Standing on the brink of change? The ME *receptarium* in Wellcome Library MS 409

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Introduction

The following paper is intended to present the main features, mostly grammatical but not only, of a *receptarium*, that is a collection of medical recipes, contained in London, Wellcome Library, MS 409, ff. 16r–54v, 88r–98r and 99r–108v.

This paper is built from data extracted from an ongoing Research Project funded by the Spanish Ministry of Education. The project, which has run and developed under several denominations for a number of years, is colloquially referred to as *Malaga corpus* and mainly consists on the transcription, lemmatization and grammatical annotation of late Middle English MSS on Science, and most particularly on Medicine. The results, including high resolution images of the original MSS are available online free of charge in the following address: hunter.uma.es/Main. The Project website also grants the registered user full access to the resulting corpus and the possibility of making very detailed searches using Boolean functions. So far the several colleagues involved in the Project, all of whom work in Spanish and British universities, have managed to provide complete morphological annotation of more than a million words, and we always including new texts. I think that it will soon surpass its rival in the field, the *Penn-Helsinki Parsed Corpus of Middle English* (acronym *PPCME2*; Kroch and Taylor 2005), which offers slightly under 1.2 million words parsed syntactically, rather than morphologically (see Moreno Olalla and Miranda García 2009 for comparison between both works). The importance of annotation processes with regard to grammatical description and subsequent dialectal analysis in combination with tools as the *LALME* cannot possibly be underestimated and will become apparent, or so I hope, in this paper.

The paper is divided into two parts. The central and more extensive section is the linguistic description of the treatise, with a ultimate view to locate it in time and space. I will also present a collection of spellings that strongly suggest that major changes in the system of long vowels (which, for convenience's sake, I will call Great Vowel Shift, although I am of course aware that this may be a misnomer) were underway; similar alterations in the inventory of short vowels and diphthongs will also be attended to. But before I do that I will describe the main physical features, dwelling a bit on the history of the MS, since it may provide evidence to support the geographical location of the text obtained using linguistic means.

MS description

As far as its contentsgo, London, Wellcome Library, MS 409 is a leech-book, that is a collection of works of medical interest, including not only receipts, herbals or uroscopy and dietary treatises, but also items of a more quaint nature, such as charms, together with secondary literature of some significance to a physician or a herbalist, for example a bilingual collection of Latin plant-names glossed into Middle English on 49r–53v

(what is technically called a synonyma), that was apparently composed out of the copy of the *Agnus Castus* herbal that can be found elsewhere in the same volume.[1]

According to the catalogue (Moorat 1962–1973: I.277–278), which is my sole source of information on these matters as I have not yet had the chance to see the physical MS (I have worked with photos instead), MS 409 is a quarto volume containing 146 folios, mixing paper and vellum still bound in the original deerskin binding, including the clasps. A number of different scribes can be distinguished in the book. The receptarium (which was copied in at least two stints, from f. 16r to f. 48v and then from f. 88r to f. 108v) contains slightly under 19,000 words in a single hand using a cursive form of Anglicana script. The hand has been dated in the catalogue as belonging to the last quarter of the fourteenth century.

For reasons that will become clear later in the paper, I think that it is important to make a short overview of the early history of the volume. Purchased by the Wellcome Trust in 1930, the MS once belonged to that famous Victorian collector, Sir Thomas Phillipps (1792–1872). The earliest known owner of the MS, yet, was a certain John Stacy, who penned a rhymed ownership inscription on a flyleaf (now f. 145r), using a 15th-century hand: "Hosomever on me dothe loke / I am John Stacys boke". Nothing more seems to be known about him. On the same folio there is a reference to a "Peater [sic] Palling" in a later hand. Another owner, almost contemporary to Stacy to judge from the hand which is witnessed on f. 146r, was 'John Hemslat de Blakedone'. This owner is particularly relevant, as he provided his birthplace, which is probably to be interpreted as Blackdown. Villages by that name can be found in North West Dorset, Central Hampshire (near Winchester) and central Warwickshire (near Leamington Spa).

Another inscription of interest, written on the inside of the front cover, is "Josephi Maynardi e Coll. Exon", which must refer to Joseph Maynard (1607–1670), Rector of Exeter College (Oxford) from 1662 to 1666. A brother of Sir John Maynard, the Tavistock politician during the Commonwealth and the Restoration, Joseph was a colourful character, known for his drinking bouts with the College Fellows, which resulted in a resignation forced by the Bishop of Exeter (Stride 1900: 70–72) who, probably to save Joseph's face, made him Prebendary of Exeter Cathedral.

Parallel MSS

London, Wellcome Library, MS 409 is part of a larger textual family of *receptaria*. Here is a tentative list of MSS offering the same text as the Wellcome copy, together with their *sigla*. They do not correspond with the ones employed in Heinrich 1896 (these are given in brackets).

- *A¹* [*E*]: London, British Library, Additional 19674, ff. 2r–30v, composed in the last years of the 15th century.
- *A²* [*A*]: London, British Library, Additional 33996, ff. 80v–148v, composed ca. 1450.
- *H* [*F*]: London, British Library, Harley 1600, ff. 4r–41v, composed in the last years of the 15th century.

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[1] This particular synonyma was not recorded in the preliminary list offered in Moreno Olalla 2013: 402–404. According to the first entry of this work ("Agnus castus anglice tote sayn. oder parkeleuys"), this does not seem to belong to any known tradition (see Keiser 1998: 3826–3828 for details) but is simply an epitome of the plant-names drawn from the copy of the herbal known as *Agnus Castus* that appears later in the same volume.

