

GUY DE CHAULIAC'S *ON BLOODLETTING* IN GLASGOW,
UNIVERSITY LIBRARY, MS HUNTER 307 (FF. 165V-166V)

Laura Esteban-Segura & Carlos Soriano-Jiménez
University of Málaga (Spain)

ABSTRACT

This paper presents the edition and analysis of the text housed in Glasgow, University Library, MS Hunter 307, ff. 165v-166v, which contains a version of the treatise *On Bloodletting* by Guy de Chauliac, an important author of medieval surgery, and which remains unedited, to the best of our knowledge. The objectives are the following: first, to investigate the transmission of the text; second, to explore the main codicological and palaeographical features of the treatise; third, to provide the first edition of the witness and discuss its main tenets; and finally, to examine the language of the text in order to locate it geographically. The assessment of all of the above will offer a complete picture of the treatise and will help to place it in its material and cultural context.

KEYWORDS: GUL MS Hunter 307, Guy de Chauliac, bloodletting, medical prose, Middle English, *eLALME*.

ON BLOODLETTING DE GUY DE CHAULIAC EN GLASGOW, BIBLIOTECA UNIVERSITARIA,
MS HUNTER 307 (FF. 165V-166V)

RESUMEN

Este artículo presenta la edición y el análisis del texto conservado en los folios 165v-166v del manuscrito de la Biblioteca de la Universidad de Glasgow, Hunter 307, que contienen una versión del tratado *On Bloodletting* de Guy de Chauliac, un importante autor de cirugía medieval, y que permanece inédito, hasta donde sabemos. Los objetivos son los siguientes: en primer lugar, investigar la transmisión del texto; en segundo lugar, explorar las principales características codicológicas y paleográficas del tratado; en tercer lugar, proporcionar la primera edición del texto y tratar los principios que la rigen; y finalmente, analizar el lenguaje del texto para localizarlo geográficamente. La valoración de todo lo anterior ofrecerá una imagen completa del tratado y ayudará a situarlo en su contexto material y cultural.

PALABRAS CLAVE: GUL MS Hunter 307, Guy de Chauliac, flebotomía, prosa médica, inglés medio, *eLALME*.

DOI: <https://doi.org/10.25145/j.recaesin.2023.87.06>

REVISTA CANARIA DE ESTUDIOS INGLESES, 87; octubre 2023, pp. 109-130; ISSN: e-2530-8335



1. INTRODUCTION

As Keiser fittingly remarked, the “full extent of the translation of learned medical treatises into the vernacular in later medieval England has only begun to be recognized” (1998, 3645). This idea still resonates twenty-five years later: while the last decades have witnessed a growing interest in vernacular scientific texts with the compilation of historical corpora, specific studies and digital editing projects,¹ there is still much work left to be done. The present paper tries to contribute to the knowledge of vernacular learned medical texts in English by making accessible a hitherto unedited one: a witness of the treatise *On Bloodletting* by Guy de Chauliac, a fourteenth-century French physician and author of the work *Chirurgia magna* (1363). This was one of the most influential medieval surgical texts and was translated from Latin into several vernacular European languages. The treatise under consideration is housed in folios 165v-166v of Glasgow, University Library, MS Hunter 307. This manuscript constitutes a fine example of a Middle English medical compendium: it is a compact codex in one volume containing (i) an anonymous Middle English treatise on humours, elements, uroscopy, complexions, etc. (ff. 1r-13r); (ii) the Middle English Gilbertus Anglicus (ff. 13r-145v); (iii) an anonymous Middle English treatise on buboes (ff. 145v-146v); (iv) *The Sekenesse of Wymmen* (ff. 149v-165v); (v) Guy de Chauliac’s *On Bloodletting* (ff. 165v-166v); and (vi) a Middle English version of the *Circa instans* (ff. 167r-172v; see Esteban-Segura 2015). The whole manuscript has been labelled *System of Physic* (Young and Aitken 1908, 245-246; Cross 2004, 24-25). It dates from the early fifteenth century.

The objectives of this paper are as follows: first, to look into the transmission of the text; second, to assess the main codicological and palaeographical features of the treatise; third, to offer the first edition of the witness and discuss its main principles; and finally, to analyse the language of the text in order to locate it geographically. The physical analysis of the codex will be carried out by close, first-hand inspection of the manuscript as well as of its digitised images. The edition of the text will adjust to the semi-diplomatic tenets, which postulate faithfulness to the original witness. As for the linguistic analysis, it will be based on the methodology put forward by *An Electronic Version of A Linguistic Atlas of Late Mediaeval English* (*eLALME*) (Benskin et al. 2013). The appraisal of all the aspects mentioned above will help to yield a complete picture of the treatise and to place it in its material and cultural context.

¹ See Taavitsainen, Pahta and Mäkinen (2005), Esteban-Segura (2012a) and Miranda-García et al. (2012-2015), among others.



2. HISTORICAL BACKGROUND AND TEXT TRANSMISSION

The practice of medicine in the Middle Ages in Europe was strongly influenced by the art of bloodletting, also known as phlebotomy. This therapy has been historically employed worldwide by physicians for treating fevers, infections, apoplexies, mental disorders and plagues for centuries (Parapia 2008, 490). The earliest evidence of this practice can be found in the Egyptian *Ebers papyrus*, one of the oldest medical texts written in the time of the Pharaohs during the early New Kingdom (Mokhtarian 2022, 92). Phlebotomy continued to be performed in the Greco-Roman and Islamic civilisations (York 2012, 143). As Voigts and McVaugh (1984, 4) contend, the main sources of medical information for bloodletting in the medieval period were the translations of the works produced by reputable physicians, such as Galen and Constantine the African.² These texts contained valuable instructions and comments regarding the convenience of venesection for different kinds of illnesses.

The development of the theory of phlebotomy was also strongly influenced by the *Epistula de phlebotomia*. This ninth-century anonymous medical treatise was reworked and adapted into verse form by the medical school in Salerno in the famous poem *Regimen sanitatis Salernitanum* in the twelfth century (Gil-Soltres 1988, 74). According to Voigts and McVaugh (1984, 3), this work played an important role in the diffusion of medical knowledge on bloodletting in the Middle Ages because it served as an essential guide for medical practitioners such as the Salernitan Archimattaeus (c. 1150), who later produced a phlebotomy treatise based on this text.

