# New Methodologies for effective exploitation of Digital Manuscript Corpora

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# **Existing Digital Resources**

- Images
- Calendars
- Catalogues
- Descriptions
- Transcriptions

# **Methodological Challenges (1)**

 Creating linked and interoperable corpora and new tools to enable new uses for digital MS resources

Problem discussed at ESF Exploratory Workshop in Birmingham 2009 'Applying Semantic Web Technologies to Medieval Manuscript Research'

# Challenges (2)

Methods for analysis of digital corpora

# Case Study of two Corpora: Manuscripts of the West Midlands of England

#### MWM - The Manuscripts of the West Midlands Project

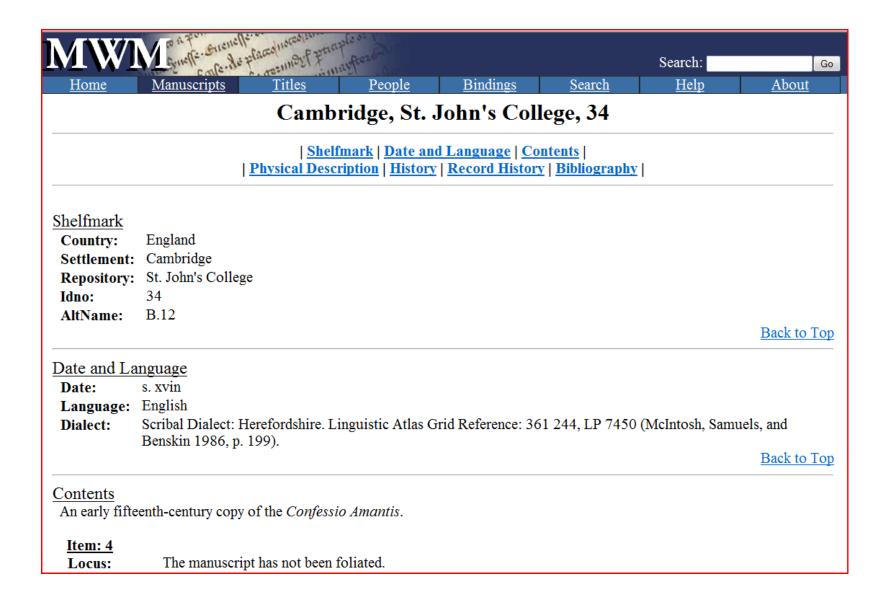


A corpus of metadata and images of MSS in West Midlands English.

Project aims: to resource study of late medieval vernacular MS production.

www.hrionline.ac.uk/mwm/

#### MWM: description of St John's College Cambridge MS B.12



#### MWM: description of St John's College Cambridge MS B.12 (2)

#### Physical Description

Form: Codex
Support: Parchment

Support: Parchment Extent: 310 x 230 mm

**Collation:** 1-27 8 with catchwords. Quire 12 wants 7 (stub remains, initial letters visible). Quire 14 wants 1 (stub remains,

initial letters visible).

**Layout:** Pricking of small rounded holes in the header (10 mm from the edge), footer (21 mm from the edge) and external

margin (15 mm from the side and 22 mm from the top edge) to indicate the framing space. Writing space: double

columns: c. 82 x 23 mm with 39 lines.

Writing: One scribe writing in a neat Anglicana Formata hand. In the Latin summaries the hand becomes smaller and more

angular, whilst retaining the same degree of cursiveness. Each line terminates with a square-shaped full stop. Double compartment a; diamond-shaped lobed d with square ascender curving 90 degrees from the left to the right, ending in an otiose hairline; 8-shaped g with rounded head, the descender closing into a rounded lobe, finishing in a squarish point attached to the head. This does not extend below the level of writing. There is a small tail on the right of the head; straight descender with a tail on the top left side of the p, rounded head with shaft starting from the right towards the left, finishing just past the meeting point with the descender; long and short r are used both in medial and final position; long r in conjunction with 'er', short r with 'or'; long and sigma s used regularly; no rounded s; dotted p; the stem of p is slightly bent towards the left by 45 degrees, ending with a small tail, the shaft does not extend past the stem/descender, it is used regularly in initial and final position; open p0 with the first stem terminating in a small tail and the second back stroke extending above the level of the letter turning towards right with a sharp angle and terminating with a tail. Two closed lobes finish the letter on the right side. Capital letters are decorated with double lines across the ascenders, otiose dots in the lobes of letters. Body height: 3 mm in the

English text; 2 mm in the Latin.