- *R* [*C*]: London, British Library, Royal 17 A. III, ff. 119r–112v, 134v–138v, 139r–166v, composed in the last years of the 14th century.
- *S*¹ [*D*]: London, British Library, Sloane 405, ff. 39r–40v, 58v–60v, 126r–197r, composed in the last years of the 15th century.
- *S*² [*B*]: London, British Library, Sloane 3153, pp. 2–91, composed in the last years of the 15th century.

This collection of recipes has been edited once (Heinrich 1896), using Additional 33996 (*A*²) as base text, but the editor apparently did not know about the Wellcome volume (which is not surprisingly, as it was in private hands at the time: the Wellcome trust only bought it in the a 1930s sale) and hence he did not include it in his *stemma codicum*. According to Heinrich (1896: 17), *A*² and *R* belong to the same branch of the family, while *A*¹*HS*² form a second group, where *A*¹ and *S*² stem from a common ancestor. The position of *S*¹ within the stemma is not clearly indicated in Heinrich, since it seems to have been a conflation from several sources, or else contaminated (Heinrich 1896: 9).

The language of *S*² was analysed by the LALME team (LP 4711) and fitted in SW Cambridgeshire, near the village of Abbington Piggotts not far from the limit with Bedfordshire and Hertfordshire (McIntosh, Samuels, and Benskin 1986: I.116). This is not the sole East Midlands MS, since Heinrich suggested a location 'an die Südgrenze des östlichen Mittellandes' for *A*². The dialect of the other MSS of the tradition have never been fully studied, but a cursory analysis of the readings from this MSS as recorded in Heinrich's apparatus criticus suggests that *RS*¹ are also South-East Midlands MSS. *A*¹ is perhaps more western and northern (‹thurste› 'thirst', ‹them› for 3 pl.), while *H* appears to be also eastern, yet clearly more northern, perhaps Lincs. (-*s* and -*th* for 3 sg. prs. ind., -*and(e)* for prs. part., ‹ilk› vs. ‹ilich›).

Linguistic description

Moving now to the linguistic side of the paper, the transcription of the receptarium contained in MS 409 was, as already stated, lemmatized. The following is an overview of the main features of the treatise.

Orthographically, thorn is very much in use, while in comparison ‹th› is extremely rare. Just to give an idea, word initial ‹þ-› represents 99.49% of the total number of instances (which in actual numbers means 2341 hits out of 2353). Almost half the instances of word-initial ‹th-› (5× out of 12×) are found, moreover, in sentence-initial position, which can be explained since in late ME capital thorns were seldom used, so ‹Th› was the only real choice. One could perhaps assume that in non-initial positions within the sentence the scribe would have chosen thorns.

In a similar manner, yogh ‹ȝ› is regularly found in the text to indicate both the velar fricative /x/ and the palatal approximant /j/. The digraph ‹gh› is used just once in the text (in ‹wrogh›, 20ᵛ/11) and in a similar vein, ‹y›, which may be alternatively used for the approximant, is very seldom found to indicate yod (just twice and with the same word: ‹yarwe›; even here, this word is spelt with ‹ȝ› the other five times). It is therefore quite safe to state that ‹y› is specialized in the treatise as a vowel graph. For the cluster /xt/ the scribe is not averse to the spelling ‹ht› as an alternative to the much more frequent ‹ȝt› (10× vs. 43×) but, other than in ‹wyht-yn›, which looks like an inverse spelling, ‹ht› is found only in the word 'weight' (9× out of 23×). Slightly more peculiar spellings for this cluster are ‹ȝth› and ‹ȝht›. The distribution of these spellings can be showcased with the different spellings for the word 'night', the most frequent word

displaying the phoneme /x/ in the treatise: ‹nyȝht-› (1×, 4.35%: ‹nyȝhtys›, 47ʳ/5), ‹nyȝt-› (6×, 26.09%), ‹nyȝth-› (16×, 69.56%).

As for the presence of ‹-e›, which is frequently used as evidence to date a ME text, analysis of the data strongly suggests that this letter is not used with any morphological value, but it was already used as a diacritic to mark a preceding long stressed vowel. The scribe is remarkably consistent in its usage. 'All', the most frequent adjective in the text (108×), is spelt ‹al› 51×, ‹all› 42× and ‹alle› just 15×. 'Good', 'red' and 'sick', which are also frequent (68× each), shows the following distribution: ‹good› 42×, ‹gode› 19×, ‹god› 3×, ‹goode› 2×; ‹rede› 62×, ‹red› 2×, ‹ryde› 2×, ‹redde› 1×, ‹redo› 1× (probably a mistake); ‹syke› 46×, ‹seke› 19×, ‹syk› 3×. Similar figures can be quoted for 'hot' (63×, only once without -e) 'whole' (61×, written ‹holl› and ‹hool› only once each), 'white' 48× (all of them displaying final ‹-e›) 'fair' (40×, only once without ‹-e›) or 'cold' (‹colde›, 36×, ‹collde› 2×). As for nouns, the most frequent item is ‹plaster› (85×), which is always spelt without the ending, as are 'juice' (71×, normally ‹jus›, but there are two instances of ‹rus›) and 'powder' (67×). Oppositely, 'wine' (69×) only omitted final ‹-e› 4 times. Other frequent nouns are 'grease' (56×), which always displays ‹-e›, while 'fire' (51×) is found without the ending only once. 'head' (54×) is a bit more complex since there are monosyllabic and bisyllabic forms, which are distributed as follows: ‹hede› 42×, ‹heuyd› 8×, ‹hedde› 2×, ‹hed› 1×, ‹heued› 1×.

In opposition to the regular use of ‹-e›, double vowel to indicate length is sporadic, but there are instances of ‹ee› (14×: ‹see› 6×; ‹bee› 4×; ‹sclee› 3×; ‹hee› 1×, ‹tree› 1×) and ‹oo› (54×, which at face value looks like a substantial number yet in fact is rare in words other than ‹good›: ‹good(e)› 44×, the other examples being ‹poot(te)› 4×; ‹cool› 3×; ‹foor› 1×; ‹hool› 1× and ‹soo› 1×).

