

CONSTRUCTING ANATOMICAL TERMINOLOGY  
IN MIDDLE ENGLISH: THE CASE OF BRITISH  
LIBRARY, MS SLOANE 3486 (FF. 140<sup>v</sup>–147<sup>v</sup>)<sup>1</sup>

*Abstract*

British Library MS Sloane 3486 contains a late Middle English abridged translation of Gilbertus Anglicus' 13<sup>th</sup>-century *Compendium medicinae*, one of the first attempts to epitomize the medical lore current in medieval England. This vernacular version of Anglicus' Latin text devotes fifteen leaves (folios 140<sup>v</sup>–147<sup>v</sup>) to gynaecological and obstetric matters which, at that time, were still heavily influenced by ancient Greek and Roman medical precepts and therapeutic practices. Anatomical terms were essential to describe the physiological workings of the female body; to give etiological accounts of menstruation, pregnancy and delivery complications; to explain the symptoms and syndromes generally associated with the so-called *sekenesses of wymmen*; as well as to administer medicinal and surgical treatment properly. The present paper intends to categorize and describe the linguistic and rhetorical strategies the translator of MS Sloane S3486 used to render anatomical terminology into ME, thus contributing to de-Latinize medical discourse and making it plausibly more accessible to the unlearned. **Keywords:** Anatomy; Gilbertus Anglicus; gynaecology; MS Sloane 3486; Middle English; terminology.

*Resumen*

El MS Sloane 3486 de la British Library contiene una traducción (abreviada) al inglés medio del *Compendium medicinae* de Gilbertus Anglicus, uno de los primeros intentos de resumir el conocimiento médico en la Inglaterra medieval. Esta traducción vernácula del texto latino de Anglicus dedica quince hojas (folios 140<sup>v</sup>–147<sup>v</sup>) a temas ginecológicos y obstétricos que, en aquella época, aún estaban severamente influidos por los preceptos médicos y la prácticas terapéuticas de griegos y romanos. Los términos anatómicos eran esenciales para describir el funcionamiento fisiológico del cuerpo femenino, para dar descripciones etiológicas de las complicaciones de la menstruación, el embarazo y el parto, para explicar los síntomas y síndromes asociados normalmente con la llamada *sekenesses of wymmen*, así como para administrar adecuadamente los tratamientos médicos y quirúrgicos. Este artículo intenta categorizar y describir las estrategias lingüísticas y retóricas que el traductor del MS Sloane 3486 empleó para representar la terminología anatómica en inglés medio, contribuyendo de ese modo a des-latinizar el discurso médico y a hacerlo más accesible al lego. **Palabras clave:** anatomía, Gilbertus Anglicus, ginecología, MS Sloane 3486, inglés medio, terminología.

1 INTRODUCTION

BY THE END OF 14<sup>TH</sup>-CENTURY ENGLAND, SCHOLARLY MEDICINE AND science “leapt the walls of [universities] and found a readership outside” (Jones 1999: 433), which demanded translated or vernacular texts to gain familiarity with antique and early medieval medical practices.

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Claire Jones (2004: 23–24) better considers this potential ‘readership’ as an emerging *discourse community* having particular interests, purposes and values in common despite their uneven command of medical jargon, degree of literacy and expertise on the field.

The composition and translation into the vernacular of the many scientific texts written in pre-1500 England has been subjected to growing attention in the last decades. Besides the computerized collection in *The Helsinki Corpus of English Texts* (1991), the indispensable electronic catalogue by Voigts and Kurtz (2000) and the collection of *Middle English Medical Texts* (Taavitsainen, Pahta and Mäkinen 2005), several critical editions and translations of medieval medical manuscripts and recipes (Ogden 1971; Voigts & McVaugh 1984; Hunt 1990; Getz 1991; Pahta 1998; Green 2001) have elucidated certain aspects of the status of Middle English (ME) medical language and terminology. Some important research also suggests the key influence of diglossia, multilingualism and code-switching on the linguistic evolution and lexical complexity of the English language (Voigts 1996; Schendl 2000, 2002; Pahta 2004; Wright 2009). More specifically, some authors have analyzed the emergence of scientific writing in English (Taavitsainen 2009) and the role that translations from Latin into ME had in generating and securing a jargonistic, specialized lexicon to the medical discipline (Robbins 1970; Voigts 1989; Taavitsainen 2004; Goyens, de Leemans and Smets 2008). In this line, the present paper intends to categorize and describe the linguistic and rhetorical strategies the translator used to render anatomical terminology into ME, thus contributing to de-Latinize medical discourse and making it plausibly more accessible to the unlearned.

## 2 PRELIMINARY CONCERNS: THE AUTHOR AND THE MANUSCRIPT

Gilbertus Anglicus was born in Essex *ca.* 1180. Early in his early life, he visited two continental leading medical schools—the *École Médicale de Montpellier* and the *Scuola Medica Salernitana*—where he profited from the mastery of in-house and itinerant experts, and consolidated the preliminary training received in England. A reputed physician during

his lifetime,<sup>2</sup> his medical writings steadily gained recognition among contemporary intellectual circles. He died somewhere in between 1240 and 1250, not after having left a widely perused *scientific* legacy.<sup>3</sup>

Anglicus' *Compendium medicinae* was one of the first attempts to epitomize the medical lore current in medieval England from an empirical perspective. The original Latin text<sup>4</sup> is divided into seven comprehensive books which integrate classical and early medieval medical knowledge with Anglicus' own expertise on the field. The first book is a monograph devoted to the theoretical description and classification of fevers, while the other six deal with a remarkable variety of then-current diseases—following the traditional *de capite ad pedes* systematic order of appearance; a wide range of herbal and minor surgery remedies for the disorders; and some recommendations regarding dietetic healthy habits, daily body care, cosmetics and aesthetics. But despite all efforts to collect only practical results based on experience, Anglicus did not always succeed in keeping himself apart from the influence of superstition and charms in the social conception of medicine (Getz 1991: liii).

By marked contrast, British Library MS Sloane 3486 (S3486) consists of a much simplified vernacular translation of Gilbertus Anglicus' *Compendium medicinae*;<sup>5</sup> in fact, the late Middle English (ME) version

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<sup>2</sup> The living proof of Gilbertus Anglicus' renown is found in Geoffrey Chaucer's *General Prologue* to *The Canterbury Tales* (ca. 1400). The portrait of the pilgrim physician lists several eminent physicians in History: Aesculapius, Rufus of Ephesus, Hippocrates, Haly-Abbas, Galen, Avicenna, Bernard of Gordon, Gilbertus Anglicus and John of Gaddesden. Cf. Benson (1987: 29–30).

<sup>3</sup> For further biographical details, see Wickersheimer (1936: 191–92) or Handerson (1918: 10–14).

<sup>4</sup> Sharpe (1997: 144) has identified twenty-two extant Latin manuscripts of Anglicus' *Compendium medicinae*, dating from around 1271–1400.

<sup>5</sup> S3486 is not the original translation of Gilbertus Anglicus' *Compendium medicinae*, but a copy from an earlier text (Green 1992: 78–79). However, it can be considered a representative exemplification of the state of medical terminology in 15<sup>th</sup>-century English. Cf. González-Hernández and Domínguez-Rodríguez (2008: 147–150).

