

Abbreviations in Medieval Medical Manuscripts

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Understanding the large number of abbreviations present in any medieval manuscript is one of the essential skills required by any knowledgeable palaeographer. English medieval manuscripts contain a great variety of abbreviations which were transferred from Latin and applied to the vernacular. As a result, their reasonably standard Latin system lost consistency. Editorial practice should avoid intervention, as it may detract from the originality and the text distinct and stylistic features. However, it is crucial to expand abbreviations coherently to carry out further analysis from a historical linguistic perspective. Thus, this article aims to demonstrate how the way in which a palaeographer transcribes specific abbreviations has an impact on the establishment of the dialectal provenance of a Middle English manuscript. In order to do so, we shall analyse the abbreviations extracted from a corpus of medical manuscripts and bring to light their relevance as far as English historical dialectology is concerned.

Keywords: abbreviations; Middle English; medical manuscripts

1. Introduction

This article deals with abbreviations in medieval medical manuscripts. Firstly a clarification of what is understood by medicine and a revision of how the abbreviations issue has been covered thus far are needed. This revision, along with the examination of a corpus of abbreviations from late Middle English medical manuscripts, will allow us to provide guidelines on how to transcribe abbreviations properly to make original texts keep their own linguistic flavour. The focus of the present study is on the English language, but code-switching in medical treatises was a common contemporary phenomenon, as scribes could integrate Latin and English in an especially subtle way. This explains

why an example in Latin may be brought to light to illustrate a specific point, as Latin words and expressions appear intermingled with the English text.

Regarding the contemplation of medicine in the Middle Ages, Wallis refers to the fact that apart from the word ‘medicine’, which was still in use in some expressions, medical knowledge could be referred to as *physica* (2010: 129): “*physica*’s primary meaning was ‘natural philosophy.’ Hence, equating medicine with *physica* shifted the epistemological status of medical knowledge toward what modern doctors call basic sciences: anatomy, physiology, and pathology.”

Thus, physicians, whose name derive from *physica*, needed to be acquainted with what Wallis calls “basic sciences”: Anatomy, Physiology, and Pathology, but they should also be aware of the properties of plants and the effect of planets¹ on people’s health. The approaches to the study of medieval medical writings rely chiefly on two criteria: the type of text and the audience. Regarding the former, Robbins (1970) establishes three groups:

- a) Prognosis: defined as “the astrological determination of the possibility of effecting a cure and the most favorable times for treatment” (1970: 395).
- b) Diagnosis: following the European tradition, illness is mainly diagnosed by urinoscopy or inspection of urine. This is related to the theory of the four humours which affected the colour of the urine when superfluous humours were present and needed excreting.
- c) Treatment or medication by means of herbs, bloodletting and empirical remedies: Robbins (1970: 406) includes here obstetrical and gynaecological treatises written presumably for midwives.

If we take into consideration the audience of the medical texts, according to Robbins (1970: 394), the difference in the classification lies in the language. On the one hand, one finds the relatively university-trained physicians who could read Latin, and on the other, “the on-the-job-trained surgeon, barber-surgeon, apothecary, apprentice, cunning man, wise woman, lay sister in a convent, and midwife”. Nevertheless, Voigts (1984: 322) and Taavitsainen (1988: 134) contend that Robbins’s classification is not accurate since even a short text can include all the information mentioned by Robbins. Thus, according to Voigts (1984), medical writing could be divided into: 1. Academic

¹ The Sun and the Moon were considered planets from a medical point of view during the Middle Ages (Bjork 2010: 197).

treatises; 2. Surgical Treatises and 3. Remedybooks. Likewise, remedybooks and *materia medica* are umbrella terms to refer to diverse kinds of treatises: herbaries are alphabetically ordered lists of plants with therapeutical effects; *receptaria* or recipe collections that were rooted in the western medical tradition from Greek and Latin physicians mainly and proliferated especially in fifteenth-century Britain.

Pahta & Taavitsainen (2004: 15) adopted a similar taxonomy, but augmented it in several ways: 1. Specialised treatises which are aimed at learned medicine practitioners, as the texts deal with bloodletting, ophthalmology, embryology, urinoscopy, gynaecology, the plague and other diseases, and other encyclopaedic treatises. 2. Surgical treatises consist of surgical manuals and anatomical description and have a particularly learned character, since they were originally compiled by university masters and used as university textbooks. 3. Remedybooks and *materia medica*. Remedybooks “comprise recipe collections with prognostications and charms, and other guides for maintaining health”, while *materia medica* include herbaries, which are alphabetically ordered lists of plants with therapeutic effects and some other texts, such as lapidaries, which often appeared next to herbaries and whose main purpose was to instruct on how to use gems or semiprecious stones to make recipes or amulets.

Finally, there are also astrological texts which include several pieces of works dealing with the influence of planets on peoples’ health: electionaries, lunaries² and destinaries, among others, and alchemy texts that could also include medical recipes, like cordial waters and elixirs, as well as the use of heavy metals to cure certain diseases.

Firstly, it is important to note the fact that there is a great diversity of genres and many of the materials have never been explored thus far. Covering an extensive variety of medical genres will provide a wider overview of abbreviations in late medieval medical English manuscripts. Most abbreviations will be present in other non-specialised medieval manuscripts, which will make the conclusions valid for the treatment of the topic in non-medical writings. Secondly, the main issue addressed in the article is the use of abbreviations and how to interpret them correctly, as their expansion will have an effect on the identification of the language depicted in the text.