Bloodletting treatises, which were widely distributed at the time, not only reveal the different techniques employed, such as cupping or using a lancet, but also other crucial aspects that had to be taken into consideration when this practice was carried out. The age of the patient was just as important as the timing. The day of the month, the season and even the weather could affect the outcome of this type of surgery, as indicated by Despars, lecturer in medicine and rector of the University of Paris at the beginning of the fifteenth century (Wallis 2010, 324). Cowen (1975, 274) explains that religion also played a key role as, for instance, bloodletting was not recommended during Christian holy days. In her analysis of a Late Middle English medical manuscript, McCall (2023, 71) also describes the close relationship between astrology and phlebotomy:

Bloodletting and zodiac figures often travelled together; for easy consultation by a physician, they were sometimes included in portable folded booklets known as almanacs or calendars [...]. A fifteenth-century English example (Wellcome MS 40 [...]) shows a bloodletting figure surrounded by descriptions of when to take blood

² Galen is considered to be one of the most prominent Roman-Greek physicians and medical scholars from antiquity. Constantine the African, a North African monk who translated Arabic medical literature into Latin in Italy in the eleventh century, was also another influential physician (Black 2019, 188).



from specific veins. The figure is pictured above a lunar table so the user could calculate astrological movements and thus the proper time to manage a patient's humours through phlebotomy.

Medical practitioners relied on these types of illustrations to locate the veins. One example of these images is a drawing of Vein Man found in a fifteenth-century Guildbook of the Barber Surgeons of York (British Library 2008).

Guy de Chauliac was a French surgeon from the first half of the fourteenth century (1298-1368). He was born in Chauliac, a village in the Géudavan, in the modern-day Department of Lozère (Thevenet 1993, 208). His medical expertise was mainly shaped by two distinguished figures. The first one was Raymond de Mollières, chancellor of the Medical Faculty of the prestigious University of Montpellier, where Guy became a Master of Medicine and Surgery (McVaugh 1997, xi). The second was Nicola Bertuccio, a surgeon at the University of Bologna. Most of Guy's education and anatomical knowledge was based on Bertuccio's theoretical teachings (Martín Ferreira and Conde Parrado 2003, 715). By the 1340s, he had acquired a high reputation in France and became the personal physician of three popes during the tumultuous Avignon Papacy (Clement VI, Innocent VI and Urban V) (Thevenet 1993, 210). In 1363, while Europe was experiencing the effects of the outbreak of the second plague pandemic, Guy produced the most significant text in the field of surgery at the time, the *Inventarium seu collectorium in parte cyrurgicali medicine*, more commonly known as the *Chirurgia magna* (McVaugh 1997, ix). In this work, it is evident that he was well aware of the significance of the aforementioned Salernitan medical school in his discussion of phlebotomy (Gil-Soltres 1988, 74). Guy de Chauliac was undoubtedly one of the most influential figures in the history of medicine. A more comprehensive biographical account of his life can be found in Nicaise's *La grande chirurgie de Guy de Chauliac* (1890).

With regard to the transmission of the medical text under scrutiny, another Middle English version of Guy de Chauliac's *On Bloodletting* can be found in London, British Library, MS Sloane 3486 (f. 147v). It was produced in the second or third quarter of the fifteenth century (British Library 2005). The treatise is not listed in Keiser (1998). Whether all the existing copies of it have been properly tracked remains uncertain and further investigation is mandatory in this regard.

The vernacularisation of medicine in Britain involved the translation into Middle English of many scientific texts in Latin on bloodletting that circulated at the time. Some examples of these medical manuscripts are: (i) London, Wellcome Library, MS 405 (ff. 67r-71v); (ii) London, Wellcome Library, MS 5650 (ff. 58v-61v); and (iii) Cambridge, Gonville and Caius College, MS 176/179. The text of the first manuscript listed includes a bloodletting treatise in Latin and English (Moorat 1962, 273). Regarding the second one, Alonso-Almeida (2020), who has provided its edition and study, states that it describes "the unfavourable days for bloodletting and when in the day bloodletting is recommended [...]; the bloodletting veins, location of veins and their therapeutic associated benefits [...]; and the virtues of bloodletting" (2020, 35). He postulates that the main source of his "edited text might be the pseudo-Bedan *De minutione sanguinis sive de phlebotomia*" (2020, 35). The



last manuscript mentioned, Cambridge, Gonville and Caius College, MS 176/179, is Henry of Blois's fifteenth-century translation of a Latin treatise on bloodletting. It is partially based on Constantine the African's *Megatechni* and *Viaticum* (Voigts and McVaugh 1984, 7).

3. CODICOLOGY AND PALAEOGRAPHY OF THE TREATISE

The physical features discussed in this section refer to those folios in which the treatise *On Bloodletting* is held. The writing surface is vellum and the material, black ink; blue and red ink are employed alternatively for paragraph marks and for two decorated initials. The dimensions of the binding are 200 mm x 140 mm, whereas the spine is 42 mm. The folios measure 190 mm x 130 mm. The dimensions of the written space are 147-150 mm x 90-95 mm. The text is presented in a single column and the handwriting is clear and careful. The treatise starts in line 14 of folio 165v, therefore in the middle of it approximately, since this folio is comprised of twenty-six lines. The number of lines in folios 166r and 166v is also twenty-six lines each. This indicates a careful process of copying. In the manuscript, folios are numbered in Arabic numerals at the top, on the right-hand side of each recto, and the treatise under consideration follows this practice. Thus, the only folio that appears numbered is 166r. Foliation seems to be a later addition. Each folio is within rules, both regarding frame and lines, in order to help the scribe keep a regular line of writing.

The script shows features from the Gothic *textura* book hand, which by the mid-fifteenth century was chiefly restricted to formal codices. There is distinction between <u> and <n> and no confusion between <þ> and <y>, as different graphs are employed (<y> has a tail). Both the layout and script show that it is a high-quality manuscript.

As in most medieval medical manuscripts, abbreviations are also made use of in the treatise in order to save time and space. Expansion marks indicate the omission of a nasal consonant and involve placing a horizontal line over the preceding vowel. They can appear in the middle (Figure 1) or end (Figure 2) of the word.³ Superior letters, which appear over the line, signal the omission of one or more letters in a word (Figures 3, 4 and 5). A number of different brevigraphs or special signs are also employed to replace a common letter combination, such as *er* and *re* (Figures 6 and 7, respectively), *ur* (Figure 8), *ar* (Figure 9), *ri* (Figure 10) and *us* (Figure 11). Finally, a special symbol is used to stand for the conjunction *and* (Figure 12).

³ All the images provided in this paper are reproduced by kind permission of Glasgow University Library's Special Collections. We are grateful to Mr Robert MacLean, Assistant Librarian, for his generous assistance and for helping us with the measures of the manuscript and to decipher part of the marginal note in f. 166v.





Figure 1. “dounward.”

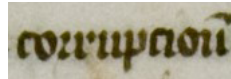


Figure 2. “corrupcion.”



Figure 3. “pat.”



Figure 4. “pou.”



Figure 5. “with.”

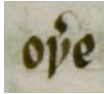


Figure 6. “opere.”

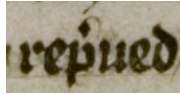


Figure 7. “repreued.”

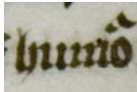


Figure 8. “humour.”

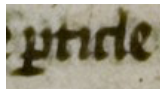


Figure 9. “particle.”

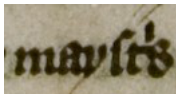


Figure 10. “maystris.”