‹oy›, besides /oi/ and /ui/, indicates /oː/, /ɔː/ and /uː/ before /st/: besides ‹doys(t)› 'thou dost' (4×; *dōst, reformulated from OE *dēst) and ‹goyst› 'thou goest' (*gōst, reformulated from OE gǣst), which can be easily explained as do-, go- + -yst, there is ‹royst(e)› 'rust' (OE rŭst) but also 'roast' (2×; OF rostir). This can lead to confusion sometimes: ‹moyst(e)› in the treatise can mean 'most' (OE māst), 'must' (OE mōste), and 'moist' (OF moiste). Of course ‹y› as a length diacritic is well known in some areas of England and Scotland, but the question remains as to why this diacritic is found only before the cluster /st/.

Other than the effects of the Great Vowel Shift in the vowel system, which I will attend to in the following section, the following phonological features are worth mentioning in order to locate the treatise in time and space:

OE /ɑː/ is turned to /ɔː/ as a rule (‹sor-› 'sore' 72×, ‹hot(e)› 63×, ‹hole› 'whole' 61×, ‹so(e)› 'so' 36×, ‹(h)olde› 'old' 24×, ‹bon-› 'bone' 14×, ‹mor(e)› 12×, ‹ston-› 'stone' 10×, ‹go(e)› 'go' 7×, ‹bor-› 'boar' 5×, ‹holy-› 5×, etc.), but there are a few instances of ‹a›-spelling: ‹hald-› 'hold' (4×, vs. ‹holde› 5×), ‹calder› 'colder' (yet ‹col(l)de› 40×).

Although the heir of OE /y/ is represented by ‹u› in ‹sulfehele› (×), ‹furst-› (20×), ‹gurdyng› (1×, cf. OE gyrdan), ‹turdell, turdyll› (3×, OE *tyrdel), and ‹e› in ‹hem(e)loc(k)› (×, OE hymlice), ‹i, y› is the preferred form: ‹brite› (ON brytja 'break to pieces'), ‹byrd-› (OE brydd), ‹kynde› (6×, OE cynd), ‹dry(e)› (10×; OE drȳge) ‹dyppe› (OE dyppan), ‹drynch-› (OE drync), ‹fyl(l)› (OE gefyllan), ‹fylþe› (OE fȳlð), ‹fyr(e)› (51×; OE fȳr); ‹ȝylt› (2×, ON gyltr), ‹lytyl› (35× OE lȳtel); ‹yvyl› (13×; once ‹evy›), ‹kyng-› (1×, OE cyning), ‹knytte› (2×, OE cnyttan), ‹rye› (10× OE ryge) ‹rygge› (2×; OE hrycg), ‹þyne› 'a distillate' (1×; cf. OE þynne 'thin').

The diphthongs /ei/ and /ai/ are merged, cf. ‹fayr(e), feyr(e)› 'fair' (OE fæger), ‹raynys, reynys› 'kidneys' (OF reines), ‹hay-, hey-› 'hay' (OE hīeg, hēg), ‹lay(e), ley(e)› 'lay' (OE lecgan), ‹plantayn(e), planteyn(e)› 'plantain' (OF plantaine), ‹say-,

sey› 'say' (OE *secgan*), ‹stray(e), streyne› (OF *(e)streigner*) ‹whayne, veyn(e), weyn(e)› 'vein' (OF *veine*), ‹veruayn(e), verueyne› 'vervain' (OF *verveine*); ‹way-, wey-› 'way' (OE *weg*). The alternative spellings ‹ay› and ‹ey› seem to have used to tell apart the pair *egg : eye*, since the first is always spelt with ‹ay› (9×), while the other is spelt ‹ey(e)› (4×). The plural is equally distinguished, but here ‹ey› is used for both: ‹eyryn, eyrun, eyron› 'eggs' vs. ‹eyyn› 'eyes'. All in all, most words only display one spelling (yet not necessarily the correct one etymologically: the scribe seems to prefer ‹ay›), see for example ‹a-w(h)ay› 'away' (36×), ‹bay-› 'bay, laurel' (7×), ‹bray-› 'grind' (20×). ‹day-› (61×, including 'daisy'), ‹fayl-› 'fail' (4×), ‹may› 'May' (16×), ‹maydyn-› (2×), ‹Spayn-› 'Spain' (9×); oppositely, ‹ey(y)r(e)› 'air' (8×), ‹eysul, eysyl(l)› 'vinegar' (6×), ‹gleyre› (2×), ‹þey› (43×).

Concerning the evolution of short /a/ followed by a nasal, this does not normally become round, but there are some cases. Leaving aside cases such as ‹and›, which is unstressed, ‹a›-spellings are the sole possibility with ‹man-› 'man' (26×), ‹pan-› 'pan' (26×), ‹franke encense› (22×) or ‹cankyr› (11×), among others. Only ‹brondyre› 'brandiren, gridiron', ‹garlond› 'garland' and ‹stomyn› 'stalk' (< ON *stamn*) display rounding but, other than ‹garlond› (which appears three times), there is a single recorded instance of the other two. With many words there is an alternative ‹a› / ‹o›, the unrounded vowel being normally the most frequent one: ‹bran-› 'bran' (7×) / ‹bronne› (1×); ‹stanche› 'staunch' (5×) / ‹stonche› (1×), ‹plante› 'plant' (4×) / ‹plonte› (1×), ‹hand-› 'hand' (6×, plus four extra instances of ‹hanful(l)›) / ‹hond-› (2×); ‹stand-› 'stand' (16×) / ‹stonde› (8×). The only exceptions to the hegemony of ‹a›-spellings are ‹hong(g)e› 'hang' (4×) / ‹hange› (1×) and ‹long(e)› (3×) / ‹lange› (1×).