² See De la Cruz-Cabanillas & Diego-Rodríguez (2018a, 2018b) on the translation, circulation and transmission of some of these texts in the Middle Ages.

It has traditionally been suggested that the medieval system of abbreviations aimed to “save time and space by allowing the scribe to drop letters from his writings of individual words” (Hector 1958: 28). To serve this purpose, “many thousands of different abbreviations” (Lowe 2006: 135) were employed during the late Middle Ages, and their use was “so widespread and often so careless that their extension is a matter of great difficulty” (Denholm-Young 1964: 69). Although “no new abbreviations were introduced” after the thirteenth century (Hector 1958: 28), they started to be transferred from Latin and applied to the vernacular without alteration. As a result, “many signs vary in significance according to the language of the manuscript in which they are employed” (Denholm-Young 1964: 70), and the relative consistency that characterised Latin manuscripts disappeared. Therefore, “while the common Latin value usually gives us a satisfactory expansion there may be doubt in particular cases concerning the value they are to be assigned, and the editor must decide whether scribal variation in their use represents casual error, personal idiosyncrasy or permissible licence” (Hewyworth 1972: 63). That is why Middle English manuscripts and their abbreviations tend to represent “une source continuelle d’obstacles et d’erreurs” (Chassant 1884: 1) for editors. This is mainly due to the fact that “some of the abbreviations have clear referents, but in more ambiguous cases the editor is put into situations in which he or she has to choose between variant spellings, or whether to consider a certain noun or verb inflected, or a particular abbreviation otiose or not” (Honkapohja 2013). This explains why it is essential to be consistent in the expansion of abbreviation and follow the same criteria on all occasions, allowing the reader to learn about the editorial procedure the editors have adopted.

Being a controversial issue, editors may decide to leave the abbreviations as such and avoid deciphering them. In fact, an up-to-date revision of the topic is wanting, as the great majority of reference works related to this discipline mainly concentrate on a mere taxonomy of the various types of abbreviations and their different meanings. What is more, most studies on medieval abbreviations date to the nineteenth century, and academia has awarded very little attention to this subject afterwards. Therefore, the main comprehensive works consulted by scholars are still Chassant (1885) and Cappelli (1899). Both authors label the different kinds of abbreviations to subsequently enumerate them together with their meaning. Trice-Martin (1892) does not only offer this detailed list with the main Latin abbreviations and their

meanings, he goes a step further and concentrates on English manuscripts distinguishing among:

- Abbreviations of Latin words used in English records
- Abbreviations of French words used in English records
- Glossary of Latin words found in records and other English manuscripts, but not occurring in classical authors
- Latin names of places in Great Britain and Ireland
- Latin names of bishoprics in England
- Latin names of bishoprics in Scotland
- Latin names of bishoprics in Ireland
- Latin forms of English surnames
- Latin Christian names with their English equivalents

Books on English palaeography devote minimal attention to this topic. In this vein, Hector (1958: 28–38), Denholm-Young (1964: 64–70), Petti (1977: 22–25), Brown (1993: 5), Preston & Yeandle (1999: ix–x), and Clemens & Graham (2007: 89–93) offer only a few pages on the correspondences of abbreviations.

Nowadays, new factors are slightly starting to be taken into consideration regarding plausible explanations for the use of abbreviations: 1) language independent communication in a multilingual environment; 2) the avoidance of using sacred names; and 3) the allegoric, ritualistic and occult purposes related to alchemical and magical symbols (Honkapohja 2013). Notwithstanding, in this article our focus is not on the function of abbreviations but on their proper expansion, as it will affect the localisation of the language of the text.

Gradually, scholars are giving the first steps towards bringing to light the complexity and importance of this field, which makes Lowe's claim that abbreviations will be valuable devices to ascertain "when and where a text has been written" (2006: 135). Moreover, Denholm-Young mentions that the purpose of the study of abbreviations should be "not merely to be able to decipher old writings, but to discover their age and provenance" (Denholm-Young 1964: 64). Thus, abbreviations will be used as sources to localise a specific text. Consequently, it is undeniable that the way in which the editor confronts and expands or, decides not to expand, the different abbreviations in English medieval manuscripts automatically influences the localisation of the language provenance of the manuscript. That is why the main aim of this

article is to study the abbreviations that appear in late Middle English medical manuscripts, in order to demonstrate the ways in which abbreviations have been, or have not been, expanded has an enormous weight on the analysis suggested by *Linguistic Atlas of Late Mediaeval English* (hereafter LALME) to establish the dialectal provenance of any late Middle English manuscript. First, a classification of the abbreviations contained in the medical writings under consideration will be provided, followed by a thorough examination of how the way in which the editor deals with abbreviations influences the results provided by LALME. Finally, the conclusions drawn from the discussion will be given in the corresponding section.