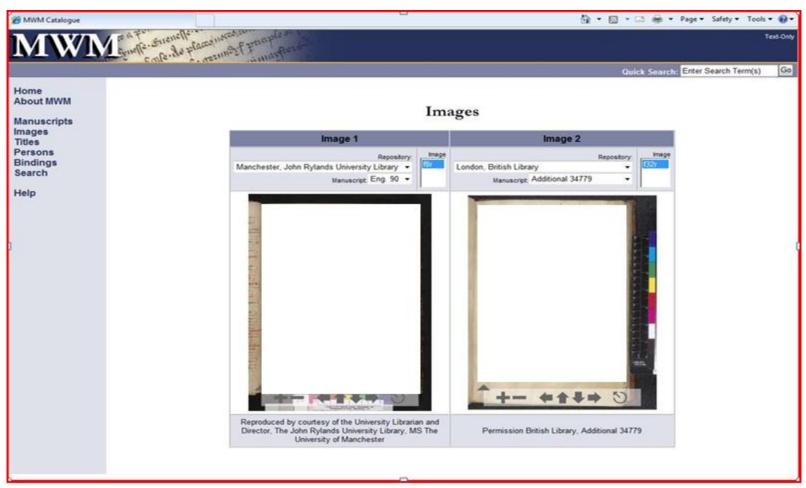
**Decoration:** The first page has a full border decorated in blue, red and gold with leaf motifs prominent on the external margin.

First letter of the first word of the prologue is a two-line capital in gold, with red and blue background. No other decoration except for two-line Lombardic capitals in blue with red penwork decoration to indicate the beginning of each section. Initial letters of each line are tinted in yellow. Other Litterae Notabiliores written in blue or red, no

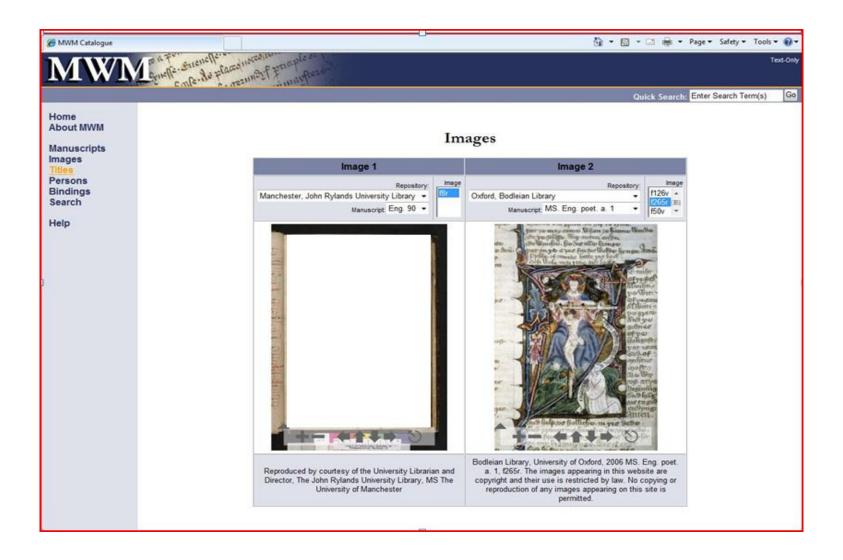
paraph marks.

#### Metadata + Images

(metadata are enhanced with images but licensing images a problem)

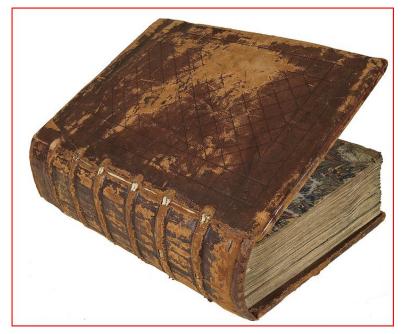


# 2 Midlands *Prick of Conscience* MSS

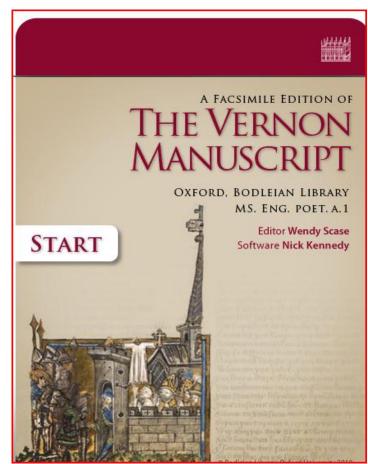


#### **The Vernon Manuscript Project**

Oxford, Bodleian Library, MS Eng. Poet. a .1, c. 1400, in English West Midlands dialect



www.birmingham.ac.uk/vernonmanuscript





The Vernon Manuscript Project has received support from

# A Medieval 'Data Deluge'

350 folios (69 folios lost)

c. 370 different items – all devotional and religious, prose and verse, almost all in Middle English