(ca. 1453) found in this manuscript is only 122 folios long (86<sup>r</sup>–147<sup>v</sup>).<sup>6</sup> The content of the Latin text is substantially reduced in S3486, to the point that it sums up, paraphrases or even omits Anglicus' large theoretical dissertations on disease etiology, physiology and symptoms of disease. The abridgement of the original text is also evident in the reduced number of therapeutic sections, popular curative practices and medicinal recipes.

The last fifteen leaves of S3486 (ff. 140<sup>v</sup>–147<sup>v</sup>) contain a vernacular version of the so-called *sekenesse of wymmen* treatises,<sup>7</sup> which include an introduction to the nature of women on a classical physiological basis and fourteen chapters focused on different gynaecological and obstetric disorders like retention of menstrual blood; profuse haemorrhages; uterine prolapse, abscesses and cancer; or abnormal fetal presentations that could complicate delivery.

### 3 THE CONSTRUCTION OF ANATOMICAL TERMINOLOGY IN S3486

The authors, compilers and translators of medical manuscripts in late medieval England often strove to find the suitable term for a particular body part or organ, especially when no equivalent word existed at hand in the ME lexicon (Norri 2004: 111). This challenge was variously faced by skillful implementation of linguistic strategies, which required a set of different grammatical and lexical-semantic resources. Therefore, it is no wonder that scribes also exploited their knowledge of foreign languages to sort out any communication problems, which could arise when trying to codify specialized or technical content in their own mother tongue.

The three sections below attempt to classify and analyze the lexical units and syntactic collocations that the scribe in S3486 used to name anatomical parts of the human body in ME.

#### 3.1 *One-to-one correspondence*

This label encompasses words that point to a specific referent in the human body. There exists a simple one-to-one correspondence between

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<sup>6</sup> Green (1992: 80–82) mentions six manuscripts containing a complete ME version of the *Compendium medicinae*; these are bound together with some other medical, astrological, pharmaceutical or botanical texts.

<sup>7</sup> Cf. Green 1992, 2006 (with L. R. Mooney).



the signifier (the sound image, the graphic component of the linguistic sign) and the signified (the meaning to which it is connected), thereby establishing a univocal relationship between language and reality that, in turn, brings about referential clarity and precision. However, the manuscript also includes a few words that may be equivocal due to their polysemous nature; whenever a single lexical item corresponds to two or more designated meanings (senemes) in S3486, the interpretation of its exact anatomical sense remains open until the reader retrieves disambiguating information from the co-text in which it is embedded (Pickles 2001: 225).

This first group consists of forty-five words that can be further categorized according to their etymological origin, in the following percentage distribution terms:

[Figure 1]

### 3.1.1 Anglo-Saxon or native words

Although it has been stated that technical matters usually have the highest concentration of classical terminology (Hughes 2000: 34), thirty-six out of the forty-five one-word or simple anatomical terms in S3486 (80%) trace their origin back to Old English (OE), as displayed in Table 1 below:

| S3486 (line; folio)                          | Old English        | Present Day English               |
|--|--------------------|-----------------------------------|
| <sup>(1)</sup> bryes (37; 140 <sup>v</sup> ) | brāw, brēaw        | eyelid, eyelash, eyebrow (= bree) |
| anclē (34; 144 <sup>v</sup> )                | anclē ow, onclē ow | ankle                             |
| arme (2; 143 <sup>s</sup> )                  | earm               | arm                               |
| backe (41; 144 <sup>t</sup> )                | bæc                | back                              |
| breste (17; 143 <sup>s</sup> )               | brēost             | breast                            |
| body (l. 9; 140 <sup>v</sup> )               | bodig              | body                              |
| brayn (l. 18; 143 <sup>v</sup> )             | bræg(e)n           | brain                             |
| forhede (37; 140 <sup>v</sup> )              | forhēafod          | forehead                          |
| fynger (36; 141 <sup>r</sup> )               | fīnger             | fīnger                            |
| gomes (24; 142 <sup>v</sup> )                | gōma(e)            | gum                               |
| hammes (40; 140 <sup>v</sup> )               | ham)m, hom)m       | ham                               |
| hede (16; 143 <sup>v</sup> )                 | hēafod             | head                              |
| herte (1; 141 <sup>t</sup> )                 | heorte             | heart                             |

|   |                  |                        |
|---|------------------|------------------------|
| knees (28; 143 <sup>v</sup> )                       | cne(o)w          | knee                   |
| honde (29; 143 <sup>v</sup> )                       | hand, ho(o)nd(e) | hand                   |
| hypes (40; 140 <sup>v</sup> )                       | hype             | hip                    |
| <sup>(f)</sup> lendis (38; 142 <sup>v</sup> )       | lændenu, lendenu | loins, buttocks        |
| <sup>(f)</sup> lyzte (1; 141 <sup>v</sup> )         | lēoht, lioht     | lung                   |
| lyppe (24; 142 <sup>v</sup> )                       | lippa            | lip                    |
| <sup>(f)</sup> modir (22; 140 <sup>v</sup> )        | mod)dor, mod)dyr | uterus                 |
| mouþe (24; 146 <sup>v</sup> )                       | mvð, mvþ         | mouth                  |
| mydrif (20; 145 <sup>v</sup> )                      | mid+hrif         | midriff                |
| nauel (36; 140 <sup>v</sup> )                       | nafała           | navel                  |
| nayles (25; 147 <sup>v</sup> )                      | næg(e)l          | nail                   |
| necke (37; 140 <sup>v</sup> )                       | hnecca           | neck                   |
| nose (18; 144 <sup>v</sup> )                        | no)osu           | nose                   |
| sides (41; 144 <sup>v</sup> )                       | si)ide           | side                   |
| skynne (19; 147 <sup>v</sup> )                      | sc(h)yn)n        | skin                   |
| <sup>(f)</sup> sperryuer (37–38; 144 <sup>v</sup> ) | spærliira        | (leg) calf             |
| <sup>(f)</sup> ssher (13; 143 <sup>v</sup> )        | scaru            | inguinal region; groin |
| teþe (30; 143 <sup>v</sup> )                        | tēþ, tēð         | teeth                  |
| too (13; 141 <sup>v</sup> )                         | tā               | toe                    |
| þyges (40; 140 <sup>v</sup> )                       | þiōh, þēoh       | thigh                  |
| wombe (26; 141 <sup>v</sup> )                       | wamb             | womb                   |
| yen (37; 140 <sup>v</sup> )                         | ē(a)ge           | eye                    |
| <sup>(f)</sup> yerde (25; 143 <sup>v</sup> )        | gi(e)rd, gyrd    | penis                  |

Table 1. Native anatomical terminology in *S3486* (one-to-one correspondence)<sup>8</sup>

Thirty out of these thirty-six native words (83.3%) in the manuscript are commonly used in Present Day English (PDE) with slightly modified spellings. In fact, Norri (1998: 122) observes that “[...] despite the constant influx of technical terms of Latin and Greek origin, the larger and better known anatomical structures still carry mostly Germanic names that were

<sup>8</sup> The terms recorded in the first column are reproduced as they first appear in the manuscript. I have rendered a semi-diplomatic transcription of the text, in which spelling conventions and singular-plural distinctions are consistently kept; by contrast, scribal superscript letters, underlining, abbreviations and symbols are avoided.

already present in OE.” None of these simple words in current use has undergone a process of jargonistic specialization, as they are usually found both in general and medical contexts.<sup>9</sup> ME *brye)s*, however, is much less frequent in contemporary English since it has been restricted to dialectal or diatypic usage (mainly heard in Northern areas of Great Britain, cf. 2.1.1.).