2. Methodology

To carry out the study of medieval abbreviations, a corpus of Middle English medical texts has been especially compiled from different specialised medical libraries, chiefly British Library, Glasgow University Library, and Wellcome Library. We have tried to cover as many as possible of the different genres included within the classification by Pahta & Taavitsainen (2004: 15), explained in the introduction section. Thus, our corpus contains:

- a) Specialised treatises dealing with
 - Ophthalmology: GUL Hunter 513 (ff. 1–37r).
 - Urinoscopy: GUL Hunter 328 *Tractatus Metricus de Vrinis* (ff. 1r–44v).
 - Gynaecology: GUL Hunter 307 (ff. 115v–166v).
 - Other encyclopaedic treatises: BL Sloane 141 (ff. 66r–86v) and Wellcome 537 (ff. 48r–310v).

- b) *Materia medica*, which include both herbaries and recipe collections.
 - Herbaries: GUL Ferguson 147 *Antidotarium Nicholai* (ff. 1r–55v); GUL Hunter 185 (f. 12v), *Flora medica* (ff. 1r–6v); GUL Hunter 307 *Pharmacopoeia* (ff. 167r–172v) and GUL Hunter 513 *Antidotary* (ff. 37v–97v).
 - Recipe collections: GUL Ferguson 147 (ff. 63r–158r), GUL Hunter 185 (ff. 13r–67v), and GUL Hunter 328 *Alphabetical List of Medicines* and *Alphabetical List of Remedies* (ff. 45r–68v).

c) Astrological Texts:

GUL Hunter 513 *De Booke of Ypocras* (ff. 98–104v), and other parallel texts: BL Additional 12195 (ff. 185r–190v) and BL Harley 2378 (ff. 7r–11v).

GUL Ferguson 205 (ff. 49v–54v).

The texts under consideration were first transcribed and then, the abbreviations were identified and classified according to Petti's taxonomy (1977), which follows the usual division into a) Contractions; b) Curtailments or suspensions; c) Brevigraphs or special signs; and d) Superior or superscript letters. Petti also includes elisions, whose main abbreviation sign would be the apostrophe to denote a silent <e>. The apostrophe does not usually occur in this period, since it is in use by late sixteenth century (1977: 23).³ Where necessary, the concordance programme *AntConc* was used to establish the real frequency of spelling forms in a given manuscript. Concordance programmes are a powerful and reliable way of treating data efficiently. Since this is a qualitative approach to the study of abbreviations, the number of occurrences is used just to account for the most common forms found in the texts to make decisions about the expansion of abbreviations. Afterwards, the questionnaire offered by LALME was completed to examine how the way in which the editor expands the abbreviations influences the establishment of the dialectal provenance of the language of the treatise. This was done in the case of Ferguson 147 (ff. 63r–91r), Hunter 513 (ff. 98r–104v), Additional 12195 (ff. 185r–190v), and Harley 2378 (ff. 7r–11v).

A word of warning should be said in regard to the use of LALME. Taavitsainen & Pahta (1997: 214–215) mention 1375 as the initial date for the presence of medical writings in vernacular English. This means that the main medical Middle English texts date from the end of the fourteenth century and throughout the fifteenth century. In fact, the manuscripts in this study which were examined with the fit-technique established by LALME are fifteenth-century copies. The precise time of composition of Ferguson 147 cannot be determined. On the contrary, Hunter 513 is dated in 1450 by Means (1993: 17), but 1470 by the Glasgow University Library catalogue; Harley 2378 goes back to 1480 (Means 1993: 16), and Additional 12195 dates to 1475 (Means 1993: 9). This implies that two important caveats should be borne in mind.

³ We have just found two instances of apostrophe in Ferguson 205, f. 49v and f. 50r, respectively. Thus, elisions are not dealt with in this article.

On the one hand, the fact that LALME covers the years 1350–1450, which places our documents right at the end, if not beyond the temporal limits of this work. On the other, due to the standardisation process the texts may represent a colourless use of language, where the local elements might be replaced with items with a wider currency. This fact is especially remarkable in the case of the parallel copies of *De Booke of Ypocras* (Hunter 513, Additional 12195, and Harley 2378). Nevertheless, since no extralinguistic information on the manuscripts is available, it is considered a useful tool to determine the localisation of the language of the texts under scrutiny.

3. Classification of abbreviations and linguistic implications of their expansion

a. Contractions

According to Petti (1977: 22), this was “the commonest method of abbreviation and consisted of the omission of one or more letters from the middle of a word”. Here we find contractions of *nomina sacra*, especially when they appear in Latin within the English text, such as *Ihu* for *Ihesu*, *Xri* for *Xristi*, *sa* for *sancta* (Ferguson 147).⁴

The absence of the letter is usually signalled by a suspension mark above a vowel. Very often the omitted character is a nasal. Thus, <m> has been omitted in *womman* (Ferguson 147), or *summe* (Hunter 307), and <n> in *mannys* (Hunter 513) or *foundement* (Wellcome 537), whereas in Latin it can also signal the omission of several letters, as in *dmi* for *domini* (Ferguson 147), or *dni* for *dinari* (Hunter 328). The usual form to mark the omission is a bar, but Petti (1977: 22) mentions an older variant, “though still in use in the late 15th century, was a crescent-shape, often with a dot below”. When the abbreviation takes place at the end of a word, “in cursive hands there was a practice of making either the bar or the apostrophe part of the upward curve on the final stroke of a letter” (Petti 1977: 22). When the word ends in <n>, this poses the problem whether the mark above the final letter is to be extended or it is just an otiose stroke. This happens very often with words containing the suffix in <-ion>, such as *decoccion* in Hunter 328. Here the

