

“OF MEDICINE3 SEDATYUE3”: SOME NOTES ON ADJECTIVE
POSITION AND ORAL REGISTER IN
MIDDLE ENGLISH MEDICAL TEXTS¹

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ABSTRACT

The position of adjectives in the English Noun Phrase is regarded as something quite fixed and pertaining to the level of syntax rather than to any other. In previous studies (Moskowich 2002; Moskowich – Crespo 2002; Lareo – Moskowich 2009), it has been shown, however, that there seem to be some other extra-syntactic variables at stake determining word-order patterns.

This paper aims at analysing the word-order patterns of adjectives in the emerging scientific writing in the Middle Ages, particularly in medical texts written in English. To this end, several texts contained in *MEMT (Middle English Medical Texts)* will be analysed. As a first approach, samples belonging to the three different traditions included in the Corpus will be considered. This examination of samples from a surgical text, a specialised one and a remedy book will also help obtain some conclusions regarding the evolution in the use of the so called French-type adjectives in the language.

1. Introduction

The existence of the class adjective has been discussed by many (Halliday 1994: 85) even for the English language. Of course my starting point is that adjectives exist and constitute a separate class in English though not all ele-

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ments in the class are equally *prototypical* in Rosch's (1978) terms or *central* in Quirk et al.'s (2005) to the class. One of its characteristics from a semantic point of view is that "the semantic resource associated with adjectives is primarily concerned with Qualities of Things" (Tucker 1988: 57). According to this, we should expect them to be abundant in descriptive texts such as the ones related to the explanation of certain medical issues affecting different bodily parts.

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This paper aims at analysing the word-order patterns of adjectives within Noun Phrases (NPs) in emerging scientific writing in the Middle Ages, particularly in medical texts. To this end, several texts contained in *MEMT (Middle English Medical Texts)* will be analysed. As a first approach, samples belonging to the three different writing traditions included in the Corpus will be considered. This examination of samples from a surgical text, a specialised one and a remedy book will also help obtain some very preliminary conclusions regarding the evolution in the use of the so called French-type. Therefore, section 2 will very briefly introduce the aim of the research here reported on; section 3 will present the material used for the empirical study, whereas in section 4 I will provide an analysis of the data to follow with some conclusions in section 5.

2. Some previous ideas about adjectives and level of orality

The study of the so-called scientific register and its evolution has occupied many scholars in the last few years. Different aspects of scientific writing in English have been analysed, each of those aspects contributing to the construction of an overview of its general structure and characteristics.

The way in which adjectives behave seems to be a good object of study for a better knowledge of this scientific register and its development. According to Biber (2008) the written register can be defined as a nominal style (where nouns, phrases and adjectives abound) whereas the oral style can be said to be a verbal one (containing higher proportions of verbs, complement clauses and adverbs, among others).

Among the characteristics of both, the ones shown in Table 1 can be mentioned.

Table 1. Oral/written style

Oral	Written
verbs	nouns
complement clauses	nominalisations
consecutive clauses	prepositional phrases
adverbs	adjectives (mainly, attributives)
	noun + noun constructions

Biber (2008) claims that academic prose is, nowadays, highly specialised and dense and this is shown in the last century in the way the characteristics in Table 1 are to be found. At the same time, he claims that the written register may adopt many of the features of orality (but not the other way round) and this may be reflected too in the way authors write when addressing particular audiences or when aiming at particular communicative effects. But nothing is said about how this worked in the past except that in earlier periods written texts were more like those we would consider speech-based registers, never mind what the purpose of the text itself could be.²

- 1) Let make a *round* þynge of þe schap of an ey
(sekenesse_of_wymmen_2.rtf [22]: 12063).

I will focus on the frequency and etymological origin of adjectives in early medical prose as an indicator of the level of orality of texts (or their relation to the oral register, rather) and try to see whether this hypothesis has any relation with the position the attributive adjective occupied in the Noun Phrase, assuming that a structure in which the adjective precedes the noun would be considered the standard one in Middle English NPs.

3. Corpus material

The texts used for this survey are all included in the *Middle English Medical Texts* compiled by Taavitsainen, Pahta and Mäkinen (2005). From it I have selected samples belonging to the three different sub-genres or traditions represented in the corpus. Although *MEMT* was compiled on radically different sampling principles, I have gathered 10,000 word samples basing on my own experience in compiling the *Coruña Corpus of English Scientific Writing*, where this size samples have proved to be more useful in terms of the study of varia-

² N+N structures are included in Biber’s consideration of what he labels a dramatic increase in the use of adjectives.

tion and contrary to Biber's (1993) suggestion that 1,000 words samples are enough for the study of variation in scientific English.

My own decision is based on two facts: on the one hand, on Biber's repeated claim that writing exhibits more variation than speech because it has the possibility of reproducing speech as well and thus all features typical of the oral register. On the other hand, on the fact that the earlier the texts the less rigid the stylistic patterns they follow.