/erK/ becomes /arK/ in ‹barme› 'ale foam' (< OE *beorma*), but the scribe mostly kept the old vowel, cf. ‹ferþyst› 'farthest', ‹hert-› 'hart' (8×), ‹persoly, persole, percyl› 'parsley' (6×), ‹serue› 'serve' (4×), etc.

Turning now to consonants, the velar fricative /x/ is clearly on its way out of the consonant system when unprotected by a following /t/. In end position this phoneme has been replaced with /w/ as a matter of course: ‹dowe› 'dough' (OE *dāh*), ‹(y)nowe› 'enough' (16×; OE *genōg*), ‹þorwe› 'through' (21×; OE *þurh*). The MS also presents the strange spelling ‹wh› in the case of ‹cowhe› 'cough' (3×; OE **cohhian*), where the underlying phoneme is not easy to account for, but it can hardly be /x/, which is denoted unexceptionally through ‹ȝ›. The spelling ‹owh› is found in the Harley version of the *Miller's Tale* and in *Piers Plowman* (OED, *s.v.* cough, *v.*). As for the palatal allophone [ç], the sole example is ‹ny(e)› (7×) 'nigh' (OE *nēah*). On the other hand when the velar phoneme is protected by a following /t/, it seems to have been kept mostly unaltered, although the spellings for this cluster, as stated above, vary. Cf. still ‹drauth› 'draught', ‹-w(h)yth› 'weight' (7×), ‹syth› 'sight', ‹drawth› 'draught'.

/f/, /v/ and /w/ are sometimes confused: ‹abowe› 'above (3×), ‹salfe› 'salve' (2×), ‹weyn-› 'vein' (5×), ‹weruayne›, ‹werueyne›, ‹werweyne› 'vervain', ‹fessel›, ‹wescyl›, ‹wessyl› 'vessel' (3×), ‹foyde› (3×), ‹varantys(e)› 'guarantee', ‹clawys› 'cloves', ‹vyne› 'wine' (6×). The confusion has happened even with Latin ‹nerwale› *'nervale'*. ‹leue› 'leaf', on the other hand, probably answers to a levelling in the paradigm, while ‹malues› and ‹maluys› 'mallows' (2×) are surely to be explained as due to influences from Latin *malua*.

There is a similar confusion between the sibilants /sk/, /ʃ/, /tʃ/ and /s/: ‹schal› 'scale' (4×), ‹shallyng› 'scalding' (1×), ‹schamony› 'scammony' (1×), ‹scaue› 'shave' (1×), ‹scholle› 'skull' (1×), ‹schem-› 'skim' (3×); ‹bachyn› 'basin' (2×), ‹schese› 'cheese' (1×); ‹flesse› 'flesh' (5×), ‹fresse› 'fresh' (4×), refress 'refresh' (1×), ‹wasse› 'wash' (16×), ‹disse› 'dish' (1×); ‹schabb-› 'scab' (7×), ‹schabyose› (2×), ‹perched› (1×);

‹sclysche› 'spatula' (1×, cf. OF *esclice*); ‹serche› 'sieve' (1×, OF *säacier*, with intrusive /r/; see MED, s.v. *sārce* for details). On the other hand, ‹ace› 'ache' and ‹pycer› 'pitcher' (1× each) look like scribal mistakes; ‹syngell› 'shingles' (2×) is dubious as it may be due to influences from L *cingulum*, but the fact is that, according to MED (*s.v.* shingles), so far the form with initial s- is only recorded in this tradition. Cf. also ‹scl-› instead of *sl-* in ‹sclee› 'slay' (3×, cf. ‹sley› just once), ‹(a)sclepe› 'sleep' (4×, cf. ‹slepe› just once), ‹scleti› 'slit' (1×), ‹(vn)sclekyd› '(un)slaked' (1+1×).

Initial /xw-/ has lost its aspiration, particularly with function words, as seen by spellings such as ‹wat(h)-› 'what' (2×), ‹wenne›, ‹wenhe› 'when' (31×), ‹were› 'where' (2×), ‹weþyr› 'whether' (2×), ‹wyle› 'while' (3×), ‹wyte› 'white' (20×). Conversely, there are also hypercorrections such as ‹a-whay› (4×), ‹whas› 'was' (1×), ‹wharmot(e)› 'wormwood' (2×), ‹whasch-›, ‹whass-› 'wash' (12×), ‹whastyd› 'wasted' (1×), ‹whatyr› 'water' (2×), ‹where› 'were' (1×), ‹whete› 'wet' (2×), ‹whylde› 'wild' (1×), ‹whyne› 'wine' (7×), ‹-whyth›, ‹-whyȝt› 'weight' (8×), ‹whomon› 'woman' (1×). Particularly noteworthy is ‹whayne› (1×), eliciting /v-/ > /w-/ that was then hypercorrected.

There are a few examples of excrescent yod and waw before initial stressed long mid-open vowels. As for ę̄- > /je-/ (i.e. yotization), cf. ‹(mouse)ȝere› '(mouse)ear' (7×), ‹ȝete› 'eat' (4×), ‹ȝew› 'ewe'. ǭ > /wo-/ is found at least twice: ‹wolde› 'old' (41^r/11), ‹wonys› 'once' (32^v/12). Oppositely, there is at least a case of yod-dropping in ‹ere› 'year' (42^v/3), while the strange spelling ‹eylke› 'yolk' (106^r/2) may be interpreted either as an instance of the same process, or else as a mere misspelling. All these examples seem to point to some breaking process in this dialect.