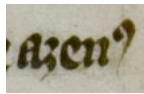


Figure 11. “azenus.”



Figure 12. “and.”

Marginal notes, quite common in medieval medical texts, are not found in the treatise, except for the name “Anthony” and the date “July 13,” in a seventeenth-century hand, in the left margin of folio 166v. This may be a mark of ownership. Running titles, underlining and other visual devices intended for reference are also wanting in the treatise.

Despite it being a short text, decoration appears in two of the three folios in the form of decorated initials, which are a two-line (f. 165v) initial letter—which opens the treatise—and a one-line one (f. 166r) in blue ink with decorations in red ink within the letters and along their left margin.

The inventory of punctuation marks encompasses the punctus (18×), always in raised position, the single virgule (40×), the double virgule (17×) and the paragraph mark (24×). The punctus is usually employed to delimit boundaries between clauses and sentences. On one occasion, two puncti are used to circumscribe a numeral. The single virgule normally appears in combination with the paragraph mark to mark off different paragraphs. When the single virgule stands on its own, its function is similar to the main one of the punctus (at clausal and sentence levels). The double virgule occurs at the of the line to signal that a word continues in the following one. The paragraph mark, as its name indicates, is employed to differentiate paragraphs. As mentioned above, paragraph marks are in blue and red ink and the scribe is systematic in alternating these two colours.

The scribe was very careful when copying the text since no errors have been spotted. The identity of the scribe/translator remains anonymous to date. MS Hunter 307 belonged to the personal collection of Dr William Hunter (1718-1783), who bequeathed it to the University of Glasgow. This institution has taken care of Dr Hunter’s legacy since 1807.



4. EDITION

The tenets of the semi-diplomatic edition have been followed. The edition produced tries to be as faithful to the witness as possible. Thus, the layout of folios has been maintained in such a way that lines in the edition correspond to those in the original manuscript. However, the number of lines has been inserted and indicated to the right of the text to help the reader locate information. Digitised images of the folios comprising the treatise are offered before each transcribed folio and a simple textual apparatus, including information about decoration and marginalia, is provided at the end of each of these.

The usage of <u> (in medial position) and <v> (in initial position) has been preserved as it appears in the original and the same has been done for letters <i> and <j>. The corresponding symbols for *thorn* <þ> and *yogh* <ȝ> have been employed. Since the transcription is graphemic rather than graphetic, the distinction of graphs used for letters <s> and <r> depending on the position in which they are found within the word has not been kept.

The original capitalisation and punctuation have been retained. Likewise, word division has been left as it occurs in the text. Therefore, words which are combined but are in fact two different ones (e.g., “aman”; “aparty”; “agarsyng”) have not been disjoined. On the other hand, elements of the same word which appear separated with a blank space (e.g., “ouer moche”; “ouer party”; “a vised”) have not been united. Split words at the end of the line have been left as such.

Abbreviations have been expanded. It is interesting to note that the word “schuldris” appears in full on two occasions; on a third occasion, the final part of the word, except for the plural mark, has been abbreviated by means of a curved flourish ending in a diamond-shaped punctus, a symbol which the scribe has used for *er/re* elsewhere (see Figures 6 and 7 above). Although usage would recommend that the abbreviation should be expanded to *ri*, the word has been transcribed as “schuldr̄es” for the sake of transcription homogeneity, since the scribe has used a specific symbol for *ri* in other contexts (see Figure 10 above). Every effort has been made to minimise editorial intervention.



yan zue hir oye medecyns as it is told her bifore and if ſche
haue no purgaciou aftir ye bering of child zue hir medecyns
y^t were told iⁿ ye chapitre of thynholding of blod. ¶ Su^t whome
han corrupt mater as quyte paſſing a wey fro he in ſtate of
blod. & oylwhil ſuch mater paſſy a wey w^t ye blod yat yei ſchul
den be purged off. And if it be old whomen or bareyn whomen
it nediy not to zue he no medecyns. ¶ y^t for if yei ben zoge
whomen let he ſey karlokis or ſkyrellwhittis in thyn. & let
hir ſute ouer ye ſmoke y^t of yat it come to hir puy membre.
or take pibol & mak poude y^t of & put it iⁿ a bagge ſo bro
od & ſo long yat it moise hile bove ye puy mebris of ye wh
man. & al tharm lei it on yilke mebris and bynde it faſte y^t
it falle not a wey.

Aphinſian behouey to knowbe yre mane inſpectionis
in blod letyng yat is to ſeie wher it be yicke or yne
or meene whil ama bledy. ¶ Blod y^t is yicke vineye goy^g
fro ye weyne but falling dropmeel it is euyl for it bitok
ney ye moiſture of ye body to be waſtad. ¶ Blod yat is
y^t yne & thatey you; it be leid on ye naile. it wole not en
gale ne crudde yan it is euyl for it bitokney y^t ralte hu
mans ben to abundant in ye body or to moche moiſture.
¶ Blod y^t is meene or meſurable yat is bittene yicke or
y^t yne y^t ſtable. ¶ Alſo in ye bledyng me ſchal byholde wher
it be heot or cold. for heot blod bitokney hote humos to
hane ye maſtrye iⁿ ye body & cold. ¶ Whan it engely me
ſchal biholde wher it be harſch or craſſyng or ther kyng

Figure 13. Glasgow, University Library, MS Hunter 307, f. 165v.

A phician behouþ to knowe þre manere inspecciouns
 1
 in blod letyng / þat is to seie wheþer it be þicke or þinne
 or meene whil aman bledþ / ¶ Blod þat is þicke vneþe goyng
 fro þe veyne but fallyng dropmeel it is euyl for it bitok//
 neþ þe moisture of þe body to be waastid / ¶ Blod þat is
 5
 þynne and watry þou3 it be leid on þe naile · it wole not en//
 gele ne crudde / þan it is euyl for it bitokneþ þat rawe hu//
 mours ben to abundaunt in þe body or to moche moisture /
 ¶ Blod þat is meene or mesurable þat is bitwene þicke or
 þynne perisable / ¶ Also in þe bledyng me schal byholde wheþer
 10
 it be hoot or cold · for hoot blod bitokneþ hote humours to
 haue þe maistrye in þe body and cold / ¶ Whan it engelþ me
 schal biholde wheþer it be harsch or crassyng or cherkyng /

