small minia  
200  
201  
202 **<lg type="rubric"><head type="rubric">Co<expan>m</ex**  
203 **<lg type="couplet">**  
204 **<ln n="129"> <word><hi rend="init2line-gold">Q</hi>u**  
205 **<ln n="130"> <word>Si</word> <word>vy</word> <w**  
206 **<lg type="couplet">**  
207 **<ln n="131"> <word>Enclos</word> <word>d</word>**  
208 **<ln n="132"> <word>Pourtrait</word> <word>dehors</**

# XML, Image-Based XML



The image shows a digital manuscript viewer with a page of text and two illustrations. The text is in a Gothic script. The first illustration is a miniature of a woman in a red dress standing in a garden. The second illustration is a miniature of a woman in a red dress standing in a garden. The XML code on the right shows the structure of the page, including the text and the illustrations. The XML code is as follows:

```
200  
201  
202 Commant l'amant veit le iardrin  
203  
204 Quant i'euz ung pou avant ale  
205 Si vy ung vergier grant et le  
206  
207 Enclos d'ung mur hault bataille  
208 Pourtrait dehors et entaille  
209  
210 A maintes riches pourtraitures  
211 Les ymages et les figures  
  
199 <figure coords="d:r,67,522,330,778">[Figure: Small minia  
200  
201  
202 <lg type="rubric"><head type="rubric">Co<expan>m</ex  
203 <lg type="couplet">  
204 <l n="129"> <word><hi rend="init2line-gold">Q</hi>u  
205 <l n="130"> <word>Si</word> <word>vy</word> <w  
206 <lg type="couplet">  
207 <l n="131"> <word>Enclos</word> <word>d</word>  
208 <l n="132"> <word>Pourtrait</word> <word>dehors</
```

# XML, Image-Based XML

- Image-Based XML

```
<figure coords="d:1,67,522,330,778">[Figure: Small miniature. Lover approaching garden.]</figure>

<lg type="rubric"><head type="rubric">Co<expan>m</expan>ma<expan>n</expan>t l'ama<expan>n</expan>t veit le iardin</head>
<lg type="couplet">
<l n="129"> <word><hi rend="init2line-gold">Q</hi>ua<expan>n</expan>t</word> <word>i</word><word>cuz</word> <word>si</word>
<l n="130"> <word>Si</word> <word>vy</word> <word>ung</word> <word>vergier</word> <word>gra<expan>n</expan>t
<lg type="couplet">
<l n="131"> <word>Enclos</word> <word>d</word>'<word>ung</word> <word>mur</word> <word>ha<expan>u</expan>t
<l n="132"> <word>Pourtrait</word> <word>dehors</word> <word><supplied>et</supplied></supplied> <word><orig reg="e">e</orig>
<lg type="couplet">
<l n="133"> <word>A</word> <word>mai<expan>n</expan>tes</word> <word>riches</word> <word>po<expan>ur</expan>t
<l n="134"> <word>Les</word> <word>ymages</word> <word>et</word> <word>les</word> <word>figures</word></l>
<lg type="couplet">
<l n="135"> <word>Ay</word> <word>moult</word> <word>voule<expan>n</expan>tiers</word> <word><orig reg="rem">rem</orig>
<l n="136"> <word>Si</word> <word>vo<expan>us</word></expan> <word>compteray</word> <word>et</word> <word>
<lg type="couplet">
<l n="137"> <word>De</word> <word>ces</word> <word>ymages</word> <word>la</word> <word>semblance</word></l>
<l n="138"> <word>Si</word> <word>com</word> <word>moy</word> <word>vie<expan>n</expan>t</word> <word>et

<ch n="b"/>
<figure TEIform="figure" coords="d:372,150,648,362">[Figure: Small miniature. Hate (Hatred, Haine).]</figure>
```

# XML, Image-Based XML

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- Image-Based XML
  - complex
  - not (easily) readable
  - not easy at all to create
  - we definitely want links to image

# Image-Based XML (IBX) tool

- IBX aka EPPT (Edition Production and Presentation Technology)
  - cross platform tool
  - removes the hassle of XML syntax
  - assists humanities researchers/professors/students in teaching/learning (image-based) tagging
- <http://www.eppt.org>

# Image-Based XML (IBX) tool

The screenshot displays the ImagText application window. The main view shows a manuscript page with Latin text in a Gothic script. A redaction mark is visible on line 154. A context menu is open over this mark, listing various actions and their corresponding XML tags. The left sidebar contains navigation and editing tools, and the bottom pane shows the XML markup for the selected text.