Word count: 2.5 x Tolstoy's *War and Peace* 

16 Miniatures (c. 52 lost)

# Digitising the Data Deluge: Aims

Metadata + images (images alone are of limited use)

An accurate text to parallel the images in the edition

A corpus of linked data exploitable for research

# **Policies on Data Capture**

Working with digital files, we could record:

Changes of ink

Sharpening of pen

Letter forms

Marks of abbreviation

# Policies on Data Capture (2)

**Considerations:** 

Equivalent to transcribing War and Peace 2.5 times

Three years to do it

Over-riding aims are accuracy and consistency

A team effort

# Policies on Data Capture (3)

#### **Decisions:**

Resist interpretation; don't embed assumptions

Have simple rules and stick to them (even if the result looks odd, for example capitalisation and word division)

Record data in format that can be re-used, added to, developed (in xml)

Allocation of data to Transcription and Description files –not strict TEI

### **Transcription Files: Scribal (?) Corrections**

'Samul' corrected with superscript 'e' and caret mark

(fol. 397v col. a)

And pift as Agas hedde. hapne schulle sume Samul schal slen him. And Saul schal be blamet. Dame schal ben Dyademed. and Saunten hem alle And on custome byng. Sepen vo wisone.

#### Page Description File: Guide Words and Letters

faint text for rubricator to insert 'Primus passus de dowel' (fol. 400v, col. B)



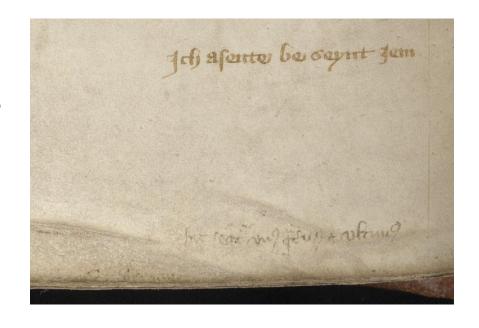


# Page Description File: Assembly

catchword to ensure correct ordering of quires

below, 'hic sequitur vnus quaternus et vltimus' – note by supervisor (?) to binder (?)

(bottom edge guide text for rubric)

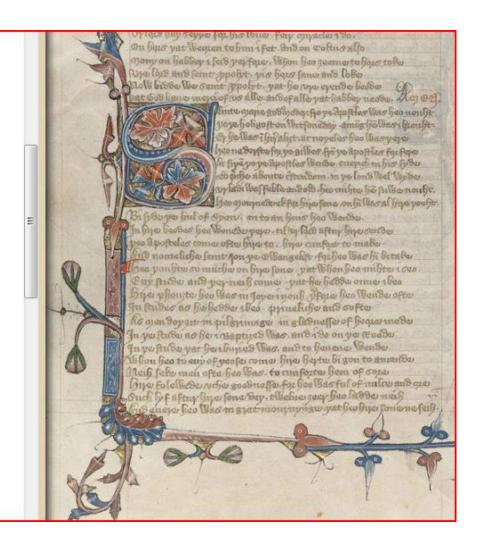


Vre lord and seint Ypolyt , bis hors saue and loke.

Now bidde we seint Ypolyt , bat he vre erende beode.

Þat God haue merci of vs alle , and of alle bat habbeb neode. AMEN.

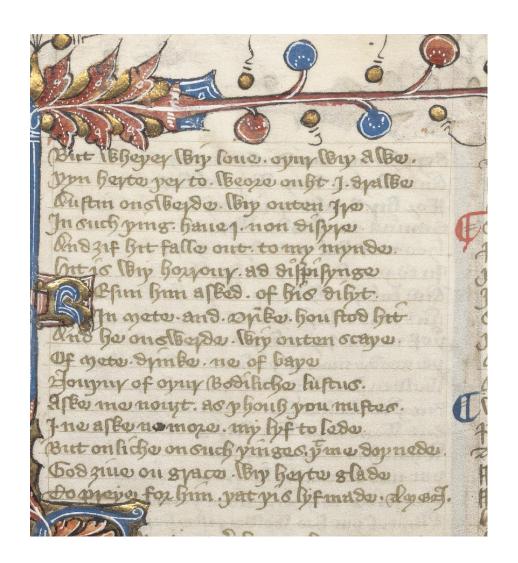
SEinte Marie godes Moder, fro be Apostles was heo nouht. bo be holigost on witsonenday, among hem was i brouht. Er he was in hire aligt, ac nobeles heo was bere. Heo ne dorste for be giwes, from be Apostles for fere. Ac siben bo be Apostles wende, euerich in his syde. To preche aboute cristendam, in be lond wel wyde. Vr ladi was feble and old, heo mihte hem suwe nouht. Heo Mournede ek for hire sone, on him was al hire bouht. Bi syde be hul of Syon, in to an hous heo wende. In hire beodes heo wonede bere, til vr lord aftur hire sende beo Aposteles come ofte hire to hire cumfort to make. And nomeliche seint Ion be Ewangelist, for heo was him bi take. Heo bouhte so muche on hire sone, bat whon heo mihte i seo. Eny stude and ber neih come, bat he hedde onne i beo. Hire phougte heo was in love i nouh, perfore heo wende ofte. In studes as he hedde ibeo, priueliche and softe. As Men dob git in pilgrimage, in gladnesse of heore mode In be stude bat he i Baptized was, and i do on be Roode In be stude bat he i buried was, and to heuene wende. Whon heo to eny of beose come, hire herte bi gon to amende Neih seke men ofte heo was, to cunforte hem of sore. Hire followed evche goodnesse, for heo was ful of milce and ore. Such lyf aftur hire sone deb . twelue geer heo ladde neih. And euere heo was in gret mournynge . þat heo hire sone ne seih.