1 A] 2-line initial in blue ink with red gestures and black details



Ffor if it be so it bitokney moche corrupcion in ye body or dif
 posyng to lepre **A**lso if it be fatty it bitokney ou moche fat
 nesse **A**lso if ye sinel of ye blod be stynkyng it bitokney cor
 rupcion of humo or rootnesse i ye body **T**o knowe ye sinel
 yof. Wete a cloy ym z lei to yi nose moche watrynesse i ye
 blod bitokney moysture but litil watrynesse bitokney drie
 nesse but yis watrynesse i ye blood if it be good it is lyk
 ye vryn of hyn yf olky ye blood **A**z zolk aftir ye enge
 lynyng me schal biholde if it be skūmyng for if it be so z it
 be not along on ye halstynesse of fallung it bitokney ye
 blod to be vutefyed **A**lso ye ou pty of ye blod olky to
 be reed z pleyu or euene and apy cleer for if it be not
 euene and if it be not along on ye reeldyng of ye vessel
 it bitokney grenaūre in ye body of par tyes **A**lso if ony
 oye colour pā rody or reed apere i ye ou pty it bitokney cor
 rupcion **A**zeleke blod bitokney abūdaūre of colre **P**ale
 blod bitokney abūdaūre of flekyne if it be ycke and if it
 be pyne it bitokney malencolie **B**lod yf myzey gree
 nesse bitokney for breūnyng in ye body and if it nere to
 blaknesse it bitokney more breūnyng or mortefyng blod
 yf is skūmyng bitokney bellyg of humōs i ye body and
 burbly blod bitokney thynidnesse **W**atry blod bitokney
 coldnesse of ye lyuer **I**f ye blod aftir ye puttyng of blod
 wat is brotū and esy to sundre it bitokney moche drie
 nesse and if it be touz it bitokney quey z viscouse humōs
A or gar syng z ventosyng it bifally of tre tymes

Figure 14. Glasgow, University Library, MS Hunter 307, f. 166r.

¶ ffor if it be so it bitokneþ moche corrupcioun in þe body or dis//
 posyng to lepre / ¶ Also if it be fatty it bitokneþ ouer moche fat//
 nesse / ¶ Also if þe smel of þe blod be stynkyng · it bitokneþ cor//
 rupcioun of humour or rootnesse in þe body / To knowe þe smel
 þerof · wete a cloþ þerin *and* lei to þi nose / moche watrynesse in þe
 blod bitokneþ moysture / but litil watrynesse bitokneþ drie//
 nesse / but þis watrynesse in þe blood if it be good it is liyk
 þe vryn of him þat owiþ þe blood / ¶ Now aftir þe enge//
 lyng me schal biholde if it be skummyng · for if it be so *and* it
 be not along on þe hastynesse of fallyng it bitokneþ þe
 blod to be vndefyed / ¶ Also þe ouer party of þe blod owiþ to
 be reed *and* pleyne or euene · and aparty cleer / for if it be not
 euene · and if it be not along on þe teeldyng of þe vessel
 it bitokneþ greuaunce in þe body of partyes / ¶ Also if ony
 oþere colour þan rody or reed apere in þe ouer party it bitokneþ cor//
 rupcioun / ¶ Zelewe blod bitokneþ abundaunce of colre / ¶ Pale
 blod bitokneþ abundaunce of flewme if it be þicke and if it
 be þynne it bitokneþ malencolie / ¶ Blod þat nyȝeþ gree//
 nesse bitokneþ for brennyng in þe body / and if it neiȝe to
 blaknesse · it bitokneþ more brennyng or mortefyng / blod
 þat is skummyng bitokneþ wellyng of humours in þe body / and
 burbly blod bitokneþ wyndnesse / ¶ Watry blod bitokneþ
 coldnesse of þe lyuer / Jf þe blod aftir þe puttyng of blod
 water is brotil and esy to sundre · it bitokneþ moche drie//
 nesse / and if it be touȝ it bitokneþ quesye *and* viscouse humours /
 For garsyng *and* ventosyng · it bifalliþ ofte tymes

26 For] 2-line initial in blue ink with red gestures



smale vernes to be touchid y^r rēnen among ye fleisch hi
dir ward & yndir ward ye whiche aperen not ne be not kn
olke and yoo musten be touchid yowz gar sing or vento
sing bi ye whiche ye body may haue moche heche. ¶ For ye
passions of ye ren & ye heed. y^r schalt make a gar sing or
ventosing i to ye fleisch yndir ye chyn and ye maistr sey.
y^r schalt make y^r gar sing for peyne of ye ren euene azen^o
ye ren i ye necke bihynde as y^r. ¶ If ye rixte ye ake sette a
ventosing ye azen^o ye ye bihynde. & so ye lift ye fro ye roote
of ye necke douward. to ward ye necke boon y^r schalt make
gar sing or ventosing for peynes of ye ren & of ye iolbis &
of ye mouy & of ye teep and also for peynes of ye necke and
for euyle i ye schuldir bladys yndir ye schuldris y^r schalt
make gar sing i y^r plans or yre. ¶ Also bittere ye schuldir
& ye elbowe for ye blod of brisur in ye schuldris & ye also for
aking of ye ren & of ye heed. ¶ Also for aking of ye schulds
& armes make a gar sing ypo ye arm on ye wristis and for
peynes of ye brest y^r schalt make ye azen^o on ye bak. ¶ And
for peynes of ye bak gar sing is good on ye buttokis by
neye. ¶ And for ichting bochus & scabbis bihynde ye knee w^t
out. ¶ & 2oib i yis hyue ye yrtide y schal make an ende & if
ony ma biholde it & fynde ony yig y displey hi let hi not
repue it but let hi take sicke alabō in hōd azen & let hi be
wel avised y he be not repued. ¶ For yis i my maylrs ty
me & my y haue wel pūed & curid & heehd many a patient
y anckid be god of his grace sendyng to y is ye hyste &
¶ The best leech!

Figure 15. Glasgow, University Library, MS Hunter 307, f. 166v.

smale veynes to be touchid þat rennen among þe fleisch hi//
 1
 dirward *and* þidirward þe whiche aperen not ne *ben* not kn//
 owe / and þoo musten be touchid þoru3 garsyng or vento//
 syng · bi þe whiche þe body may haue moche heelp / ¶ ffor þe
 passioums of þe izen *and* þe heed · þou schalt make agarsyng or
 5
 ventosyng *in* to þe fleisch vndir þe chyn / and þe maistir seiþ ·
 þou schalt make þi garsyng for peyne of þe izen euene *azenus*
 þe izen *in* þe necke bihynde as þus // ¶ Jf þe ri3te izen ake sette a
 ventosyng þere *azenus* þe izen bihynde · *and* so þe lift izen / fro þe roote
 10
 of þe necke dounward · toward þe necke boon þou schalt make
 garsyng or ventosyng for peynes of þe izen *and* of þe iowis *and*
 of þe mouþ *and* of þe teef / and also for peynes of þe necke and
 for euyle *in* þe schuldir bladis vndir þe schuldris þou schalt
 make garsyng *in* · ij · placis or þre / ¶ Also bitwixe þe schuldir
and þe elbowe for þe blod of brisure *in* þe schuldris *and* þere also for
 15
 aking of þe izen *and* of þe heed / ¶ Also for aking of þe schuldris
and armes make a garsyng vpon þe arm on þe wristis / and for
 peynes of þe brest þou schalt make þere *azenus* on þe bak ¶ and
 for peynes of þe bak garsyng is good on þe buttokis by//
 20
 neþe / ¶ and for icching bocchis *and* scabbis bisyde þe knee *with*
 out / ¶ Now *in* þis fyue þe particle J schal make an ende *and* if
 ony man biholde it *and* fynde ony þing þat displesþ him · let him not
 repreue it but let him take siche a labour *in* hond *azen* *and* let hym be
 wel a vised þat he be not repreued / ¶ ffor þis *in* my maystris ty//
 25
 me *and* myn J haue wel preued *and* curid *and* heeled many a patient
 þanckid be god of his grace sendyng to þat is þe hizeste *and*
 ¶ þe best leech /