Most of the terms recorded in Table I (twenty-nine out of thirty-six = 80.5%) denote external topography and organs at the macroscopic level, a significant percentage that attests to a pre-existing OE word stock for this lexical semantic domain, which allowed for successful communicative exchanges revolving around different health topics and everyday circumstances. The predominance of Anglo-Saxon terms to name macroscopic or superficial anatomical features of the human body is still observable in contemporary medical discourse: “[...] even in PDE, ordinary English words are used for large easily visible and easily recognizable organs, whereas Greek or Latin terms are applied to designate finer, less distinguishable organs” (Koch 1987: 117).

Only six out of these thirty native words (20%) have been gradually superseded by other lexical units; namely: *bryes*, *clees*, *lendis*, *sperlyuer*, *ssher* and *yerde*. PDE equivalent terms come from viable or appropriate OE alternatives (ME *bryes* > PDE *eyebrow* [ē(a)ge + OE *brū*], ME *clees* > PDE *toenail* [tā + OE *næg(e)*]), and ME *sperlyuer* > PDE *calf* [cealf]); or from foreign languages: ME *lendis* > PDE *loins* (< Old French *lo(i)gne*), ME *ssher* > PDE *groin* (< Old French *groign?*) and ME *yerde* > PDE *penis* (< class. Latin *pēnis*). An obsolete native word can be also replaced by

<sup>9</sup> A simple Google search returns 302.000.000 results for the word *nose* (18<sup>nd</sup> November, 2011). The first page includes two health-related links: one corresponding to the entry in *Wikipedia*, the worldwide consulted free encyclopedia regardless of the reader's knowledge on the topic; and another to KidsHealth.org (<http://kidshealth.org/kid/htbw/nose.html>). Here, the information is arranged in a basic format and it presents easy-to-follow, illustrated contents. On the other hand, this word is also found in both slightly specialized websites (like *The Merck Manual Home Edition for Patients and Caregivers*: <http://www.merckmanuals.com/home/sec19.html>) and in journals particularly devoted to clinical practice and basic science of otolaryngology, head and neck surgery (*Ear, Nose and Throat Journal*: <http://www.entjournal.com/ME2/Default.asp>).

a hybrid combination, as exemplified by PDE *buttocks* (< Old Norse *butt-r* + OE suffix *-uc*) [cf. ME *lendis* in Table 1].

ME *bryes* is nowadays old-fashioned in the related ophthalmological senses of *eyelid* and *eyelash*, but the variant spelling *bree* is often preferred to *eyebrow* in some contemporary Northern dialects.<sup>10</sup> This is a clear case of semantic restriction since two of the original senses of OE *brāw*, *brēaw* fell into obsolescence; the compound—and self-explaining—words *eyelid* (OE *ē(a)ge* + OE *lid* - ca. 1240) and *eyelash* (OE *ē(a)ge* + Old French *lascher?* - ca. 1752) were eventually preferred in their stead. Conceptually speaking, *bryes* alone (*i.e.* without a pre-modifier) could be a confusing term in S3486, to the point that the proper facial referent—the eyelid—has to be disambiguated by co-textual clues:<sup>11</sup>

[1] ¶ General sygnes & toknes of þis sekenese ben ache & greuance & heuynesse fro þe navel to þe prevy membre & ache of þe reynes and of þe rigge bone & of þe forhede & of þe necke & of þe • yen • & of infeccion of þe bryes þat is to sey changynge of hir colour in to anoþer colour [...] (ll. 35–38, f. 140<sup>v</sup>).

[2] And if þis wiþholdynge be for þickenese of þe blode þat stoppeþ þe sydes of þe veynes of þe modir þat þe blode mowe not flowe in dewe tymes as it shulde • her vryn wille be rede oþer while as blode & in tyme þat þei shuld haue her purgacions it wille be derke & þe veyn is full of blode & þe colour of her bries & her yen • is cler rede (ll. 4–8, f. 141<sup>r</sup>).

ME *lendis* gradually disappeared from the language and the lacuna left was solved by introducing either the word of French origin *loins* or *buttocks* (< OE *buttuc*), depending on the context and the specific anatomical location intended; namely: either “the part of the side and back between the ribs and the pelvis” or “the prominence formed by the gluteal muscles or either side” (Stegman *et al.* 2006: 283, 1118). The same occurred in the case of ME *sperlyuer*, which ceased to designate the back portion, or hinder part, of the lower leg as the PDE term (*leg*) *calf* gained force in the English

<sup>10</sup> *OED Online*, see *bree*, *n.*

<sup>11</sup> The *Middle English Dictionary (MED) Online* records two compound nouns in which the word <bree> combines with prepositions that restrict anatomical location: *above-breggh* and *over-brei*. Even if these combinations seem to be literal renderings (or calques) of Latin *super-cilium*, they may better serve disambiguating purposes.

language (around the 15<sup>th</sup>–16<sup>th</sup> century).<sup>12</sup> Regarding the word *ssber* (< OE *scaru* > ME *sb(c)a(a)re*, *sb(c)e(e)re*), it was already used in the *Anglo-Saxon Leechbook II* (ca. 1000)<sup>13</sup> to mean the division or fork of the body, which is nowadays called inguinal region or groin (*i.e.* “the fold or crease in the junction of the inner part of the thigh with the trunk” [Stegman *et al.* 2006: 835]).

ME *yerde* (literally, “a straight or slender short of branch of a tree; a twig, stick” at that time)<sup>14</sup> alluded to the virile member either because it resembled to a rod in shape, or by analogy with the mental image of a shoot sprouting out of the male body.<sup>15</sup> In PDE, the equivalent word *yard* is seldom found in this figurative anatomical sense, the Latin word *penis* being generally used to denominate the male genital organ.

As shown in Table 1 above, the scribe of S3486 also resorted to OE words when referring to some indispensable organs inside the human body, that is, at a microscopic level, including: *brayn)e*, *herte*, *lyzte*, *modir* and *womb)e*. The Anglo-Saxons had readily adopted traditional Greek ideas related to brain (> S3486 *brayne*) anatomy and function. In fact, Cambridge Gonville & Caius College MS 428, a manuscript dating back to the 11<sup>th</sup>-century,<sup>16</sup> contains the earliest known Western illustration of brain functions. The illustration resembles a Celtic stone cross in design. Around the ring surrounding the intersection of the two bars, it is written: “There are present four principal human members.” These are displayed in a clockwise sequence, starting with the liver and then continuing with the heart, testes and brain, or ‘cerebrum’ (in the upper left fraction of the circle). Clearly influenced by the Hippocratic and Aristotelian systematic conception of the shape, predominant humours and mental faculties of the brain, the scribe of Gonville & Caius College MS 428 drew it as:

<sup>12</sup> *OED Online*, see *sparlire*, *n.* and *calf*, *n.2.*

<sup>13</sup> *OED Online*, see *share*, *n.2.*

<sup>14</sup> *OED Online*, see *yard*, *n.2.* (senses #1 and #11).