ImagText - Pembroke 25 - EPPT-Trial - /Users/ksk/Desktop/eclipse3.2EPPT-Mac-trial-20060416/projects

Navigator xMarkup TOC

Quick access [xMarkup]

Navigation

- Abbreviations and Expansions
  - Abbreviation
  - Choice
  - Expand abbreviation
- Letter
- Deletions and Additions
- Editor Emendations

Tag info (name / DTD)

Bookmarks XSLT Utility

1 items

Description

XCIII . PREDICATIO BONA . DE VIII . VITIIS

Thumb View Thumbs List

ImagText OverLay

Select rectangle area

Overlay: 175r (175r.ovl) <-T/L B/R->

a: 255, r: 199, g: 180, b: 156 (137,846)

Pembroke 25

150 Qui uouero dmeum &et dmndominum fidelitter amat. &et indesinentter colit, mandata

151 pperseueranter impl&et., caelesteem cum anglisangelis diDei glamgloriam &et clari

152 tatem aetneternam pperpetualitter possidere dignnus efficitur. Pres

153 tante dnoDomino nronostro ihuIesu xpChristo., cui est honor &et imperperium &et potestas,

154 cum ppatre &et spu sco. pomia seta setoy. amey.

155 XCIIII . PREDICATIO

150 <abbr type="contractio">

151 <pan resp="szarmach">

152 <let lower="bar">p<

153 <nlet upper="macron">

154 </w></expan></cho

155

Copy

Show Image

xMarkup

Edit Markup

Delete Markup

Show markup

Show HTML

Folio Line [Navigation] (<line coords="175r:ovl:r,36,768,508,798" n="27">)

Folio [Navigation] (<fol id="175r" n="175r" writtenLines="27">)

Quire [Navigation] (<quire>)

Manuscript [Navigation] (<ms name="Pembroke 25">)

coll [ROOT] (<coll>)

w [Text] (<w>)

Letter [Letter] (<let upper="macron">)

Abbreviation [Abbreviations and Expansions] (<abbr type="contraction">)

Choice [Abbreviations and Expansions, Deletions and Additions, Editor Emendations] (<choice>)

Expand abbreviation [Abbreviations and Expansions] (<expan resp="szarmach">)

154:19 Let

# Image-Based XML (IBX) tool

The screenshot displays the ImagText application window. The main view shows a manuscript page with Latin text. A red oval highlights the text "spu" on line 9, with a red arrow pointing to the XML tag editor. The tag editor shows the tag `<abbr type="contraction">spu</abbr>`. The interface includes a navigation pane on the left, a toolbar at the top, and a status bar at the bottom.

Quick access [xMarkup]

Navigation

- Abbreviations and Expansions
  - Abbreviation
  - Choice
  - Expand abbreviation
- Letter
- Deletions and Additions
- Editor Emendations

Mode

Tag selection: Abbreviation **E<sup>3</sup>**

attributes data

Attribute	Value
Type of Abbreviation	contraction
suspension	
<input checked="" type="checkbox"/> contraction	
brevigraph	
superscript	
coords	

`<abbr type="contraction">spu</abbr>`

Show markup   
Show content

Tag it! Clear all Close

Select text



# Image-Based XML (IBX) tool

The screenshot shows the ImagText application window. The main view displays a manuscript page with Latin text. A red rectangle highlights the word "spu" in the text. A dialog box titled "INSERT [Abbreviations and Expansions] Abbreviation" is open, showing a preview of the word "spu" and options for tagging it. The dialog includes a "Mode" section with "INSERT" selected, a "Tag selection" dropdown set to "Abbreviation", and a "Show markup" checkbox checked. Below the dialog is a table of attributes data.

Attribute	Value
Type of Abbreviation	contraction
suspension	
<input checked="" type="checkbox"/> contraction	
brevigraph	
superscript	
coords	d-m:r,261,450,313,507

Below the table, the XML tag is shown: `<abbr type="contraction" coords="d-m:r,261,450,313,507"`. The "Show markup" and "Show content" checkboxes are both checked. At the bottom of the dialog are buttons for "Tag it!", "Clear all", and "Close".

A red oval with the text "Select image" is positioned over the dialog box, with a red arrow pointing to the "spu" word in the manuscript image.