⁴ Expanded abbreviations are signalled by underlining the omitted letters.

editor must decide whether the stroke going up and backwards is a decorative flourish or should be expanded. Similarly, Petti (1977: 22) refers here to the case of final <e> that is considered by him a curtailment and will be addressed in the following section.

b. Curtailments or suspensions

This form of contraction entails shortening “the end of a word by one or more letters” (Petti 1977: 22). Thus, final <e> can be abbreviated in verbs like *saithe*, *apperethe*, and *takethe* (Hunter 513), while in the case of crossed double final <l> it is a moot issue whether this should be expanded as *-lle* or just *-ll*. Thus, an otiose mark crossing over the consonant in words like *myddell* and *appell* (Hunter 513) contrasts with a single crossed <l> where omitted <e> is to be expanded in words, such as *oleo* (Hunter 328, f. 46v). Petti concludes stating that “it is particularly difficult to decide whether or not a final *e* or *n* is intended” (1977: 23). Unlike this common suspension, a crossed <h> is rarely found, as in the word *moche* (Ferguson 147, f. 107v).

As the omission is usually signified by a bar, Petti adds that “a bar above a final vowel, nasal or *y* generally indicated omitted *m* or *n*”, as in *doun* (Wellcome 537), *him* (Hunter 185), *popilyon*, *coton*, *possyon* or *anon* (Ferguson 147). Often final <n>, as it happened in the case of suffix <-ion> above, may show a bar on top of it or a kind of pompous stroke going up and backwards. It is always troublesome how to deal with this pompous loop. Alonso-Almeida (2014: 98), in the case of Present-day English *gallon* in Hunter 185 f. 51r, interpreted it as *galoun*. Nevertheless, some other editors, when the final stroke parts from the line level of letter <n> may consider it an otiose stroke and the word would be rendered as *galon* instead.

The editor needs to face the decision of whether the symbol above final <n> may be regarded as otiose, or it stands for the following different spellings: 1) the sign can be expanded and interpreted as the omission of the nasal consonant <n>. 2) It can also be considered an <e> as a diacritic mark. This can be illustrated by the parallel copies of *De Booke of Ypocras*, where it is possible to find words from the astrological field containing the problematic signs previously explained. In Harley 2378, Means (1993: 246) has interpreted the line above the final <n> in *Saturne* (f. 7r) as an abbreviation standing for a diacritic mark, probably because, when it appears expanded, it tends to show this final <e>. The word *moon* in Additional 12195 shows the pompous stroke in the final <n>, which Taavitsainen et al. (2005) have transcribed as *mone* (f.

187v). Similarly, the Present-day English word *man* presents the same sign and it has been expanded as *mane* (f. 187r), although it appears as *man* when it is not abbreviated. The editor's decision will therefore have an influence on the establishment of the dialectal provenance of the manuscript following the methodology suggested by LALME, since *man* is associated to a large number of counties, whereas *mane* seems to be a more diagnostic spelling form, as can be seen in Figure 1.

Unfortunately, since there is no rule of thumb to be followed on every single occasion, editors should revise the scribe's practice in this and other similar words and adopt the most common practice found in the text.

c. Brevigraphs or special signs

Brevigraphs have often been compared to modern shorthand symbols. Probably the commonest one is the version of the Tironian note, which will develop into the ampersand. Many of them have to do with different combinations of <r> related clusters, such as *per*, *par*, *pre* or *pro*, *-ra*, *-er/-re*, *-ir/-ri*, and *-ur*. The clusters with <s> are also common, especially in plural forms *-es/-is*, *-ys*, and *-us*. Table 1 shows the abbreviation of <r> clusters, as well as <s> clusters along with the corresponding image and its transcription.⁵ The expansion of the <s> clusters have implications for the identification of the dialect. The choice between *-es/-is* is not a simple one (Voigts 1989: 94). In our opinion, brevigraphs should be expanded according to the spelling of the most frequent expanded form. Nowadays, computer tools help the researcher in finding the real frequency of spelling forms, as this information is automatically retrieved by means of concordance programmes, such as above-mentioned *AntConc*. For instance, to decide how editors should expand abbreviations for plural forms, the most widely used endings should be revised. Thus, in the fifteenth century very often nouns in plural can take the ending *-is/ys* or *-es*. In Ferguson 147 forms, such as *schepis*, *boxys*, *leuys*, *snaylys*, *pingis*, *monthys*, or *vermys*, coexist with plural nouns in *-es*, both expanded and in an abbreviated form. Thus *-es* is attested in plural forms, such as *pinges*, *leues*, *gobbetes* 'a medicinal pellet', and *snayles*. As it can be observed in the following examples, the same words can be made plural either by adding *-is/ys* or *-es*, as

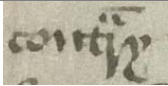
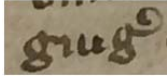

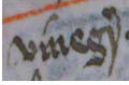
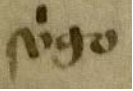
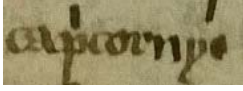