18 peynes] *in left-hand margin, vertically.* Anthony July 13



5. LINGUISTIC ANALYSIS

Dialectal localisation of the language found in folios 165v-166v of Glasgow, University Library, MS Hunter 307 has been accomplished following the model provided by *An Electronic Version of A Linguistic Atlas of Late Mediaeval English*, *eLALME* for short (Benskin et al. 2013), which is based on the well-known *A Linguistic Atlas of Late Mediaeval English* (McIntosh, Samuels and Benskin 1986), developed at the University of Edinburgh.⁴ The method of analysis involves several stages. First, a survey questionnaire is completed. This questionnaire has a list that incorporates more than 400 items which are assigned to respective realisations recorded from the text studied. The set of items selected from *eLALME* for the present study is mainly composed of function words, such as determiners, prepositions, conjunctions and auxiliary verbs, although some content words have been included. In the next stage of the procedure, the results of this questionnaire are analysed. This step is essential for the creation of the Linguistic Profile (henceforth LP) of the text,⁵ which is supplied in Appendix 1.⁶ In the final part of this process, the “fit”-technique (Benskin et al. 2013) is employed. This involves finding the specific variants of the items plotted in the dot and user-defined maps (see examples in Figures 16 and 17, respectively) and comparing the devised LP of the text of the manuscript that concerns us with other LPs from other texts in *eLALME*.⁷ The county dictionary has been consulted whenever no variants of items figure on the maps.

The distribution of the occurrences of the majority of the forms examined broadly places the text in the Midlands and the South. For instance, ‘þoruʒ’ for THROUGH, ‘wole’ for WILL and ‘ben’ for ARE typically occur in these regions. The dot maps also show that the forms ‘whan’ for the time conjunction WHEN, ‘þe whiche’ for WHICH and ‘moch’ for MUCH are registered in texts from the same areas. The next forms to be discussed, the first- and third-person singular present indicative

⁴ *eLALME* covers the period from 1350 to 1450 (Benskin et al. 2013).

⁵ Following the editorial policy of *eLALME* (Benskin et al. 2013), uppercase and lowercase letters have not been distinguished in the LP of our text.

⁶ A previous phase of lemmatisation and POS-tagging of the text has been particularly useful for quickly consulting grammatical information of the forms examined and for retrieving swiftly and efficiently all the realisations of the items analysed. Data about the category, subcategory, type, tense, number, person, case, gender, folio and line of each token have been collected in an Excel spreadsheet. In the semi-diplomatic edition of the text, although the abbreviations are expanded, the original word division and punctuation are preserved with as little emendation as possible. This is important because any conclusions regarding the local origin of the text under scrutiny have to be made on the basis of an accurate reproduction of the source text. For this purpose, all the original forms have been imported without modification to the concordance programme *AntConc* (Anthony 2023) to find their raw frequency in the text. In order to preserve the original letters, such as the thorn, the character encoding of the .txt file has been changed to “Unicode (UTF-8)” in this software tool.

⁷ Dot maps reproduce the distribution of different forms or variants of an item on a map which covers mainland Britain between Land’s End and the Firth of Forth. User-defined maps offer a more precise location of all the forms registered in *eLALME*, together with extra information of their respective LPs.



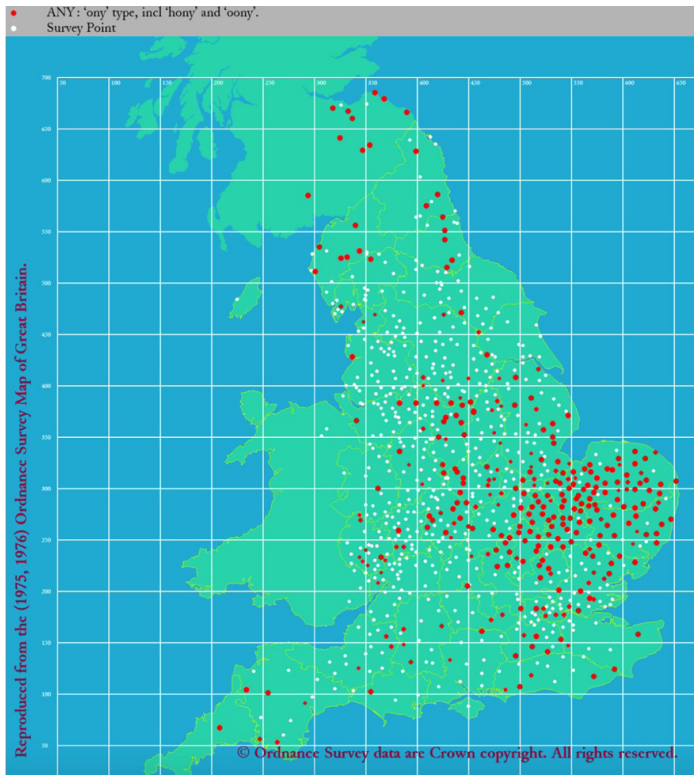


Figure 16. Dot map which shows the distribution of 'ony' type for ANY (*eLALME*).

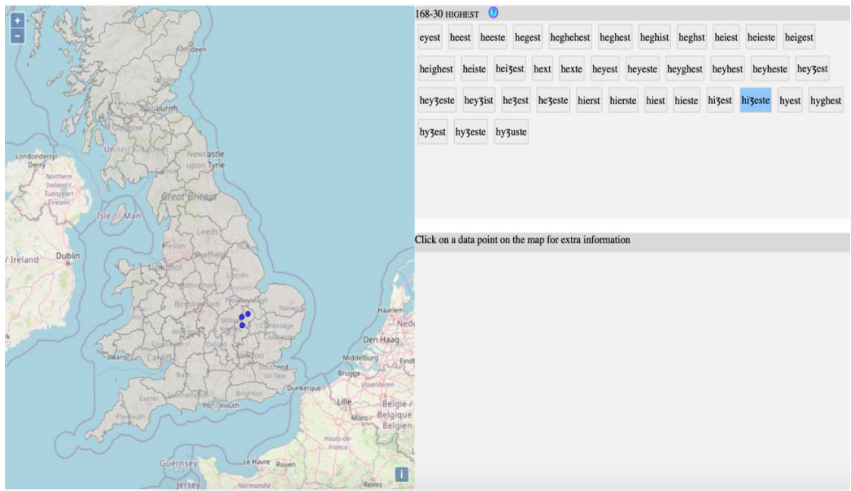


Figure 17. User-defined map which shows the distribution of 'higheste' for HIGHEST (*eLALME*).



form 'schal' and the second-person singular 'schalt' for the verb SHALL, also present a similar distributional pattern, even though the latter appears more precisely in Huntingdonshire (Hu), Cambridgeshire (Cam), Bedfordshire (Bed), Hertfordshire (Hts), Northamptonshire (Nht), Warwickshire (Wrk) and in other counties in the Midlands, as confirmed by Vega Déniz (2004, 67). The presence of 'ony' for the item ANY in the East and North Midlands is corroborated by Alonso-Almeida, Domínguez-Morales and Quintana-Toledo (2022, 26).