<sup>15</sup> *MED Online*, see *yērd* (*n.2.*), senses #4 and #5.

<sup>16</sup> The illustration is included on folio 50. It has been already published by Charles Singer in *Evolution of Anatomy* (London: Paul, Trench & Trubner, 1925; Fig. 31, p. 66).

[...] a skull facing inwards and seen from above, with the coronal, sagittal and lambdoid sutures represented by double lines. The mental faculties inscribed on it centrifugally are “fantasia” (imagination), “intellectus” (reasoning), and “memoria” (memory). In accordance with the Ancient Greek theory of qualities, the brain is labeled cold and moist [...]. (Clarke, Dewhurst and Aminoff 1995: 9)

On the other hand, the heart (< S3486 *berte*) was not only deemed fundamental to the physiological workings of the human body, but also believed of utmost importance for personal development and identity, inasmuch it was “somehow associated with the essence of life and vigour, and was looked upon as the seat of courage” (Haubrich 2003: 106). The Anglo-Saxons also knew about the decisive function of the lungs (S3486 *lyzte*), the basic saccular organs that supplied the organism with the oxygen needed for life. The word *lyzte* is figuratively used in the manuscript as substitute for ‘lungs’, probably on account of some understood association between the pair of respiratory organs and one of its essential qualities: their little weight. The adjective ‘light’ is here nominalised without morphological transformation to refer to an organ with a common name in use (ME *lung(e)* < OE *lungen*), thus giving place to a meaningful semantic transference—a synecdoque—that is only understood in context: “& longe withholdynge of þis blode makip [...] **oþer while it greueþ þe herte & þe lyzte & makip hem to haue a cardiacle**” (l. 44, f. 140<sup>v</sup>— ll. 1–2, f. 141<sup>r</sup>).

The alternation between the metaphorically-used *mother* (S3486 *modi(er)*) and *womb* (S3486 *womb(e)*) deserves a closer analysis. The entry for *womb* in the *Oxford English Dictionary Online* (*OED Online*) starts defining the word as near-synonym to PDE *uterus* (just in figurative sense); and continues noting that *womb* was habitual in ME to indicate other anatomical locations: (i) the abdomen; (ii) the stomach as a receptacle of food; (iii) the heart ventricles; and (iv) the bowels. However, the *Middle English Dictionary Online* (*MED Online*) mentions that it could make reference to the “human uterus or vaginal canal” only in the fifth place, indicating that *womb(e)* was much more frequent to name: (i) the human or animal stomach; (ii) the abdominal cavity or abdomen; (iii) the surface over the stomach or lower abdomen; and (iv) the ventral side of the human body or underbelly. The polysemous nature of ME *womb(e)* is further demonstrated by quotations in which it may refer to the “human

intestinal track; bowels; rectum; guts or abdominal viscera”, “the thoracic cavity or chest” or the “seat of emotion or of one’s deepest self, heart or soul.” Despite this broad range of semantic possibilities, Norri (2004: 116) states that *modir*—a literal translation of Medieval Latin *matrix*—was some kind of functional metaphor that emphasised the nurturing and protective role of the uterus by transferring two innate motherly features to a female body organ.

Although both terms could evoke the same referent in the female body, *i.e.* they are exchangeable in a specific context and under certain linguistic conditions or domains, the scribe of S3486 usually prefers *modir* to *womb(e)* throughout the manuscript. The first word has two senses linked to the field of gynaecology and obstetrics: (i) *uterus* (“& þis blode þat passeþ fro wyemen in þe tyme of her purgacion commep out of þe veynes of þe modir” [ll. 21–22, f. 140<sup>v</sup>]); and (ii) *placenta* (“The modir is a skynne þat þe chylde is closed in / in his moder wombe” [ll. 22–23, f. 140<sup>v</sup>]). Nevertheless, *womb(e)* is more polysemous than *modir* in the text because it indistinctively refers to the (i) *abdominal area* (“¶ But if þe moder falle out of þe wombe by neþe forþ if it be when she haþe bore chylde” [ll. 6–7, f. 145<sup>r</sup>]); (ii) the *bowels* (“& þei shulde be put in a womanes preuy membre as men puttþ suppositories in a mannes foundement to purge þe wombe” [ll. 25–26, f. 141<sup>v</sup>]); or (iii) the *uterus* (“ffor you3 þer wer a dede chylde in her wombe it wolde brynge it oute” [ll. 41–42, f. 141<sup>v</sup>]). The exception is given when the word *moder*, in the strict sense of female parent, comes into scene; in this particular case, the Anglo-Saxon word *womb* is equivalent to *uterus*, as seen in prepositional phrases like: “þe childe is falle in to sum sekenesse or it wille dye **in his moderes wombe**” (l. 19, f. 140<sup>v</sup>), or “a litil skynne þat is aboute þe childe **in his moder wombe**” (l. 19, f. 147<sup>r</sup>).

The native words *gomes* and *teþe* close this first section. It may be stated that both words enjoy certain degree of lexical stability in the historical evolution of the English language. The anatomical senses of *gomes* and *teþe* have gone through a process of immediate semantic continuation since ME, that is, they have remained largely unchanged from a diachronic perspective except for some regular spelling and sound changes (Stefenelli 2011: 564–66).

In his translation of Bartholomew de Glanville's *De Proprietatibus Rerum* (ca. 1398), John of Trevisa uses the plural form *gomes* to render in ME the original author's reference to the fleshy integument of the jaws and bases of the teeth.<sup>17</sup> And in S3486—also a vernacular translation of a Latin text—this lexical item reappears in identical contexts. The choice points to a subjacent translation equivalence, a concept that Newman (1994: 469ii) defines as “a commonsense term [consistently used] for describing the ideal relationship between that a reader would expect to exist between an original and its translation.” This ideal equivalence also contributes to stabilize the semantic content of a word in the language. In fact, the anatomical sense of ME *gomes* has continued in vogue up to PDE (*gums*, also *gingiva* [ $<$  Latin *gingīua*]), and the modern spelling variant is recorded in some contemporary, well-reputed medical dictionaries.<sup>18</sup> Likewise, the word *teþe* (sing. *tōþ*) can be presumed certain extent of lexical stability by ME, as it preserves the Anglo-Saxon anatomical sense<sup>19</sup> referring to “the hard conic structures set in the alveoli of the upper and lower jaws, used in mastication and assisting in articulation” (Stegman *et al.* 2006: 1999).