# Image-Based XML (IBX) tool

The screenshot shows the ImagText application window. The main view displays a manuscript page with Latin text. A red rectangle highlights the word "spu" in the text. A dialog box titled "INSERT [Abbreviations and Expansions] Abbreviation" is open, showing a preview of the word "spu" and a "Tag selection" dropdown set to "Abbreviation". The "attributes data" table is also visible, with the "coords" attribute highlighted.

Quick access [xMarkup]

Navigation

- Abbreviations and Expansions
  - Abbreviation
  - Choice
  - Expand abbreviation
- Letter
- Deletions and Additions
- Editor Emendations

Mode

INSERT  EDIT  DELETE

Tag selection: Abbreviation

E<sup>3</sup>

Attribute	Value
Type of Abbreviation	contraction
suspension	
<input checked="" type="checkbox"/> contraction	
brevigraph	
superscript	
coords	d-m-r,261,450,313,507

<abbr type="contraction" coords="d-m-r,261,450,313,507">

Tag it! Clear all Close

Select image

# Image-Based XML (IBX) tool

The screenshot shows the ImagText application window. The main area displays a manuscript page with Latin text. A red rectangle highlights the word "spu" in the text "Qui cupat & spu sc̄o utit ad". A dialog box titled "INSERT [Abbreviations and Expansions] Abbreviation" is open, showing the selected text "spu" and a preview of the tag **E<sup>3</sup>**. The dialog includes a "Mode" section with "INSERT" selected, a "Tag selection" dropdown set to "Abbreviation", and an "attributes data" table.

Attribute	Value
Type of Abbreviation	contraction
suspension	
<input checked="" type="checkbox"/> contraction	
brevigraph	
superscript	
coords	d-m-r,261,450,313,507

At the bottom of the dialog, the XML tag is shown: `<abbr type="contraction" coords="d-m-r,261,450,313,507"`. The "Tag it!" button is highlighted with a red oval and a red arrow pointing to the dialog.

Tag it!

# Digital Projects in the Humanities: manuscripts

The screenshot displays the ImagText application window. The main view shows a manuscript page with a red selection box around the text "Hroðgar mæpelode helm scyldiga". Below the image, the coordinates "a: 255, r: 201, g: 185, b: 151 (536,880)" are shown. The left sidebar contains a "Quick access [xMarkup]" section, an "Edition" dropdown set to "HL", and a "Tag info (name / DTD)" section. The bottom panel shows the XML markup for the selected text, including line numbers 1857 and 1858, and the corresponding XML tags for the words and lines.

ImagText - EPPT-Beowulf-ED - EPPT - /Users/Kevin/Desktop/eclipse3.2EPPT-Mac-20060416/projects

Quick access [xMarkup]

Edition  
HL

Tag info (name / DTD)

Select rectangle area

olio: 138r (Daylight) <-T/L B/R->

a: 255, r: 201, g: 185, b: 151 (536,880)

1857 Hroðgar mæpelode,  
1858 helm Scyldinga:

1857 \x/x" Sievers="A" Sieversscan="/ x / x" v="a"> <w>Hroðgar</w> <w>mæpelode</w>, </HL>  
1858 Sieversscan="/ \ x" v="b"> <w>helm</w> <w>Scyldinga:</w> </HL>  
1859  
1860  
1861 Sievers="B" Sieversscan="x / x /" v="a"> <w>"Fere</w> <w>fyhtum</w>, <w>þu</w>, </E  
1862 vers="A" Sieversscan="/ x / x" v="b"> <w>wine</w> <w>min</w> <w>Beowulf</w>, </HL>  
1863

1857:266 Scansion All-Markup

# Digital Projects in the Humanities: archaeology

The screenshot displays the ImagText software interface. The main window shows a photograph of archaeological artifacts on a blue background. A red rectangular selection box is drawn around a specific fragment on the left. The interface includes a Navigator panel on the left, a Description field, and a Thumb View panel at the bottom left. The bottom right panel shows a metadata table with the following data:

1573		1573	<fol id="mica-sm1-01" name="SI-Mica-01-sm1.jpg"><row n="1"
1574	147	1574	<cell type="A">147</cell>
1575	VIC	1575	<cell type="B">VI C</cell>
1576	66	1576	<cell type="C">66</cell>
1577	Sheer Mica	1577	<cell coords="A11r,46,66,211,206" type="D">Sheer Mica</cell>
1578	1	1578	<cell type="E">1</cell>
1579	3	1579	<cell type="F">3</cell>