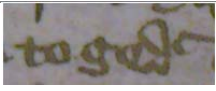


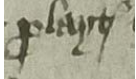
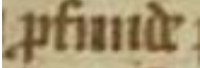
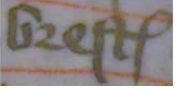
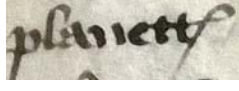
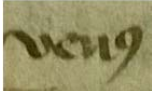
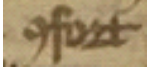
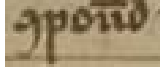
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Figure 1. Counties associated to *man* and *mane*

Table 1. Brevigraphs and their transcription

Manuscript	Image	Transcription
Hunter 513 f. 98v		-ra <i>con</i> trary
Ferguson 147 f. 7v		-er <i>ginger</i>
Hunter 185 f. 13r		-er <i>heron</i>
Hunter 328 f. 63r		-re <i>vinegre</i>
Hunter 513 f. 101v		-ir <i>virgo</i>
		-ri <i>capricornyo</i>
Hunter 509 f. 2r		-ur <i>humour</i>
Ferguson 147 f. 83r		-ur <i>togedur</i>
Ferguson 147 f. 63r		per <i>.peper</i>
Ferguson 147 f. 65v		par- <i>parte</i>
Hunter 513 f. 98v		pre- <i>prelaytes</i>
Hunter 503 f. 1r		pro- <i>profunde</i>
Ferguson 147 f. 82r		-es <i>brestes</i>
Hunter 513 f. 99r		-is <i>planettis</i>
Hunter 513 f. 98v		-us <i>venus</i>
Hunter 328 f. 48r		con- <i>confort</i>
Hunter 328 f. 49r		com- <i>compound</i>

þingis/þinges, leuys/leues, snaylys/snayles show. All in all, even if the number of plural nouns in *-is* in this text outranks the other possible plural forms, we have transcribed the example in Table 1 as *-es* because when in full, *brestes* does never appear as *brestis*. Similarly, in *De Booke of Ypocras* in Hunter 513, the total number of plural forms is thirty-four, out of which twenty-four correspond to plural nouns in *-es* and ten to plurals in *-is*. However, the word *planete* does never take a plural in *-es* when expanded, which explains why in this specific lexical unit the same abbreviation has been transcribed as *-is* even if the number of plural forms in *-es* outnumber those in *-is*. This way, the same abbreviation has been transcribed differently on account of the most frequent expanded form of the noun present in the same text.

Another hard decision is whether the superscript number 9, which clearly corresponds to *-us* in Latin, should always be transcribed as such in native English words. An argument supporting its transcription as *-us* in English words in the case of Ferguson 147 is the presence of this ending expanded in words like *cornus*, *monthus*, *shepus*, and *gostus* ‘juniper’. This ending is found expanded both in singular nouns like *clothus*, *clessus* ‘a seed’, *cropus* ‘any part of a medicinal herb except the root’, *brerecropus* ‘a bud or shoot (of a plant)’, and in plural nouns, such as *wormus* and *tymus*. In fact, the forms *-us* in words are attested in some western Linguistic Profiles, according to LALME. As can be seen in Figure 2, with some scattered forms elsewhere in the South, its distribution is clearly concentrated on the West Midland area, specifically in the South-West Midlands.

As shown elsewhere (De la Cruz-Cabanillas 2018: 61–62), the plural forms in *-us* along with the other plural forms used in Ferguson 147 (*-ys*, *-es*, *-is*, *-uus*) make this combination compatible with the Linguistic Profile 7300, which corresponds to South-East Herefordshire on the border with Gloucestershire.