Unetymological initial h- is added in some words, such as ‹harm› 'arm' (1×), ‹has› 'as' (1×), ‹here› 'ear' (7×), ‹hys› 'is' (8×), ‹holde› 'old' (4×), ‹houte› 'out', ‹huse› 'use', but and rarely dropped: the only instances seem to be ‹alue› 'half' ‹am›, 'them', and ‹ys› 'his' (1× each).

The cluster -/dər/ appears as ‹þər› in ‹gaþyr, geþyr›, ‹altogeþyr›, ‹to(e)geþyr(ys)› (142×), seldom ‹-dyr-› (3×), but is kept in ‹madyr› 'madder' (13×). There are also a couple of confusions between /t/ and /θ/: ‹thoe› 'to', ‹thake› 'take', ‹dirth› 'dirt', and perhaps ‹clyppyth› 'clipped', if this is not a scribal confusion.

There is slight evidence suggesting that the Wellcome text may have been dictated to the scribe, since there is a collection of spellings that are difficult to explain as mere copy mistakes but are well-known errors within the field of acoustic phonetics: drop of implosive alveolars, /d/ in particular, in ‹an› 'and' (10×), ‹bin› 'bind', ‹muster› 'mustard', ‹wallewor› 'wallwort' or ‹wylle› 'wild'. Cf. also ‹hym› 'hemp'. Assimilation of /d/ is found in ‹minsomyr›, ‹missomyr› 'midsummer', ‹mossell› 'morsel', ‹hanful(l)› (4×) and probably ‹schallyng, schallyd› 'scalding, scalded'. If this assumption is correct, then ‹staund merche› 'horse parsley' (1×, cf. OE *stānmerce*) should then be read as a hypercorrection.

In the same vein, voiceless and voiced consonants are sometimes confused, particularly with plant-names: ‹debe› 'deep' (1×), ‹fynecreke› 'fenugreek' (2×), ‹marycollenys› 'marygold' (1×), ‹blaystyr› 'plaster' (1×), ‹bottys› 'pots' (1×), ‹spygenarde› 'spikenard' (1×), ‹dryng› 'drink' (1×). On the other hand, ‹sanke de dragon› (1×) and ‹sanegle›, ‹sanygyl› (11×) do not necessarily belong here since they may be explained as due to influences from French, cf. *sa(u)nk, sanigle*. In end position, there are a few instances of the past participle ending -*yt*: ‹powdryt›, ‹poudyrt› (9×), ‹yboylyt› (1×), ‹ytempyryt› (1×). The striking ‹wytayne› (found just once) is perhaps to be put down to a confusion between /w/ (or, more likely, /v/ as stated above) and a fricative bilabial [β]. There are even a few instances of contraction, an unusual feature in written Middle English: ‹hys› 'he is' (2×), ‹þys› 'this is'.

Turning now to morphology, MS 409 can be broadly described as having the typical system of a late ME Southern text. Here are the main points to be noted.

The plural ending of nouns is overwhelmingly -*ys* (388×), followed from afar by -*s* (43×; 30 of these instances are formed by the word ‹days›) and -*es* (4×). There are a number of weak plurals: ‹aloen› 'aloes' (1×), ‹axskyn› 'ashes' (1×), ‹carsyn›, ‹cressyn› 'cresses' (8×), ‹eyron, eyryn, eyrun› 'eggs' (9×), ‹eyyn›, ‹yen› 'eyes' (7×), ‹oxyn› 'oxen' (1×), ‹tymen› (1×). In the case of the word *rose*, strong and weak plural can be found side by side: ‹rosys› (3×) vs. ‹rosyn(e)› (2×). Umlauted plurals are the unsurprising ‹fete› (4×), ‹teþe› (3×), ‹men› (1×) and ‹wemen› (1×). Beside a dozen of what seem to be copy mistakes where the scribe probably forgot to add ‹-s›, as in ‹leue› (23^v/5), there are several instances of zero plural with measures: ‹niȝth›, ‹parte›, ‹peny(-wyht)›, ‹ponde› ‹q*ua*rtron›, ‹spone(ful)›, ‹ȝere›. Also with items after numbers: ‹iiij playstyr› (108^v/8), ‹ij turdyll› (36^r/6), etc.

As for verbal morphology, the main data are as follows. The 1 sg. prs. ind. appears just twice, the ending being -*e*/-Ø: ‹warantise› 48^v/10 and ‹wol› 46^r/9. The 2 sg. ending is -*(y)st* (18×), but there is an instance of -*s*, which may or not be a mere copy mistake, and a substantial number of -Ø (7×), but the latter appears only with the verb *may* (which also displays five instances of ‹mayst›). As for *shall*, the form is ‹shalt(e)› (15×), although there is a single instance of ‹shal›. As for the irregular *will*, there is only an instance, spelt ‹wollyt›.

The 3 sg. offers -*(y)þ(e)* as its main ending with regular verbs (30×), but there is a modicum of instances with -*(y)s* (10×). As for present-preterit and irregular verbs, the data are as follows: ‹(n)ys› (146×), ‹hys› (8×), ‹be(þe)› (2×); ‹doþe› (5×), ‹may› (48×); ‹most› (1×); ‹shal(le)› (78×); ‹wele›, ‹well› (4×), ‹wol(le)› (28×), ‹wyl› (2×), and the unexpected ‹wolte› (1×, perhaps a scribal mistake).

As for the plural present indicative, with regular verbs the usual ending is -*þ(e)*, although the number of instances is too small to be definite (5×) and moreover there is a single instance of -*yn* (‹akyn›, 94^r/5), which would be a sixth of the total sample. With present-preterit and irregular verbs the ending seems to be -Ø: ‹may› (1×); ‹wyll› (1×); ‹schal› but cf. the surprising ‹schellym› (2×). On the other hand, there is a diversity of forms for the verb *to be*: ‹ben(e)› (4×), ‹boþe›, ‹buþe› (3×), ‹ar›, ‹er› (2×), ‹beþe› (2×).