A closer inspection reveals that the text under scrutiny shows some distinct Midland characteristics. This is particularly conspicuous in the distribution of the form with initial 'þ-' for THE and the two variants 'azen' and 'azenus' for AGAIN. The latter realisation has a very restricted location partly due to the scarce number of instances found: Nht, Wrk and Staffordshire (Stf). The dialectal localisation of 'þre' for THREE is similar. Its occurrences are largely concentrated in the counties mentioned above and others such as Cam, Hu, Bed, Wrk, Rutland (Rut) and Leicestershire (Lei). Concerning the personal pronoun HIM, there are three variants, namely, 'him,' 'him' and 'hym.' All three belong to the Midlands, although a substantial proportion of occurrences can be found in some northern regions as well. The item OTHER renders one single variant, 'oþere,' which has been attested in greater frequency in Nht, Cam, Hu, Bed, Rut, Lei and in a few other counties. As for the item BETWEEN, it yields two forms, 'bitwene' and 'bitwixe,' as an adverb and as a preposition, respectively, being the former restricted to the Midlands and the latter concretely to the area bordering the East Midlands and the East of England. More specifically, the localisation of 'bitwixe' has been found in Cam, Hu, Bed and the neighbouring counties. As regards the form 'aftir' for AFTER, there is a significant concentration of instances of this realisation in the counties aforesaid, even though it has also been located in Wrk, Lincolnshire (Lin) and Norfolk (Nfk), among others. There are three occurrences of 'hizeste' for the superlative item HIGHEST, two of them appearing in Hu and the other one in Bed.

It should be mentioned that the analysis of the realisations of other items, such as IT, FROM, IS, AFTER, NOT, WHILE, WHETHER, WITHOUT, HAVE, MANY and LITTLE, does not offer conclusive results since their distribution is widespread in the whole area studied. The data supplied by *eLALME* regarding some forms of KNOW and ALSO are not statistically significant, since only a few instances are registered across the country.

All this evidence shows that the limits of the geographical local origin of the text can be more narrowly circumscribed to the counties of Bed, Hu and Cam. As mentioned earlier, the final stage of the 'fit'-technique entails the comparison of the LP of MS Hunter 307 (LP H307) with those LPs from the aforementioned counties contained in *eLALME*. Taking into account the similarities that they share with the source text in terms of date of creation and linguistic features, LPs 749, 745 and 6180 have been selected. They are available in Appendices II, III and IV, respectively. The items which do not coincide with those of LP H307 have not been included in the appendices. The LP which happens to show a greater degree of linguistic correspondence with LP H307 is LP 745 from Huntingdonshire.



6. CONCLUDING REMARKS

This article has offered the study and edition of a hitherto unedited fifteenth-century English text on phlebotomy, more specifically the Middle English version of Guy de Chauliac's *On Bloodletting*, which remained unexplored so far. The discussion of the sources of this work and the circulation of similar scientific texts about phlebotomy in the medieval period sheds light on the diffusion of specialised medical knowledge in England, but there is still much work to be done to assess the dissemination of this particular treatise.

The examination of physical features of the treatise points to a careful and well-planned piece of work, which has survived in very good condition. The type of script, the use of colour for paragraph marks and initial letters as well as the lack of marginalia and scribal errors seem to indicate that the function of the volume was not practical.

On the other hand, the analysis of the language of the text has allowed establishing a likely area of provenance. Following the principles of *eLALME* (Benskin et al. 2013), the dialectal localisation of folios 165v-166v of MS Hunter 307 has been identified. The results of the analysis suggest that the text was written in the Midland variety, probably in the county of Huntingdonshire. It is worth noting that some studies have confirmed that the local origin of other treatises housed in MS Hunter 307 is similar. In her linguistic analysis of one of the texts comprised within the medical compendium *System of Physic*, namely, a version of the Middle English Gilbertus Anglicus (ff. 13r-145v), Esteban-Segura (2012b) assigned it to the area of Huntingdonshire in East Anglia. In addition, Vega Déniz (2004, 70) indicated that the linguistic features of another text of this codex, the obstetrical and gynaecological treatise *The Sekenese of Wymmen* (ff. 149v-165v), appear to be from the same county. Thus, MS Hunter 307 seems to have been composed in East Anglia, where medical texts were in large circulation during the Middle Ages (see Jones 2000), and more specifically in Huntingdonshire. Further research on the rest of the texts contained in the manuscript will be carried out to confirm this hypothesis as well as to try to elucidate the identity of the scribe/compiler.