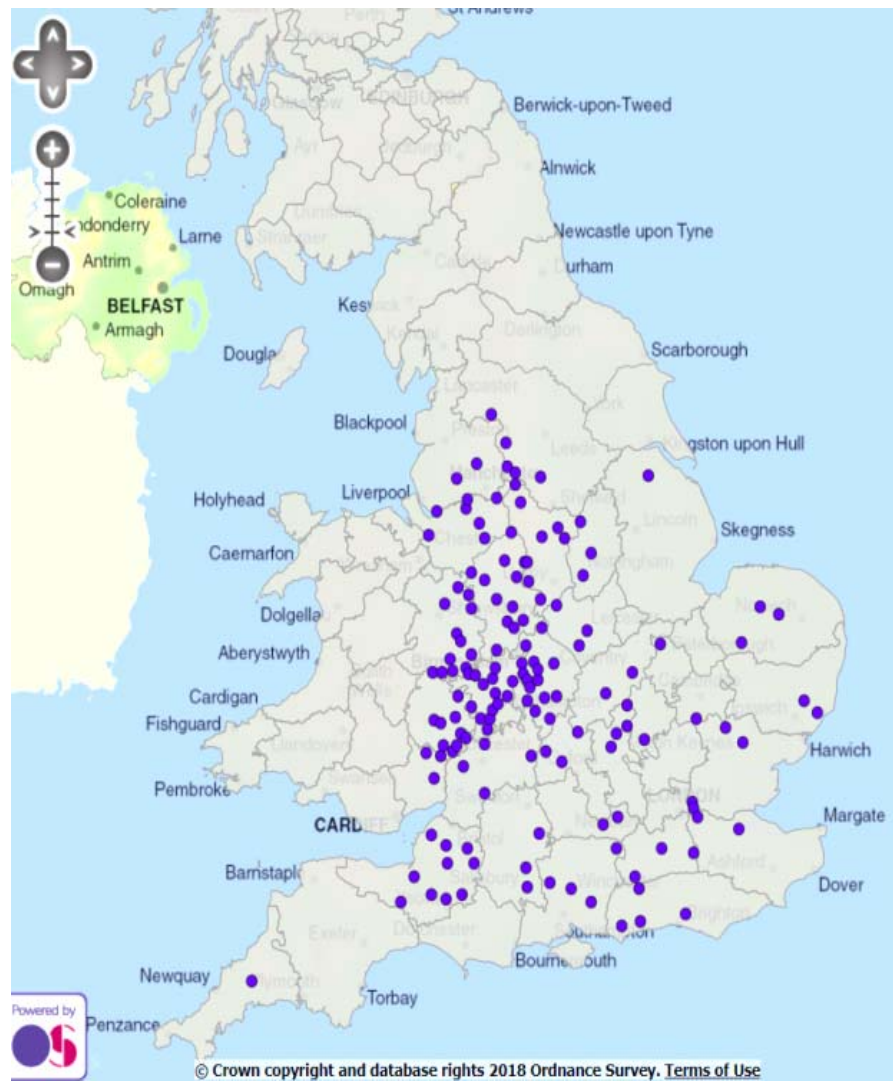


Figure 2. Map for *-us* in plural nouns according to LALME

Another controversial abbreviation is *-ur*, which appears quite often in Latin words, especially in medical recipes where the efficacy phrase is conveyed with the verb *sanabitur*, ‘will be healed’. In Ferguson 147 this symbol is also displayed with native English words, such as *aftur*, *watur*, *togedur*, *flour*, or *powdur*. Some other times the ending is found in full in *anothur*, *botur*, *otbur*, *lykur*, *plastur*, *rethur* ‘an ox, a cow, bull’, *safur*, and *soffur* ‘suffer’. In fact, the presence of *anothur* expanded totals up to fifty-two instances out of sixty occurrences, which leads to the confirmation that the form is available within the scribe’s repertoire. The language may look weird with all those *-ur* endings, but LALME has attested this form instead of final *-er* in English native words in the following Linguistics Profiles: 1400, 1453, 1454, 4003, 4005, 4006, 4009, 4014, 4015, 4017, 4018, 4019, 5051, 5052, 5064, 5291, 5411, 5412, 5652, 5654, 5656, 5660, 5802, 5840, 6240, 6270, 7080, 7500, some of which share a wide variety of forms with the Linguistic Profile of Ferguson 147 (De la Cruz-Cabanillas 2018: 54). As can be seen in Figure 3, most of the *aftur* instances correspond to the West Midland area with heavy concentration in the South-West part.

There are other specific abbreviations that usually appear only in medical texts; many of them have to do with units of measure, but others are abbreviations of some common words in medical jargon like *recipe* or *ana* — See Table 2.