Due to the nature of the treatise, there are few examples of past forms (18×), and only one instance of a regular verb, ‹vsyd› (20^v/15). 2 sg. form offers -*dyst* (‹dedyst›, ‹woldyst›) and -*te* (‹wolte, wylte›), while the 3rd offers ‹w(h)as›, ‹wolde› and ‹wolte›, and ‹woll›, which may be a scribal confusion—as this is normally a present form.

While there are few past forms, the subjective is well represented in the receptarium (218×). The ending here is -*e*/-Ø in almost all instances, both in the singular and in the plural, but the verb *to be* offers a present plural ‹ben(e)› 8× (cf. ‹be› 31×).

Let us turn now to non-finite verbs. As for participles, there is are just 13 instances of the present participle, all of them displaying -*yng*, which thus corresponds with the gerund. Past participles show the prefix *y-* once every four times (65×, 25,9%). Weak participles display the ending -*yd* almost unexceptionally, the sole noted exceptions being ‹perched› (39^r/10) 'pierced' and ‹clyppyth› (47^v/23) 'clipped', which may be just a mistake. As for strong past participles, the most noteworthy feature is the alternation between ‹broken› (9×) and ‹broke› (3×), and the back vowel of ‹multon›, ‹multu*n*› (7×), ‹(y)multe› (3×) on the one hand, and the front vowel of ‹(y)mylte› (5×), ‹mylton›, ‹myltyn› (3×) on the other.

The last of the non-finite verbs is the infinitive. -Ø is by far the most frequent ending (521×), but there are two instances of -*(y)n* (‹modyfyyn› 42^r/11, ‹han› 106^r/3). Moreover, there is also a small yet conspicuous number of infinitive forms ending in -*y*:

‹fastyny› 'fasten', ‹oppey›, ‹opynny› 'open'; ‹percy› 'pierce'; ‹rekeny› 'reckon'; ‹restory› 'restore', ‹ropy, rapy› 'become viscous'—and perhaps ‹sley› 'slay' since ‹sclee›, without a diphthong, is a possible spelling for this verb. This feature is shared with the imperative, which normally displays -Ø but where final *y*-forms are found sometimes cf: ‹boyly› 'boil' (2×), ‹clensy› 'cleanse' (1×), ‹keuery› 'cover' (1×), ‹medely›, ‹melly› 'mix' (3×), ‹multy› 'melt' (1×), ‹pyly› 'peel' (1×), ‹playst*y*r*y*› 'plaster' (1×), ‹pury› 'purify' (1×), ‹scleti› 'slit' (1×), ‹temp*y*rey› 'temper' (1×).

Final -*y* is not restricted to verbs but found, yet very very sparingly, with other grammatical categories as well, the only examples being ‹mychy› 'much', ‹mu*n*dificatify› 'cleansing', ‹to-ge-þery› 'together', ‹popylery(n)› 'poplar', all of them appearing just once. ‹endyuy› 'endive' may also belong here but there is always a chance that L. *endivia* played a part in the spelling. As a whole, it seems clear to me that final -*y* has something to do particularly with verbs. So far I am unable to provide a satisfactory explanation for this peculiar ending, but it is perhaps no a coincidence that, other than ‹scleti› and ‹ropy, rapy›, all verbs end in a sonorant (either a liquid or a nasal) or a sibilant.

As for personal pronouns, ‹h-› forms are detected for 3 pl.: ‹hy›, ‹hey› is found four times for nominative case, and ‹ham›, ‹am› is hegemonic for the oblique cases (310× and 3×, respectively), but ‹þei› rules supreme as subject case (43×), yet ‹þem› is found just twice. The other persons are quite straightforward: 1 sg. subject case ‹y› (2×); 2 sg. (subject) ‹þ*u*› (83×), ‹þu› (1×); (oblique) ‹þ*e*› (6×); (genitive) ‹þy› (136×), ‹þyn› (9×), ‹þey› (1×). 3 sg. m. (subject) ‹he› (116×), ‹hee› (1×), ‹hy› (1×); (oblique) ‹hym› (202×), (genitive) ‹hys› (41×), ‹ys› (1×); 3 sg.n. (subject) ‹hyt› (137×), ‹yt› (28×); (oblique) ‹hyt› (349×). 3 sg. fem. (subject) ‹sche› (8×); (oblique), ‹hyr› (9×), ‹here› (3×); (genitive) ‹her› (2×), ‹hyr› (1×), ‹hyre› (1×).

The paradigms for the demonstratives require little commentary as they are consistent with a late ME Southern dialect: ‹þis› : ‹þes(e)› and ‹þat› : ‹þo›.

Locating the dialect

Concerning the dialect employed in the text, the lemmatized version was used to fill in a LALME questionnaire, then fed to the electronic version of the Linguistic Atlas. The computer-generated result is presented in the map below.

Automatic fitting of Wellcome 409 in *eLALME*

Since the automatic outcome does not fit with the general features that I have just outlined and which clearly point a much Southern text, I resorted to semi-automatic fitting, selecting from *eLALME* just a number of features that seemed particularly noteworthy. Basic to this fitting were the following features: breaking of long open /ɛː/, which is regularly found for a few words such as 'ear', and the opposite trend of yod-deletion in 'year' (which may be a hypercorrection). These features, together with the employment of ‹o› to indicate long /uː/ in 'down', ‹buþe, boþe› for 'is' and ‹ham› for 'them' are only found in a small pocket around Tavistock in Devon, while the usage of ‹þo› 'those', the spelling ‹flesse› 'flesh' and the form ‹byþowte› 'without' would push the location to the East within that county, not far from the Southern Somerset/West Dorset border.