Reviews sent to the authors: 02/09/2023

Revised paper accepted for publication: 09/09/2023



WORKS CITED

- ALONSO-ALMEIDA, Francisco. 2020. "A Middle English Text on Phlebotomy." *Revista Canaria de Estudios Ingleses* 80: 29-49.
- ALONSO-ALMEIDA, Francisco, Elena DOMÍNGUEZ-MORALES and Elena QUINTANA-TOLEDO. 2022. "Middle English Astro-Medical Texts in New Haven, Yale Medical Library MS 47." In *A Philologist World of Texts. Festschrift in Honour of Professor Jeremy Smith*, edited by Isabel de la Cruz-Cabanillas and María José Esteve-Ramos, 19-39. Las Palmas de Gran Canaria: Universidad de Las Palmas de Gran Canaria.
- ANTHONY, Laurence. 2023. *AntConc (4.2.0)* [Computer software]. Tokyo: Waseda University. <https://www.laurenceanthony.net/software/antconcl>. Accessed June 2023.
- BENSKIN, Michael, Margaret LAING, Vasilis KARAIKOS and Keith WILLIAMSON. 2013. *An Electronic Version of A Linguistic Atlas of Late Mediaeval English (eLALME)*. Edinburgh: The University of Edinburgh. <http://www.lel.ed.ac.uk/ihd/elalme/elalme.html>. Accessed June 2023.
- BLACK, Winston, ed. 2019. *Medicine and Healing in the Premodern West: A History in Documents*. Peterborough: Broadview Press.
- BRITISH LIBRARY. 2005. "Detailed Record for Sloane 3486." <https://www.bl.uk/catalogues/illuminatedmanuscripts/record.asp?MSID=739>. Accessed 1 June 2023.
- BRITISH LIBRARY. 2008. "Drawing of Vein Man, in the Guildbook of the Barber Surgeons of York." <https://www.bl.uk/onlinegallery/onlineex/illmanus/egermanucoll/d/011ege000002572u00050000.html>. Accessed 5 June 2023.
- COWEN, David L. 1975. "A Late Medieval Yiddish Manuscript on Bloodletting." *Clio Medica. Acta Academiae Internationalis Historiae Medicinae* 10 (4): 267-276.
- CROSS, Rowin. 2004. *A Handlist of Manuscripts Containing English in the Hunterian Collection, Glasgow University Library*. Glasgow: Glasgow University Library.
- ESTEBAN-SEGURA, Laura. 2012a. *System of Physic (GUL MS Hunter 509, ff. 1r-167v): A Compendium of Mediaeval Medicine Including the Middle English Gilbertus Anglicus*. Bern: Peter Lang.
- ESTEBAN-SEGURA, Laura. 2012b. "The Middle English Gilbertus Anglicus: An Assessment of Dialectal Features in G.U.L. MS Hunter 307 (ff. 13r-145v)." In *At a Time of Crisis: English and American Studies in Spain*, edited by Sara Martín Alegre, Melissa Moyer, Elisabet Pladevall and Susagna Tubau, 323-328. Barcelona: Departament de Filologia Anglesa i de Germanística, Universitat Autònoma de Barcelona/AEDEAN.
- ESTEBAN-SEGURA, Laura. 2015. "The Middle English *Circa instans*: A Pharmacopoeia from Glasgow, University Library, MS Hunter 307 (U.7.1)." *Manuscripta: A Journal for Manuscript Research* 59 (1): 29-60.
- GIL-SOLTRES, Pedro. 1988. "Introducción." In *Arnaldi de Villanova opera medica omnia IV: Tractatus de consideracionibus operis medicine sive de flebotomia*, edited by Luke Demaitre, 7-120. Barcelona: University of Barcelona.
- JONES, Claire. 2000. "Vernacular Literacy in Late-Medieval England: The Example of East Anglian Medical Manuscripts." PhD diss. University of Glasgow.
- KEISER, George R. 1998. *Works of Science and Information. Volume X*. In *A Manual of the Writings in Middle English 1050-1500*, edited by Albert E. Hartung. New Haven: The Connecticut Academy of Arts and Sciences.



- MARTÍN FERREIRA, Ana Isabel and Pedro CONDE PARRADO. 2003. "Edición y adulteración humanistas: el caso Chauillac-Joubert." In *La Universitat de València i l'humanisme: stvdia hvmnanitatis i renovació cultural a Europa i al Nou Món*, edited by Ferran Grau Codina, Xavier Gómez Font, Jordi Pérez Durà and José María Estellés González, 713-730. Valencia: University of Valencia.
- MCCALL, Taylor. 2023. *The Art of Anatomy in Medieval Europe*. London: Reaktion Books.
- MCINTOSH, Angus, Michael L. SAMUELS and Michael BENSKIN. 1986. *A Linguistic Atlas of Late Mediaeval English (LALME)*. 4 vols. Aberdeen: Aberdeen University Press.
- MCVAUGH, Michael R., ed. 1997. *Inventarium sive chirurgia magna. Volume 1: Text*. New York: E. J. Brill.
- MIRANDA-GARCÍA, Antonio, Graham D. CAIE, Santiago GÓNZALEZ FERNÁNDEZ-CORUGEDO, Javier CALLE-MARTÍN, Laura ESTEBAN-SEGURA, Teresa MARQUÉS-AGUADO and David MORENO-OLALLA, comps. 2012-2015. *The Málaga Corpus of Late Middle English Scientific Prose (MCLMESP)*. Málaga: University of Málaga. <https://hunter.uma.es/>. Accessed 4 September 2023.
- MOKHTARIAN, Jason Sion. 2022. *Medicine in the Talmud: Natural and Supernatural Therapies between Magic and Science*. California: University of California Press.
- MOORAT, Samuel A. J. 1962. *Catalogue of Western Manuscripts on Medicine and Science in the Wellcome Historical Medical Library Volume I: MSS. Written before 1650 A.D.* London: The Wellcome Historical Medical Library.
- NICAISE, Edouard, ed. 1890. *La grande chirurgie de Guy de Chauillac*. Paris: Ancienne Librairie Germer Baillière.
- PARAPIA, Liakat Ali. 2008. "History of Bloodletting by Phlebotomy." *British Journal of Haematology* 143 (4): 490-495.
- TAAVITSAINEN, Irma, Päivi PAHTA and Martti MÄKINEN, comps. 2005. *Middle English Medical Texts*. CD-ROM. Amsterdam: John Benjamins.
- THEVENET, André. 1993. "Guy de Chauillac (1300-1370): The "Father of Surgery."" *Annals of Vascular Surgery* 7 (2): 208-212.
- VEGA DÉNIZ, Alicia. 2004. "The Dialectal Localization of MS Hunter, 307, ff. 149v-166v." In *Voices on the Past. Studies in Old and Middle English Language and Literature*, edited by Alicia Rodríguez-Álvarez and Francisco Alonso-Almeida, 63-73. A Coruña: Netbiblo.
- VOIGTS, Linda Ehksam and Michael R. McVAUGH, eds. 1984. *A Latin Technical Phlebotomy and Its Middle English Translation. Transactions of the American Philosophical Society* 74 (2): 1-69. Philadelphia: The American Philosophical Society.
- WALLIS, Faith, ed. 2010. *Medieval Medicine: A Reader*. Toronto: University of Toronto Press.
- YORK, William H. 2012. *Health and Wellness in Antiquity through the Middle Ages*. Santa Barbara: ABC-CLIO.
- YOUNG, John and P. Henderson AITKEN. 1908. *A Catalogue of the Manuscripts in the Library of the Hunterian Museum in the University of Glasgow*. Glasgow: James Maclehose and Sons.



APPENDIX I: LP H307

No. ⁸	ITEM	FORMS
1	THE:	þe (74×)
6	IT:	it (36×)
11	WHICH:	þe whiche (2×)
13	MANY:	many (1×)
14	MAN:	man (1×), man (1×)
15	ANY:	ony (3×)
16	MUCH:	moche (6×)
17	ARE:	ben (1×), beʒ (1×)
19	IS:	is (12×)
22	SHALL <i>sg</i> :	schal (4×)
22-30	SHALL <i>2sg</i> :	schalt (5×)
24	WILL <i>sg</i> :	wole (1×)
28	FROM:	fro (2×)
29	AFTER:	aftir (2×)
31	THAN:	þan (1×), þan (1×)
32	THOUGH:	þouȝ (1×)
33	IF:	if (14×), jf (2×)
34	AS:	as (1×)
37	AGAIN:	aȝen (1×), aȝenus (3×)
41	WHILE:	whil (1×)
46	NOT:	not (8×)
52	THERE:	þere (1×)
55	THROUGH:	þoruȝ (1×)
56	WHEN:	whan (1×)
76	ALSO:	also (9×)
84	BE <i>inf</i> :	be (24×)
89	BETWEEN <i>pr</i> :	bitwixe (1×)
89-10	BETWEEN <i>adv</i> :	bitwene (1×)
100	BUT:	but (4×)
126	EVIL:	euyll (2×), euyle (1×)
155	GOOD:	good (2×)
160	HAVE <i>pres</i> :	haue (1×)
160-20	HAVE <i>inf</i> :	haue (2×)

⁸ The list of numbers in this and following LPs refers to the item number of the *eLALME* questionnaire.