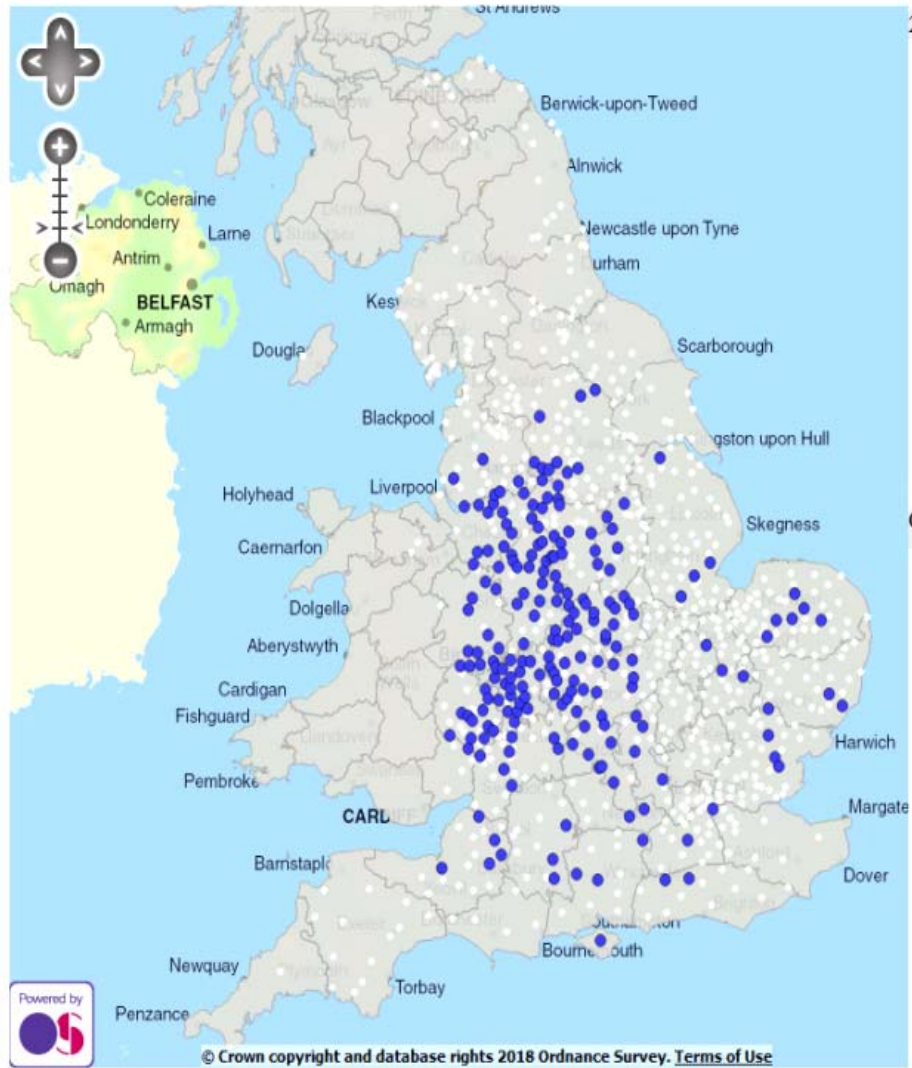











Figure 3. *Afur* distribution according to LALME





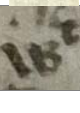
Table 2. Units of measure and other specific medical words

Manuscript	Image	Transcription
Ferguson 147 f. 90v		<i>ana</i>
Ferguson 147 f. 90v		<i>Recipe</i>
Hunter 328 f. 46v		<i>bondful</i>
Hunter 328 f. 45r		<i>dragme</i>
Ferguson 147 f. 91r		<i>ounce</i>
Hunter 328 f. 49r		<i>pound</i>
Hunter 328 f. 52r		<i>scipule</i>
Ferguson 147 f. 90v		<i>semis</i>
Hunter 328 f. 46v		<i>half a pound</i>

d. Superior or superscript letters

The use of superior letters is extremely common in English manuscripts for the vernacular. Even a manuscript like Ferguson 205, which shows very few abbreviations, contains superscript letters (see Table 3). Although some words, like ordinal and cardinal numbers, were already used in Latin, most superscript letters correspond to English lexical units. Their expansion is not troublesome, and the editor only needs to decide whether they will be expanded or not. As a result, we will find the following consistent abbreviations throughout the whole corpus: *hou*, *his*, *pat*, *pe*, and *with*.

Table 3. Superior or superscript letters in Hunter 513

Manuscript	Image	Transcription
Hunter 513 f. 98r		<i>p^u</i>
Hunter 513 f. 98r		<i>p^s</i>
Hunter 513 f. 98r		<i>p^t</i>
Hunter 513 f. 100r		<i>p^e</i>
Hunter 513 f. 98r		<i>w^h</i>

4. Conclusions

In this article we have dealt with abbreviations in a corpus of medieval medical manuscripts in late Middle English. After revising the treatment of the topic by previous scholars, we have adopted Petti's taxonomy to classify our data. The explanation is illustrated with the wide variety of abbreviations attested in medieval medical writings. Since we have chiefly concentrated on the English language, Latin abbreviations are not usually dealt with. The relevant issue here is not the quantification of the data but the qualitative approach to it. In case editors decide to expand abbreviations, we have advocated that the abbreviations must be expanded consistently, and clear criteria should be established to decide among the different options available for their interpretation. Nowadays, the computer tools at the researchers' disposal will allow for the establishment of the real frequency of expanded forms, which should lead editors in their quest to find the right expansion. Thus, the most frequent expanded form should be taken into consideration in case there is doubt on how to read the abbreviation.

We have demonstrated how the expansion of abbreviations in a given way is not without consequences for linguistic purposes. The texts analysed with the LALME methodology can provide very distant results in linguistic terms depending on how editors read the existing abbreviations. Thus, interpreting the abbreviation which resembles a number 9 as *-us* instead of *-es* or *-is*, when it appears in final position, has an influence on the localisation of the language. Obviously, the provenance of the language is not determined on the examination of one single feature, but the *-us* ending for the plural will narrow down the search to some specific counties. Likewise, the transcription of *-ur* instead of *-er* in some native English words will point to a given area. Finally, the always troublesome expansion of the bar or flourished loop in final *-n* will provide different linguistic results. Thus, despite of the fact that LALME has some flaws, it continues to stand as a valuable resource for localisation of the language of Middle English manuscripts.

As most abbreviations are also found in non-medical manuscripts, the conclusions drawn here from the analysis of the data can be applied to other non-medical texts. Even if the corpus includes an alchemy text, this is a short extract containing only medical material, not properly alchemical. Thus, the value of abbreviations in alchemical manuscripts deserves further research in the future, as alchemical writings may hide an occult purpose only accessible to expert alchemists unless abbreviations are properly deciphered.