### 3.1.2 Foreign words

As indicated in section 3.1.1., the accurate translation of Latin texts into English sometimes required resorting to foreign languages to deal with *lacunæ* existing in the ME vocabulary (or, it may be thought, in the translator's own idiolect). The lack of conventional English equivalents for communicating scientific and medical lore outside the boundaries of Latin

<sup>17</sup> *OED Online*, *gum*, *n. 1.* (sense #2.a)

<sup>18</sup> Cf. *Stedman's Medical Dictionary* (2006: 840); *The American Heritage Medical Dictionary* (2008: 232); *Dorland's Illustrated Medical Dictionary* (available at: <http://www.dorlands.com/wsearch.jsp>, ©2011); or *Medical Dictionary: MedlinePlus*, by Merriam-Webster Inc. (available at: <http://www.merriam-webster.com/medlineplus/gum>, ©2011).

<sup>19</sup> These are some examples of early use in real OE documents: “Selle his agen fore, toð fore teð” (King Ælfred's *Laws*, 19; ca. 900); “Hure sylfe leaf [...] þane cancor þara toþa zehæled þur hwan þa teð oft feallad” (*The Old English Herbarium and Medicina de Quadrupedibus*, 209/17; ca. 1150); and “It is said Eize for eize, toth for toth” (Wycliff's *Bible*, Matthew V.38; 1382). Quotations taken from *OED Online*, see *tooth*, *n.* (sense #1.1.a), and *MED Online* see *tōth* (*n. 1.*).



scholasticism usually moved medieval translators and authors to search for *ad hoc* solutions, including adoption of foreign words and coining of new ones. These strategies not only served to enrich the rhetorical and expressive potential of the vernacular, but also “laid a solid foundation upon which the relevant [scientific] fields would be constructed in the centuries to come” (Norri 2004: 100–101).

In S3486, the group of foreign words only includes nine elements, a 20% of the forty-five lexical units that exhibit a one-to-one correspondence with their tangible referents in the human body. These words come from three main sources: Greek, Latin—probably entering into ME through direct contact with Old or Middle French speakers—and Old Norse (ON), another language in the Indo-Germanic family that started to exert lexical influence in English since pre-Conquest times, especially in the field of familiar words used in everyday life and house chores (Wardale 1972: 17–26).

| S3486 (line; folio)                           | Source                       | Present Day English                  |
|---|------------------------------|--------------------------------------|
| legge (40; 140 <sup>v</sup> )                 | Old Norse <i>leggr</i>       | leg                                  |
| foundement (26; 141 <sup>r</sup> )            | Latin <i>fundamentum</i>     | fundament (= ‘buttocks; ‘anus)       |
| pappis (25; 142 <sup>v</sup> )                | class. Latin <i>papilla?</i> | pap (=breast); <sup>(1)</sup> nipple |
| pores (17; 142 <sup>v</sup> )                 | Greek <i>πόρος</i>           | pore                                 |
| <sup>(1)</sup> reynes (36; 140 <sup>v</sup> ) | Latin <i>renēs</i>           | ‘kidneys; ‘loins                     |
| secondyn (37; 146 <sup>v</sup> )              | late Latin <i>secundinae</i> | secundines; afterbirth               |
| splene (41; 143 <sup>v</sup> )                | Greek <i>σπλήν</i>           | spleen                               |
| stomake (28; 142 <sup>v</sup> )               | Greek <i>στόμαχος</i>        | stomach                              |
| veynes  | Latin <i>vēna</i>            | vein                                 |

Table 11. Foreign anatomical terminology in S3486 (borrowings and loanwords)

Eight out of the nine words in Table 11 (88.8%) are still retained in PDE. Three of these eight words (37.5%) have the same physical referent in PDE (S3486 *splene*, *stomake* and *veynes*), thus characterized by a relatively time-stable lexical content.

The words *splene* and *stomake*, both naming two vital organs and dating back to ancient Greek medical texts, enjoyed an undisputed relevance within the Anglo-Saxon conception of the human body. On the

one hand, ‘spleen’ had a lexical counterpart in early OE—*milt*, *mylt*—,<sup>20</sup> which was generally found in Anglo-Saxon manuscripts until the Latin transliteration of Greek *σπλίω* entered into ME (ca. 1300) and superseded the native word.<sup>21</sup> A case in point that attests for the usage of OE *milt* in real documents is the *Old English Herbarium*, a compendium of herbal remedies that incorporated some recipes to alleviate *milt* pain. The Anglo-Saxons believed the spleen (alongside the liver and the kidneys) was the seat of feelings and emotions; therefore, to keep this organ in a healthy state was essential for general well-being (Haubrich 2003: 34). Wallflower, caper and eglantine roots, for instance, were said to be greatly beneficial against spleen pain, especially if prepared and applied in the form of warm topical plasters (Van Arsdall 2002: 221–225).

On the other hand, the ‘stomach’ was thought to play a fundamental role in human physiology since Hippocratic times. By the 2<sup>nd</sup> century AD, the renowned physician Galen of Pergamon described the three principal phases of digestion; his theory on the physiological workings of the human digestive system was willingly accepted and reproduced in medical treatises up to the 16<sup>th</sup> century, including Gilbertus Anglicus’ *Compendium medicinae*.<sup>22</sup> The spelling variant found in S3486, *stomach*, is a literal rendering of Latin *stomachus*, save for the masculine nominative suffix *-us*, which not only resembles to the source language orthographically, but also keeps the primary anatomical sense of the foreign word that designates the sac-like dilatation of the alimentary canal.

And ME *veynes* seems to have entered into the language through Old French *veine*, *vaine* (< Latin *vēna*). The spelling in S3486 may indicate that

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<sup>20</sup> “The *Splen* is so called in English, from the *Greek* *Σπλίω* from whence also the *Latin* word *Splen* is derived. It is otherwise called in *Latin*, *Lien*, and in *English* the *Milt*.” Cf. *The Anatomy of Humane Bodies Epitomized*, by Thomas Gibson (1703: 106). Notice that, in PDE, the noun *milt* remains into existence but it is connected to animal anatomy: (i) the spleen of an animal reared for food; and (ii) the semen or the testes of a male fish. Cf. *OED Online*, *milt*, *n.* (senses #1.a and #2). In the *MED Online*, see *milt(e)* (*n.*).

<sup>21</sup> *OED Online*, see *spleen*, *n.* (examples under sense #1.a.α). In the *MED Online*, see *splēne* (*n.*).

<sup>22</sup> Galen considered the stomach a fundamental piece to the complex physiological process of nutrition, saying that it could even cause disease and unhealthy conditions if it did not convert food into absorbable nutrients properly (Von Staden 2006: 44–46).

this word was fully anglicized by late ME. It should be conceded, however, that *veynes* could be a calque from Middle French *veines* (the alternation between <y> and <i> being plausibly justified on scribal collocation to avoid minim confusion and reading difficulties).

Conversely, there are five lexical items (62.5%) in Table 11 that can point to different anatomical parts depending on the historical period, the topic at hand or the co-textual information surrounding; namely, S3486 *legge*, *fundement*, *pappis*, *pores* and *secondyn*, which are discussed below.