171	HIM:	him (3×), him (1×), hym (1×)
168-30	HIGHEST:	hiʒeste (1×)
181-10	KNOW <i>inf</i> :	knowe (3×)
191	LITTLE:	litol (1×)
198-10	MAKE <i>inf</i> :	make (7×)
199-10	MAY 1/3sg:	may (1×)
218	NOW:	now (2×)
221	OR:	or (17×)
222	OTHER:	oþere (1×)
259-10	TAKE <i>inf</i> :	take (1×)
267	THREE:	þre (2×)
285	WHETHER:	wheþer (3×)
295-20	WITHOUT <i>adv</i> :	without (1×)
299	YOU:	þou (5×)
337-20	THAT* 'tha':	þat (3×), þat (10×)
338	THIS* 'thus':	þus (1×)
339	THUS* 'this,' 'thes':	þis (3×)

APPENDIX II: LP 749 (BEDFORDSHIRE, *ELALME*)

No.	ITEM	FORMS ⁹
1	THE:	þe ((þ ^c , the))
6	IT:	it
11	WHICH:	which, whiche ((þe-which, þe-whiche))
13	MANY:	manie ((manye, many))
14	MAN:	man (man)
15	ANY:	ony ((oni))
16	MUCH:	myche
17	ARE:	ben (ben) ((be))
19	IS:	is
22	SHALL <i>sg</i> :	shal
22-20	SHALL <i>2sg</i> :	shalt

⁹ According to Benskin et al. (2013), in *eLALME*'s bracketing system those variants which are "not enclosed by parentheses stand in dominant frequency. Single parentheses enclose forms that occur about one third to two thirds as frequently as the dominant form. Double parentheses enclose forms that occur less than about one third as commonly as the dominant form."





24	WILL <i>sg</i> :	wole
28	FROM:	fro
29	AFTER:	aftr ((<i>after</i>))
31	THAN:	þan ((<i>þan</i>))
32	THOUGH:	þouʒ
33	IF:	if
34	AS:	as ((<i>a</i> ^s))
41	WHILE:	while ((<i>þe</i> -while))
46	NOT:	not
52	THERE:	þere (þere) ((þer, þer, þ ^r e))
55	THROUGH:	þoruʒ, þorouʒ
56	WHEN:	whanne, whanne ((<i>wh</i> ^a nne))
89	BETWEEN <i>pr</i> :	bitwix
100	BUT:	but
155	GOOD:	good (gode)
160	HAVE <i>pres</i> :	haue
160-20	HAVE <i>inf</i> :	haue
171	HIM:	him ((<i>hym</i> , hym, him))
181	KNOW <i>pres</i> :	knowe, know-
191	LITTLE:	litil ((<i>lit</i> le, little))
199-10	MAY <i>1/3sg</i> :	mai ((<i>may</i>))
199-20	MAY <i>pl</i> :	moun ((<i>mai</i>))
218	NOW:	now
221	OR:	eip̄er ((<i>eip̄ir</i> , or, eip̄er))
222	OTHER:	oþere (oþer) ((<i>oþer</i> , oþir, oþere))
267	THREE:	þre
299	YOU:	ʒou ((<i>ʒ</i> ^{ou} , ʒow))

APPENDIX III: LP 745 (HUNTINGDONSHIRE, *ELALME*)

No.	ITEM	FORMS
1	THE:	þe ((þ ^e , the))
6	IT:	it
11	WHICH:	whiche (which) ((þe-whiche, þe-which))
13	MANY:	manye ((<i>many</i>))

14	MAN:	man (maʌ)
15	ANY:	ony ((onye)
16	MUCH:	myche (miche)
17	ARE:	ben (beʌ) ((be)
19	IS:	is
22	SHALL <i>sg</i> :	shal ((sha))
22-20	SHALL <i>2sg</i> :	shalt
24	WILL <i>sg</i> :	wole
28	FROM:	fro ((fʌo))
29	AFTER:	aftir ((after))
31	THAN:	þan ((þanne))
32	THOUGH:	þouʒ
33	IF:	if
34	AS:	as
41	WHILE:	while, whil
46	NOT:	not
52	THERE:	þere (þere) ((þeere))
53	WHERE:	where ((wher))
55	THROUGH:	þoruʒ
56	WHEN:	whanne (whan, whaʌne)
89	BETWEEN <i>pr</i> :	bitwixe (bitwix)
100	BUT:	but
155	GOOD:	good (goode) ((gode))
160	HAVE <i>pres</i> :	haue
160-20	HAVE <i>inf</i> :	haue ((han))
171	HIM:	him ((him, hym))
181	KNOW <i>pres</i> :	knowe, know-
191	LITTLE:	litol ((litel, litle))
199-10	MAY <i>1/3sg</i> :	may
218	NOW:	now
221	OR:	eip̄er ((or, eip̄ir))
222	OTHER:	oþere (oþer)
267	THREE:	þre
285	WHETHER:	wher (wheþer) ((wher))
295	WITHOUT <i>pr</i> :	wiþoute (wiþouten, wiþouten) ((wiþ-outen, wiþ-outen, wiþowte))
299	YOU:	ʒou



APPENDIX IV: LP 6180 (CAMBRIDGESHIRE, *ELALME*)

No.	ITEM	FORMS
6	IT:	it
11	WHICH:	þe-wich, þe-wiche, þe-which, þe-whiche
13	MANY:	many
14	MAN:	man, man
15	ANY:	ony, any
16	MUCH:	moche
17	ARE:	ben
19	IS:	is
22	SHALL <i>sg</i> :	schal (xal)
24	WILL <i>sg</i> :	wole, wol ((wil))
24-30	WILL <i>pl</i> :	wole (wolen, wolyn)
28	FROM:	from (fro)
29	AFTER:	aftyr (aftir)
31	THAN:	þan
32	THOUGH:	þou3, þou (al3if)
33	IF:	3yf, 3if (if)
37	AGAIN:	a3en
41	WHILE:	þe-while, while-þat, while
46	NOT:	not (nout, nou3t)
52	THERE:	þere
55	THROUGH:	þorou3, þoru3 (þour3)
100	BUT:	but
123	EITHER ... OR:	oþer+
126	EVIL:	euele, euy1
155	GOOD:	goode, gode, good
160-20	HAVE <i>inf</i> :	haue
191	LITTLE:	litol, lityl
221	OR:	or (oþer)
285	WHETHER:	wheþer
295	WITHOUT <i>pr</i> :	wiþ-outyn