References

- Alonso-Almeida, F. 2014: *A Middle English Medical Remedy Book from Glasgow University Library MS Hunter 185*. Heidelberg, Carl Winter.
- AntConc* (Version 3.4.0) [Computer Software]. 2014: A. Laurence comp. Tokyo: Waseda University. <http://www.laurenceanthony.net/>.
- Brown, M. P. 1993: *A Guide to Western Historical Scripts from Antiquity to 1600*. London, British Library.
- Cappelli, A. 1899: *Lexicon abbreviatarum quae in lapidibus, codicibus et chartis praesertim medii-aeui occurrunt. Dizionario di abbreviature latine ed italiane usate nelle carte e codici specialmente del medio-evo*. Milan, Hoepli.
- Chassant, L. A. 1884: *Dictionnaire des abréviations latines et françaises usitées dans les inscriptions lapidaires et métalliques, les manuscrits et les chartes du moyen âge*. Paris, Jules Martin.
- Chassant, L. A. 1885: *Paléographie des chartes et manuscrits du XI au XVII siècle*. Paris, Jules Martin.

- Clemens, R. & T. Graham 2007: *Introduction to Manuscript Studies*. Ithaca & London, Cornell University Press.
- De la Cruz-Cabanillas, I. 2018: Mapping the Language of Glasgow University Library Manuscript Ferguson 147. In M. J. Esteve-Ramos ed. *Textual Reception and Cultural Debate in Medieval English Studies*. Newcastle upon Tyne, Cambridge Scholars: 51–78.
- De la Cruz-Cabanillas, I. & I. Diego-Rodríguez 2018a: Medical Astrology in Middle English: The Case of *þe Booke of Ypocras*. In M. J. Esteve-Ramos ed. *Textual Reception and Cultural Debate in Medieval English Studies*. Newcastle upon Tyne, Cambridge Scholars: 79–99.
- De la Cruz-Cabanillas, I. & I. Diego-Rodríguez 2018b: The Circulation and Transmission of Hippocratic Lunaries in Middle English. In M. Stenroos ed. *Proceedings of the 10th International Conference on Middle English*. Frankfurt am Main, Peter Lang.
- Denholm-Young, N. 1964: *Handwriting in England and Wales*. Cardiff, University of Wales Press.
- Hector, L. C. 1958: *The Handwriting of English Documents*. London, Edward Arnold.
- Hewyworth, P. L. 1972: The *-us* Abbreviation in Middle English Manuscripts. *Scriptorium* 26.1: 63–64.
- Honkapohja, A. 2013: Manuscript Abbreviations in Latin and English: History, Typologies and How to Tackle them in Encoding. *VARIENG, Studies in Variation, Contact and Change in English* 14: <http://www.helsinki.fi/varieng/series/volumes/14/honkapohja/>.
- LALME: *A Linguistic Atlas of Late Mediaeval English*. 1986: A. McIntosh, M. L. Samuels & M. Benskin comps., with the assistance of M. Laing and K. Williamson. 4 vols. Aberdeen, Aberdeen University Press. <http://www.lel.ed.ac.uk/ihd/elalme/elalme.html>.
- Lowe, K. A. 2006 [1994]: Palaeography. In K. Brown ed. *Encyclopedia of Language and Linguistics*. 2nd ed. London, Elsevier: Vol. 11: 134–141.
- Means, L. 1993: *Medieval Lunar Astrology: A Collection of Representative Middle English Texts*. New York, The Edwin Mellen Press.
- MEMT: *Middle English Medical Texts* [CD-Rom]. 2005: I. Taavitsainen, P. Pahta & M. Mäkinen comps. Amsterdam & Philadelphia, John Benjamins.
- The Oxford Dictionary of the Middle Ages: Volume 1*. 2010: R. E. Bjork comp. 4 vols. Oxford, Oxford University Press.
- Pahta, P. & I. Taavitsainen 2004: Vernacularisation of Scientific and Medical Writings. In I. Taavitsainen & P. Pahta eds. *Medical and Scientific Writing in Late Medieval English*. Cambridge, Cambridge University Press: 1–22.
- Petti, A. G. 1977: *English Literary Hands from Chaucer to Dryden*. London, Edward Arnold.

- Preston, J. F. & L. Yeandle 1999. *English Handwriting 1400–1650. An Introductory Manual*. Asheville, Pegasus Press.
- Robbins, R. H. 1970: Medical Manuscripts in Middle English. *Speculum* 45: 393–415.
- Taavitsainen, I. 1988: *Middle English Lunaries. A Study of the Gender*. Helsinki, Société Néophilologique.
- Taavitsainen, I. & P. Pahta 1997: The Corpus of Early English Medical Writing: Linguistic Variation and Prescriptive Collocations in Scholastic Style. In T. Nevalainen & L. Kahlas-Tarkka eds. *To Explain the Present: Studies in the Changing English Languages in Honour of Matti Rissanen*. Helsinki, Société Néophilologique: 209–228.
- Trice-Martin, C. 1892: *The Record Interpreter: A Collection of Abbreviations, Latin Words and Names Used in English Historical Manuscripts and Records*. Chichester, Phillimore.
- Voigts, L. E. 1989: The Character of the Carecter: Ambiguous Sigils in Scientific and Medical Texts. In A. J. Minnis ed. *Latin and Vernacular: Studies in Late-Medieval Texts and Manuscripts*. Cambridge, D. S. Brewer: 91–109.
- Voigts, L. E. 1984: Medical Prose. In A. S. G Edwards ed. *Middle English Prose: A Critical Guide to Major Authors and Genres*. New Brunswick, Rutgers University Press: 315–335.
- Wallis, F. ed. 2010: *Medieval Medicine. A Reader*. Toronto, University of Toronto Press.

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