The word *legg(es)* was borrowed from ON *legg-r* during early OE. It generally comprised the entire inferior limb in ME, but nowadays it is semantically restricted to just “the segment of the inferior limb between the knee and the ankle” (Stegman *et al.* 2006: 1063) in technical speech and writing. In S3486, *legg(es)* is fully anglicized as seen in the loss of its original Scandinavian nominative suffix *-r* and the incorporation of the inflectional suffix *-es*, which goes back to the OE masculine plural *-as*. The presence of the OE strong mark for plurality was probably favoured by the massive adoption of French borrowings—which also carried *-es* in plural nouns—into ME (Smith 1998: 113).

In the same vein, the anatomical sense of S3486 *fundement* and *pappis* is topic- and cotext-dependent. Even if these two Latin-derived words initially operated as broad concepts, they gradually experienced a diachronic semantic distinction or bifurcation into two separate meanings. In the 14<sup>th</sup> century, *fundement* variously referred to (i) the buttocks; (ii) the lower extremity of the rectum, the anus; or (ii) the bony framework of the body.<sup>23</sup> However, the exact anatomical site in S3486—the anal orifice—is identified thanks to a brief authorial aside to distinguish between the administration routes and therapeutic functions of pessaries and clysters:

[3] Sleyngē of þe modir commēþ of a kene colerik humour þat cleuif  
aboute þe modir within [...] & to hele hem of þis greuance [...] let  
tempre bran with cove mylke and cast it in to þe modir þorouȝ  
**hir preuy membre with a pyssarie as men purgeþ a manes wombe  
with a clisterie þorouȝ his fundement** [...] (ll.1–7, f. 142<sup>v</sup>).

By contrast, the word *pappis* is used rather vaguely in the manuscript. In ME, it could have two distinct meanings in the field of female anatomy:

<sup>23</sup> *OED Online*, see *fundament* (sense #1); and *MED Online*, see *fundement* (sense #5).

(i) *woman's breast*, which either pointed to the mammary glands or, more generally, the ventral part of the body between the neck and the abdomen; and (ii) *nipple*.<sup>24</sup> Despite this referential ambiguity, the text is not clear about where to perform the therapeutic cuppings needed to drain any surplus blood out of the female body. The anatomical location to be scarified is therefore uncertain and it can only be presumed:

[4] [...] & profitable bledynge ben at þe veynes of þe grete toon to be garsyd on þe leggis byneþe þe sperliuere boþe by fore & by hynde **and to be cuppyd by neþe þe pappis** & also by neþe þe reynes & by hynde [...] (ll. 42-43; f. 140<sup>v</sup>— l. 1; f. 141<sup>r</sup>).

Likewise, *pores* is not used in S3486 to identify a minute opening in the skin or body surface, but the small holes that sometimes let the blood flow out of the veins (so that there is a pathological wasting or loss of such vital liquid). Again, this is a case of analogy, in which the transference of meaning is contingent on some sort of assumed functional correspondence; just like the human body sweats, or excretes, watery fluids through the pores of the skin, women's profuse haemorrhages may be due to the piercing quality of the blood or to its thinner consistency which causes an abnormal outflow through vein pores:

[5] To myche flowynge at þis membre of blode • comneþ in many maners as grete plente of blode þat is in wymen [ij] **or of keneship of þe blode þat þorouȝ keneship persiþ þe veynes [iij] or of sotilte of blode þat swetiþ þorouȝ smaler pores of veynes & so flowiþ out for þe blode is vndefyed / & rennyng & þynne as water [iiij]** or it is of feblenese of þe woman þat may not holde þe blode within hir or it is of sum breche of a veyn þat is in þe preuy membre or nyȝ (ll. 15-20, f. 142<sup>v</sup>).

In S3486, the *secondyn* is briefly defined as the organ that physically joins the foetus with the maternal uterus, *i.e.* the placenta. From a 21<sup>st</sup>-century obstetric viewpoint, however, the secundines is a more inclusive concept since it consists of both the placenta and the membranes that envelop the foetus and enclose the amniotic liquid (or after-birth). On this basis, it is

<sup>24</sup> In PDE, the equivalence between *pap* and *nipple* is archaic, chiefly restricted to Northern areas of England and Scandinavia, Irish English and U.S. Midlands. Cf. *OED Online*, *pap*, *n*.

conceivable that the word *secundines* has undergone a process of semantic extension or widening in the medical field:

[6] þe secondyne is a litil skynne þat is aboute þe childe in his moder wombe riȝt as þer is a þynne skynne aboute þe note kernel & oþer while a woman is delyuered þer of when she berip childe & oþer while þe secoundyne leueþ in hir stulle for feblenes of þe modir (ll. 19–22, f. 147<sup>r</sup>)

This section on foreign terms adopted in S3486 closes with ME *reynes*, the only word in Table II that is completely obsolete nowadays. ME *reynes* (l. 36, f. 140<sup>v</sup>), coming from Latin *rēnēs* through Anglo-Norman *reines* or *rens*, is ambiguously used in the manuscript. It can either signify *kidney(s)* [*< ME kid(e)neire?*]<sup>25</sup>—the bean-shaped excretory organs—or *loins*, a specific part of the body situated on each side of the back between the false ribs and the hip bone (Norri 1998: 363). The scribe leaves the anatomical referent unspecified and the caregiver has to put his or her (in case of women—physicians or midwives)<sup>25</sup> previous knowledge and expertise into practice.

### 3.2 Compound words

This second section deals with two-word chains or phrases in which each constituent holds its own lexical (or contentive) meaning, thus making an active and significant contribution to the content of S3486 and promoting, to a certain extent, the development and growth of ME medical terminology.

There are two categories of compound words in S3486. The first results from juxtaposing two descriptive, contentful nouns to indicate a concrete anatomical location or emplacement. ME *rigge bone* (> OE *brycg(g)* + OE *bān*) [l. 36, f. 140<sup>v</sup>], for example, expresses a lexically-specified locative relation, which is usually established by reference to the projecting or elevated part of the back, *i.e.* the vertebral column, spine or backbone. Nevertheless, the combination *rigge* + *bone* could also be used

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<sup>25</sup> During the Middle Ages, much of women's healthcare, particularly in gynaecological and obstetric matters, was actively provided by midwives and other experienced laywomen. Cf. for instance, M. H. Green's *The Trotula: An English translation of the medieval compendium of women's medicine* (2002).

as synonym of *vertebra* in ME,<sup>26</sup> thus being a name not only for the whole axial skeleton of a person or animal but also for each of its cartilaginous constituents. The topic and context in which the word is found would be then responsible for its correct disambiguation ('vertebral column' in the case of S3486).

A variant of this first category is compound words in which the first element is inflected for the genitive case (Saxon genitive). The *-es* ending, which marked the genitive singular of most OE nouns, is kept in some anatomical terms of S3486. In the noun phrase (NP) *þe shulderes blades* (< OE *sculdur* + OE *blæd*) [l. 39, f. 140<sup>v</sup>], the scribe combines the word-form *shulderes* (in possessive case) with *blades* (in nominative plural) to narrow the anatomical area in question, *i.e.* the posterior shoulder region. This linguistic device helps the reader in symptom localization: "þan þei shul haue heuynesse aboute þe mouþe of hir stomake & ache aboute þe shulderes blades boþe byfore & byhynde" (ll. 38–39, f. 141<sup>v</sup>).