# Using the Vernon files for palaeographical research

Palaeographical analysis distinguishes two scribes, A & B

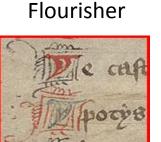
Linguistic analysis locates
B in N Worcs and A in
SW Worcs

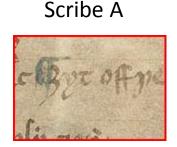


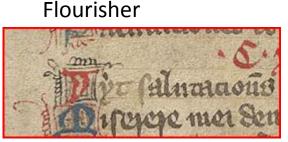
# Qu. 1: Did Scribe A Decorate his Text?

Scribe A and Flourisher form <Y> and <Þ> (thorn) indistinctly

Scribe A







But Scribe A uses <Y> only for /i/ (e.g. *Ysaac*)

For j/(471 instances) Scribe A uses <3>(yogh) (e.g. 3yt = yet)

Whereas for /j/ Flourisher also uses <Y> (e.g. Yyt = yet)

Answer: No!

#### Qu. 2: Provenance of Flourisher?

Scribe A is located in West Midlands on linguistic grounds

Flourisher's graphemic profile (<Y> = <Þ>) is associated with areas *outside* the West Midlands

#### **Further Research Possibilities**

- Could also use transcription + description + images to investigate, for example, what constrains scribe's variations in his practice – e.g. why does he abbreviate here and not there?
   Why this form of a letter here and that there?
- Creation of and linking to new corpora e.g. Simeon MS (BL Addit. 22283) would support further research along these lines

### **Next: Enlarging the Corpus**

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Vernon scribe B's Scale of Perfection in Vernon and Simeon (fol. 152r continued by Simeon Scribe 3)

beo en Sifyping forte come to more Enologing and felping of of goftly vines no of vis \$300 Hoz m vrues and Phole 508: m pe pusse partie of contemplacon Of ve vusse paytie of contemplacion capitallo octano But aloud) man of fo arow angel Kno per man be sel TO VISSO partie of conteplacion. Whiche is pfit as hit may bear heere fith boye morganion and maffection on he nanffiguep into an ange o par is forto sepo. in Enolopigo. and in parfit longinge and wiel for semen Sel pa sier map sohon he hay lene fepne int of 308, 3n8 vis. 18 hon a mones fonle is fuft refourned Go fulles of vertino to permage of this after ringer Wanch A good Ingel mit Supfur. 50 con per deuel. Ind 600 Mars is wifeted and is taken in from af coupli and flegth has companied telle Benefi Been h affections. from vern yourtes and ymaginations of af IF nen feles noup. ozetler Bur Wo booth quatures and as her there muche panifiches out of pe bosili Bitter, Ind pen bed pagyare of pe hongoft like in pe man surflags. But was is fo libras for to see be unsufted yng soyfaftnefe Bhi per sie nourt forto Diffy gietle 2 diens good and goff piges. It's softe steerte biening mute be funt of surtenon. Broil nor differred As feint Jon seil lone in him so payfyth, pat be pe yamffing of prolone. pe foulers oned for pe tome. and conformed to pe prinage fi er 800 fit ficent fon Busself Bur The Histal Tabe furt Wher I of yo trute. Opo bigming of yo conteplacon, man be feeles in you lyfa (But you fulfed of hit is fept top othat relle pe as me prep: vuel in ms man of felung & Bliffe of hunens of pis omm. and conforming to vivilore

#### **Exploiting Corpora to Enhance Palaeographical Research**

Vernon and MWM projects offer examples of how

linking corpora of different genres within and across resources

 and analysis through cross-referencing of palaeographical methods with other methodologies (e.g. linguistic profiling)

can lead to insights