Breaking of /ɔː/ is given little coverage in *eLALME* so information on this feature is less compelling but the sole form recorded there, ‹wold›, is actually located in SW Devon (Plymouth). This is in agreement with the OED, which says that forms such as ‹wolde› 'old' or ‹wonys› 'once' are found in the South West and West Midlands (OED s.v. *one*).

There is also some external evidence to support a Devon location, mainly the fact that the book was owned by a person called 'John Hemslat from Blackdown' (which may well refer to the Dorset village, just a few miles from Devon) and by Joseph Maynard, about whom not much is known but who may have been born in Tavistock, just like his more famous brother Sir John, and who was Rector of the Exeter College in Oxford (known to have been the college of choice among the Devonshire clergy and gentry until the early nineteenth century, see Stride 1900: 1; Lobel and Salter 1954: 107–118). The non-linguistic evidence is of course not very strong by itself and cannot bear much weight but, put in connection with the linguistic side of the argument, it may allow to support some location in or near Devon as a likely composition place. Somewhere between Exeter and Axminster may perhaps be an acceptable fitting, Exeter itself being a good candidate.

MS 409 and the GVS

MS 409 displays substantial evidence to suggest that the Great Vowel Shift had already begun by its date of composition. In this section I collect the available textual evidence that indicates that the vowel system of this particular dialect was undergoing major modifications. Since there is some scholarly disagreement as to the actual nature and extent of the change, I am using the tag 'GVS' as a convenient umbrella term, and will include here not only those spellings that are normally linked to the classical account (that is, diphthongizing of long close vowels and raising of long mid-vowels, followed by fronting and raising of /aː/), but also changes in short monophthongs and diphthongs.

Percentually, the most conspicuous change is that words originally having /eː/ are spelt with ‹i›: ‹by› 'be' (7×; OE *bēon*), ‹bryst› 'breast' (OE *brēost*); ‹gryne› 'green' (OE *grēne*); ‹hy› 'he' (OE *hē*), ‹(a)pryuyd› 'proved' (2×, cf. eME *prēven*), ‹pyse› 'piece' (OF *pece*), ‹syge› 'seat' (OF *sege*). The change to /iː/ yet seems not complete since it only appears with some words, while others that originally had /eː/ too never show ‹i›-spellings, even though they are comparatively frequent: 'here', 'seethe', or 'sheep'. This of course supports the idea stated by Lass in the *Cambridge History of the English Language*, which is akin to the well-known dictum, usually attributed to Jules

Gilliéron: "chaque mot a son histoire"),[2] that the GVS proceeded almost on a word-by-word basis. ‹clyue› 'cleave' (5× < OE *cleofian*) and ‹hyryng› 'hearing' are unsure case: they probably belong here, but note that *clifian* and *clīfan* were known in OE, as were *hīeran* and *hȳran*.

There are also cases of raising of older /ɛ:/ to /i:/: ‹hyt› 'heat' (OE *hǣtu*), ‹lykys› 'leeks' (3×; OE *lēac*), ‹lyf›, ‹lyuys› 'leaf, leaves' (OE *lēaf*), ‹ryde› 'red' (2×; OE *rēad*). This indicates that in this dialect the mid-open and mid-close front vowels had merged into /e:/ prior to the raising. Possible reverse spellings are ‹whete› 'white' and ‹(y-)leke› 'like'.

Examples of the diphthongization of older /i:/ can be found too. ‹feyfe leuyd grace› 'five leaved grass', ‹vrayne› 'urine', ‹weyne› 'wine', ‹day, dey› 'die', ‹a-reyse› 'arise', ‹þey› 'thy'. The indifferent use of spellings with ‹ei› and ‹ai› strongly suggests that the outcome must have been the same diphthong /ei/ that can be found in the heirs of OE *weg*, *ǣg*—and, after the earlier merging of /ai/, also *dæg* and the like. The MS offers a modicum of inverse spellings, which also strengthen the case for an actual pronunciation /ei/: ‹myst› 'mayst', ‹mye› 'May', ‹wybrede› 'waybread', ‹glyre› 'white of egg' (< OF *glaire*), perhaps also ‹ny(e)› 'neigh' (6×). ‹breyse›, ‹brays› 'crush, shatter' (OE *brȳsan*) probably belong here as well, but note that the reflexes of OE *brȳs-* are varied in the treatise, ‹brus-› and ‹bres-›, which may be Western spellings (maintenance of original /y/ and unrounding and lowering to /e/ in each case), can be found next to ‹bris-›.

As for the other long vowels, the evidence is dubious or there is none. While in theory one might (should?) assume that the parallel change of back vowel was also in progress in this dialect, there are no written instances to support this. Of course, the French spellings ‹ou› and ‹ow› may be hiding the diphthongization of older /u:/ into */ou/, but it is noteworthy that there are no instances of *‹ou›- or *‹ow›-spellings for older /o:/ in the treatise that would suggest raising to /u:/.

There are no clear examples of the raising of /a:/ either. The forms ‹eche, eke› 'ache' (5×) may or may not belong here, since there are instances of this word with ‹e› at least since the 1200s, which look like reconstructions from Umlauted forms such 2 sg. *æcest* and 3 sg. *æceþ*.