Historically, the combination *shulderes blades* has undergone a process of lexicalization to end up meaning (or being a less-specialized synonym of) 'scapula' in PDE. This process involved formal modification of the head word (by which *shulderes* lost its bound *-es* morpheme) and a semantic shift in *blade(s)*; on analogical grounds, *blade*, which was generally used for "the broad, flattened, leaf-like part—as distinguished from the shank or handle—of any instrument or utensil" in early ME,<sup>27</sup> acquired a specialized medical sense due to its formal similarity with the flat, triangular bone lying in each dorsolateral part of the thorax.<sup>28</sup> Therefore, the combination 'shoulder blade' was adopted in the lexical inventory of the language to enrich its expressive and communicative potential in the scientific domain (Brinton and Traugott 2005: 96–97).

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<sup>26</sup> MED Online, see *riggebōn* (n.).

<sup>27</sup> OED Online, see *blade*, n.; MED Online; see *blāde*, n.

<sup>28</sup> The characteristic shape of the 'shoulder bone' also serves as contradistinction to the other two bones (*clavicle* and *humerus*) that make up the human shoulder. In PDE, however, *shoulder-blade* and *blade-bone* coexist with the classical, and more technical, loan translation *scapula*; in the same wise, the hybrid compound word *collarbone* (< Latin *collāre* + OE *bān*) functions as synonym of *clavicle* (< Latin *clavicula*) and the *upper arm bone* is the vernacular counterpart of Latinate *humerus*.

The second category of compound words is formed by ‘adjective + noun’ combinations. ME *lytil fynger* (> OE *lītel* + OE *fynger*) [l. 31, f. 141<sup>v</sup>] designates the fifth digit of the hand. By means of nominal premodification, the scribe is able to provide a more accurate picture of the ideal size a medicated vaginal suppository should have: “[...] and make þer of a suppositorie **as grete as þer lytil fynger** & put it in hir prey member” (ll. 31–32, f. 141<sup>v</sup>). The same word formation strategy is seen in *grete too* (OE *grēat* + OE *tā*) [l. 12, f. 141<sup>v</sup>], in which the adjective *grete* facilitates referential identification and somehow guides the caregiver in the correct application of surgical therapeutic measures against accumulated menstrual blood: “And aboute þat tyme of þe mone þat þei sshulde haue her purgacion if þei haue non **let hem blede a gode quantite at þe grete too & anoþer day at her oþer too**” (ll. 11–13, f. 141<sup>v</sup>). In PDE, the original adjective *grete* (in the sense of ‘thick’ or ‘stout’) has been replaced by *big* (OE *byggale*), another Anglo-Saxon qualifier that better defines the most prominent digit in the human foot.

In *þe prey member* (l. 36, f. 140<sup>v</sup>), the scribe resorts to a spelling variant of Middle French *privé*, *prevé* plus an anglicized version of Latin *membrum* to designate the external female genitalia. Both loanwords had specific senses applicable to the domain of human sexuality, which came to reinforce the scribe’s lexical choice. ME *prey* was often used to define actions relating to sexual activity or procreation, and, along the same line of thought, female genitals could be “private” because of their relevant role in generation (Wallis 2010: 222–31). Likewise, the word *member* itself was a well-established medieval euphemism for *genitalia* that, at the same time, implied some connotation of intimacy and reservation.<sup>29</sup>

### 3.3 Complex noun phrases

The last section comprises a series of periphrastic constructions formed by two or more lexemes in combination with functional or grammatical elements. This constituent-structure definition allows a further subdivision according to the syntactic strategies used to express anatomical location.

<sup>29</sup> *OED Online*, see *member*, *n.*; and *MED Online*, see *member*, *n.* (especially sense #2).

3.3.1 2.3.1. Periphrastic *of*-constructions

In S3486, it is frequent to find *of*-constructions that only incorporate native elements. When writing *þe holownesse of þe modir* (< OE *hol(e)h* + OE *-ness* + OE *mod)dor, mod)dyr*) [ll. 21–22, f. 141<sup>r</sup>], the scribe makes a figurative use of the language to denominate the *uterine cavity*. The noun *holownesse* perfectly recalls the characteristics of the cavernous space within the uterus, while *modir* metaphorically stresses its nurturing and protective functions.<sup>30</sup> Along the same line, *þe depenesse of þe modir* (ll. 36–37, f. 143<sup>v</sup>) may be referring to PDE *fundus of the uterus*, the farthest part from the uterine opening or exit (just opposite to the cervix).

However, *þe mouþe of þe modir* (l. 28, f. 144<sup>r</sup>) combines the analogical use of *mouþe*—whose prototypical meaning is transferred to another anatomical site due to formal, and even functional, reasons—with the metaphorical use of *modir*. In PDE, this linguistic expression has been superseded by the Latin-derived compound noun *vaginal orifice*. There is also a transferred meaning in ME *stones*, an everyday word undergoing a process of specialization that remained in force up to the 17<sup>th</sup>-century. The scribe of S3486 either uses *stones* to refer to PDE *ovaries* (ME *þe stones of þe modir* < Latin *ovarium*) or *testicles* (ME *þe stones þat ben in þe yerde* < Latin *testiculus*).<sup>31</sup> In both cases, the metaphor works on account of the formal resemblance between the egg-shaped reproductive organs and a rounded stone or pebble.<sup>32</sup>

The lexical unit *þe clees of her feet* (l. 27, f. 147<sup>r</sup>) is a pleonasm; it conveys the same implicit meaning twice without being indispensable to

<sup>30</sup> Cf. 3.1.1. above.

<sup>31</sup> The entry for *stōn, n.* in the *MED Online* notes that *stones* was sometimes found in punning contexts in reference to their “precious” nature and essential role to reproduction (see senses #9 and #14). However, *stones* is now obsolete in medical contexts, although often heard in vulgar speech to name the male testes (cf. *OED Online, stone, n.* [sense #11.a]). *MED Online*, see Besides, the *MED Online* notes that *stones* was sometimes found in punning contexts in reference to their “precious” nature and essential role to reproduction.

<sup>32</sup> Galen of Pergamum (ca. 130–200) found some kind of viscous fluid in the uterine horns—probably by dissecting a female ape—which he identified as female seed. This finding also led him to mistakenly assume that the ovaries were the female equivalent to male testes, and that reproduction required sperm from both parents (Hellwarth 2002: 1–4).



understand the message. Given that the word *clees* primarily designates “the sharp horny nail with which the feet of birds and some beasts are armed,”<sup>33</sup> it is likely that the scribe judged it necessary to complement the noun head with a prepositional phrase (“of her feet”) that served as a clarifying linguistic device; thus, the scribe was able to extrapolate an otherwise animal feature to the human body. ME *clees*, a then-current synonym of *claw* and *hoof*, has also fallen into disuse save for some dialectal areas. In PDE, it is often named through the native compound word *toenail* (< OE *tā* + OE *na(e)gl*).

Finally, there are periphrastic of-constructions formed by hybrid combinations, that is, by native and foreign lexemes. The case of *þe mouþe of þir stomake* (ll. 38–39, f. 140<sup>v</sup>) is a ME rendering of OE *mup* and Greek *στόμαχος*. In PDE, it corresponds to technical *cardia* (< Greek *καρδία*) or, in common speech, *mouth of the stomach* (an analytic construction that is almost identical to ME). Other illustrative NPs following this pattern in S3486 are commented below:

*þe veynes of þe modir* (l. 22, f. 140<sup>v</sup>), *þe veynes of þe grete toon* (ll. 42–43, f. 141<sup>r</sup>), *þe veyne of þe arme* (l. 38, f. 142<sup>v</sup>) and (l. 25, f. 145<sup>v</sup>). The four examples represent a ME rendering of Latin *vēna* combined with OE (*modir*, *grete toon*, *arme*) or foreign (*legges*) words. PDE equivalents are either synthetic NPs (*uterine veins*, *big toe veins*, *arm veins*, *leg veins*) or analytic, less specialized versions: *veins in/of the uterus/ big toe/arm/leg*.

*þe soles of her feet* (l. 24, f. 144<sup>r</sup>) and *þe pawmes of her hondis* (l. 8, f. 147<sup>r</sup>) are redundant, or pleonastic, expressions from a contemporary perspective.<sup>34</sup> In the medical field, the denotative meaning of ME *soles* and ME *pawmes* is clarifying enough as to their concrete anatomical location; whereas the *sole* is “the under surface of the foot” (ca. 1325),<sup>35</sup> the *pawme* defines the “inner surface of the hand between the wrist and the fingers” (ca. 1300).<sup>36</sup> Nevertheless, both words may be certainly ambiguous out of

<sup>33</sup> *OED Online*, see †*clees*, *n.* and *claw*, *n.* (sense #1).

<sup>34</sup> Cf. 3.2. above.

<sup>35</sup> *OED Online*, see *sole*, *n.* (sense #1); and *MED Online*, see *sōle*, *n.* (sense #1.a).

<sup>36</sup> *OED Online*, see *palm*, *n.2.* (sense #1). The *MED Online* does not record this anatomical sense of *palm* under the corresponding entry *palm)e*, *n.*

the medical field owing to their characteristic polysemy;<sup>37</sup> therefore, it is possible to find restrictive constructions in PDE everyday language like *foot sole/the sole of the foot* and *hand palm/palm of the hand*.

*þe sydes of þe veynes of þe modir* (ll. 4–5, f. 141<sup>r</sup>) can be considered an exceptional construction in which three lexical items are periphrastically combined to make reference to PDE *uterine veins walls*.<sup>38</sup> Once again, the scribe resorts to an analytic structure to entail a close syntactic relation between the three intervening lexical units (*sydes—veynes—modir*) and to signal exact anatomical location.

### 3.3.2 Other periphrastic devices

This last section deals with the usage of a long NP instead of a shorter, or more simple, syntactic structure. Even though the scribe of S3486 rarely points to anatomical sites using a roundabout or circumlocution, there is an example in which he refers to the *perineal area* by means of ‘noun head’ + ‘postmodifying relative *that*-clause’: “þe skynne þat is bytwix þe two preuy membres” (l. 22, f. 145<sup>r</sup>). The scribal choice is a typical example of restrictive relative clause (Kroeger 2005: 231). The actual reference of the NP is determined by the context, giving a hint to carry out a deductive process in two stages: (i) the noun head designates one organ from the human intergumetary system, *i.e.* “the membranous protective covering of the body, made up of multiple layers” (Stegman *et al.* 2006: 1779); and (ii) the modifying clause restricts the identity of the referent to a specific area of the female anatomy: the *perineum*.<sup>39</sup>

<sup>37</sup> The *OED Online*, for instance, includes four different entries for *sole*, *n.*; one for *sole*, *adj.*; and three more for *sole*, *v.* In addition, there are three entries for *palm*, *n.* and another one for *palm*, *v.*

<sup>38</sup> In context: “And if þis wipholdyng be for pickenese of þe blode þat stoppeþ þe sydes of þe veynes of þe modir [...]” (ll. 4–5, f. 141<sup>r</sup>).

<sup>39</sup> The entry for *perineum* in the *Stedman's Medical Dictionary* includes three different but closely related senses: 1. Surface area between the thighs extending from the coccyx to the pubis that includes the anus posteriorly and the external genitalia anteriorly. 2. The compartment inferior to the pelvic diaphragm bounded peripherally by the osseofibrous structures comprising the pelvic outlet the surface of which is sense 1. 3. External surface of the central tendon of the perineum lying between the vulva and the anus in the female and the scrotum and the anus in the male (Stegman *et al.* 2006: 1460).

[7] [...] oþer while women hau so grete penance þat þe skynne þat is bytwix þe two preuy membres to breke son in two in berynge childe & al it is one hole & so þe modir falliþ out and wexiþ harde ¶ (ll. 22–24, f. 145r)

#### 4 CONCLUSION

The vernacularization of practical sciences—including alchemy, astronomy and medicine—started earlier than that of disciplines with a more theoretical nature; in fact, 13<sup>th</sup>-century Europe witnessed the emergence of written scholarly discourse in different vernacular languages, and inaugurated a whole didactic tradition in which much effort was devoted to explain scientific abstractions and concepts in a plain language (Glick, Livesey & Wallis 2005: 136–137). The amount of Anglo-Saxon terms and expressions used to designate anatomical parts and organs in S3486 points to the translator's preference for native lexical items, in contraposition to Greek and Latin well-rooted terminology, and reveals his strategies to solve translation problems and anticipate to foreseeable communication difficulties in the field of gross and microscopic anatomy.

It may be surmised that the potential discourse community of this 15<sup>th</sup>-century gynecological treatise was already familiar with most of the anatomical terms found in S3486, since 80% of the words discussed in this paper are attested in (pre-)OE and early ME manuscripts. The remaining 20% have foreign etymological origin, as displayed below:

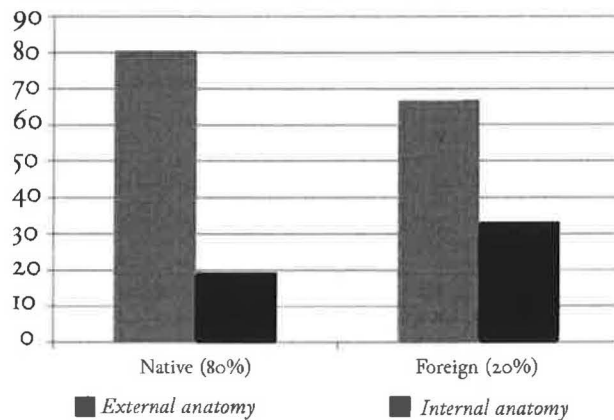


Figure 1. One-to-one correspondence distributed in %

However, the introduction of some periphrastic devices and figurative language, which helped to add deferred senses and specific connotations to the discourse, may also indicate that Gilbertus Anglicus' Latin text also needed modulation and adaptation if an effective diffusion of medical knowledge was to be achieved in 15<sup>th</sup>-century England.

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