Turning now to short vowels, there is some evidence that the actual qualities of /i/ and /e/ may have been not well distinguished by the scribe. In a small number of instances /i/ seems to have been lowered to /e/, cf. ‹scleti› 'slit', ‹het› 'it', ‹bressurys› 'brisure', ‹leue› (3×) 'live', ‹wete› 'wit' (2×), ‹wele, well› 'will' (3×). The opposite happens to ‹hympe› (8×) 'hemp', a spelling not recorded in either OED nor MED which may be yet another reverse spelling. The frequent ‹mylt-› (12×) 'melt' perhaps belongs here as well: while this form may be explained as from the (weak) causative *mieltan*, which may also help explain the vocalism of ‹mult-› (7×), this verb still follows the strong declension (cf. past participle ‹(y-)multe, (y-)multon› 10×, ‹mylton› 2×). Other examples can be explained as due to other causes. Influences from other languages, particularly Latin, are probably behind spellings such as ‹ment-› 'mint' (3×, cf. L. *mentha*) or ‹mysel› 'leper' (Middle L *misellus*). Dialectal divergences probably explain ‹creme› 'crumble', which may be a Western spelling (cf. OE *gecrymman*), as may ‹skeme›, ‹scheme› 'skim' (8×, cf. OF *escumer*; ‹skyme› appears once). ‹wyll› 'well' and ‹schyl› 'shell' are also to be in this category, as they perhaps answer to OE by-forms (West-Saxon *wielle, sciell* next to Anglian **wella, scell* whence 'well', 'shell'), and so

[2] Cf. Malkiel 1983. The sentence apparently is not recorded in Gilliéron's publications, see Kretzschmar 2002: 84.

may ‹pypyr› (OE *pipor* instead of **piopor*, **peopor* with back Umlaut—in case it is not yet another instance of Latin influence, cf. *piper*).

As for the diphthongs, the more relevant changes seem to be /eu/ > /(j)uː/ and /au/ > /au/ > /ɒu/. Concerning the first, cf. ‹blwe› 'blue' (OF *bleu*), ‹nue›, ‹nwe› 'new' (9×), ‹sute› 'suet' (OF *seuet*), also spelt ‹suyt›, ‹chwe› 'chew'. A possible inverse spelling is ‹eyryn› 'urine'. As regards the second shift, cf. ‹drowe› 'draw', ‹bowsonys› 'badger's' (<OF *bausenc*), ‹lowrel› 'spurge laurel'. A possible reverse spellings in ‹clawys› 'cloves' (OF *clou*).

Conclusions

The analysis of MS 409 showcases the convenience of employing *Fachprosa* in the task of dating and locating the early stages of the GVS. In opposition to scribes of other lines of work (literary, historical, etc.) who, most of the times, copied texts for the benefit of third parties, copyists of scientific treatises in the vernacular were freer in their choices, particularly since we know that many of their MSS were translations composed for the private use of the scribes themselves (who were frequently physicians, herbalist brothers, barbers and the like). Since these works were created for internal consumption, as it were, their scribes seem to have been but little constrained by orthographic rules and produced texts that must have been very close to the actual pronunciations of the authors. Gillis Kristensson famously remarked once that literary masterworks in ME made poor linguistic artifacts (Kristensson 1967: x). While it is certainly quite a bold statement, there is also some truth in it—at least as late ME authors go—and I am even willing to go a (reckless) step further: pretty manuscripts, for example presentation copies, are linguistically artificial most of the times, and hence they also tend to either disappoint or misguide the student of language. On the other hand, the more *currens* and ugly the hand is, the greater the possibility that the text was copied for personal use only and hence the more likely to contain valuable idiolectic information.

Linguistic data drawn from Wellcome 409, for example, may be quoted as evidence to challenge the actual accuracy of a number of oft-repeated features related to the Great Vowel Shift. First of all, the language used in this receptarium casts some doubts as to the date when the GVS begun. Most manuals state that the GVS, whatever the actual nature of the change, began to be detected in the early 1400s: so say Jespersen, Luick, Jordan, Stockwell, Labov, etc. A collection of spellings in Wellcome 409 may be quoted to push the suggested date about 25 years back in time, in case the hand has been correctly dated in the catalogue.

Lass stands apart from the scholars just mentioned since in the *Cambridge History of the English Language* he claims that some "innovating spellings [that can be associated with the GVS] begin sporadically in the East Midlands in the early fourteenth century" (Lass 1999: 79). He refers particularly to the appearance of ‹ou› to indicate /oː/. Leaving aside the fact that Lass's statement is not universally shared (already Richard Jordan rejected the idea that this is connected to the GVS and explained it as "incomplete attempts […] to differenciate close /oː/ from /ɔː/"; Jordan 1974: §53), the 14th-century evidence quoted by Lass amount to just three sources.[3] He quotes the religious poems by William of Shoreham, a Kentish parson (ca. 1320), which does fit in with this idea, but the other two sources are not coherent with his own statement. One of these sources is Robert Mannyng's *Handlyng Synne*, which belongs rather to a Northern area (South

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[3] Jordan 1974: §53 refers exactly to the same sources as Lass, yet adds "Southwestern Records of the 14th century".

Lincs), an area where the raising movement of /oː/ must be put down to a different, though perhaps akin, cause (the Northern fronting of /uː/ to /yː/). The third of Lass's sources, the Gawain-poet, can hardly be deemed East Midlands and, as far as we know, he belongs to the late, rather than the early, fourteenth century. According to the date provided in the catalogue, the scribe of Wellcome 409 must have been an exact contemporary to the Gawain-poet and was probably also a Western man, yet from a substantially more Southern and Western location, as the text was probably composed in a Devonshire dialect. Be as it may, the idea that the GVS was at the beginning a strictly East Midlands affair, which then propagated through the rest of England as time progressed, should be perhaps reconsidered.

A third notion that this text may help dispel is the idea that the results of the GVS were first detected in words historically having /oː/, much earlier than the parallel raising of /eː/ which, according to Lass, are not found in any abundance until ca. 1420 (Lass 1999: 79). Wellcome 409 gainsays such assumption since it provides not a single instance of raising of /oː/ (denoted through ‹ou›-spellings), while on the other hand the parallel (yet later, *pace* Lass) raising of /eː/ to /iː/ is found consistently throughout the whole treatise. So, while the raising of long close /oː/ may have happened yet not been put to paper, it is clear that raising of /eː/ was well underway at the time, which surely indicates that it began earlier.

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