The three sub-genres here represented more or less correspond to the three layers or levels of "informativeness" in which Taavitsainen (2004) classified Middle English medical texts. In this three-fold classification, we can find texts more or less equivalent to the general patterns of medieval commentaries, compilations and question – answer formulae (Moskowich 2008). As can be seen in the information directly taken from *MEMT* in Table 2 all samples but one have been extracted from editions. Chauliac's *Ulcers*, *Sekenesse of wymmen 1* and the *Compendium* by Gilbertus Anglicus have been taken from already edited texts. The fragment *Sekenesse of wymmen 2* has been directly transcribed from the manuscript.³ The three texts of the samples coincide in being translations from Latin into Middle English which might account for some interference to be observed not only in the etymological origin of the lexical items chosen by the author when two possibilities were at hand, but also in word-order. Besides, *Sekenesse of wymmen* is an extract of a treatise on gynaecology and obstetrics. According to Green (1992) it is a translation of fifteen of the twenty gynaecological and obstetrical chapters from Gilbertus Anglicus' *Compendium medicinae*, a scholastic compilation written in c. 1240, the most influential medical text of its time.

Table 2. Description of samples

Work	Manuscript	Edition	Words
Chauliac, <i>Ulcers</i>	New York Academy of Medicine 12, ff. 80b-88b.	B. Wallner. 1982. <i>The Middle English Translation of Guy de Chauliac's Treatise on Ulcers. Part I: Text. Book IV of the Great Surgery.</i> (Acta Universitatis Lundensis, Sectio I Theologica Juridica Humaniora 39.) Stockholm: Almqvist & Wiksell International, pp. 3-40.	10,531

³ This transcription was made by Francisco Alonso Almeida for *MEMT*.

<i>Sekenesse of wymmen 1</i>	Yale Medical Library 47, ff. 60r-65v.	M.-R. Hallaert. 1982. <i>The sekenesse of wymmen: A Middle English treatise on diseases in women.</i> (Scripta 8.) Brussels: Omirel, pp. 27-49.	4,397
<i>Sekenesse of wymmen 2</i>	Yale Medical Library 47, ff. 65v-71v.	–	5,321
Gilbertus Anglicus, <i>Compendium</i>	Wellcome Medical Library 537, ff. 48r-95v.	F. M. Getz. 1991. <i>Healing and society in medieval England: A Middle English translation of the pharmaceutical writings of Gilbertus Anglicus.</i> Madison: The University of Wisconsin Press, pp. 1-54.	12,988

Their distribution in the different layers or writing traditions established by Taavitsainen (2004) can be said to conform to the following pattern:

- “Surgical texts” belong to the learned tradition, some of them being really sophisticated and theoretical. Being this so, we cannot expect a register very close to that of “orality” but rather the opposite.
- “Specialised texts” are texts that have their origins in the academic tradition or treatises dealing with a specific field of specialisation. Since they have a somewhat academic origin, they can be said to be halfway between surgical texts and remedies.
- The last one, “remedies and materia medica”, though apparently the lower layer of them all, may also contain some reference to medical theories at the beginning to end in the form of recipes.

The distribution of samples is shown in Table 3 below.

Table 3. Corpus material

Sub-genre	Sample name	Words per sample	Number of words
Remedies	Gilbertus Anglicus, <i>Compendium</i>	–	12,988
Specialised	<i>Sekenesse of wymmen 1</i>	4,397	9,718
	<i>Seknesse of wymmen 2</i>	5,321	
Surgical	Chauliac, <i>Ulcers</i>		10,531
Total			33,237

In my consideration of attributive adjectives a manual checking of the corpus was necessary to make sure that certain tokens were not disregarded by mistake. This is the case of *ful* and *right* which are normally used as intensifiers and could have been eliminated from my counts in an automatic survey. However, a manual treatment of the material revealed some instances in which they are something different:

- 2) Or let hir drinke an ey schell full of ius of leke [f. 71r\] or of detayne
(sekenesse_of_wymmen_2.rtf [22]: 23364).

4. Analysis of data

Since I have concentrated on a narrow idea of adjectives, that is, descriptive adjectives only (Dixon 2004: 1), only adjectives have been considered for my analysis so that other elements such as nouns premodifying other nouns have been excluded from my counts, thus provoking a clear decrease in the number of tokens to be studied. Of the total number of words in the samples (33,237), only 1.2% correspond to adjectives in an attributive position, which is not a very high proportion and fits with Dixon's (2004) consideration that the class adjective as such is normally smaller than that of nouns and verbs (Dixon 2004: 10). An overall view of the distribution of this small amount of adjectives in the material can be seen in Table 4 below:

Table 4. Adjectives in the corpus

Sample	Total words	Adj. tokens	Adjectives (NF)	Adj. types
<i>Ulcers</i>	10,531	542	450.5	229
<i>Gilbertus</i>	12,988	472	555.7	143
<i>Sykenesse</i>	9,718	388	415.8	174
All samples	33,237	1,422		546

-Ing forms have been a problematic issue. All those that are transitive forms such as *the man driving the car* where the *-ing* form is not a real adjective but, rather, a relative clause of some sort, have been disregarded. That is the case of (3) and (4) below:

- 3) And it hath derke colour as a crabbe. And henric saiþ þat in *corrodyng* it goþ
about as þat fish
(chauliac_ulcers.rtf [10]: 57036).

- 4) for debilitē of þe membre, for which þe superfluiteȝ of membreȝ beyng nyȝ or drawn to it Or for vnguentȝ *mollifying & anynting it* wiþ her moisteneȝ & her vnctuositee
(chauliac_ulcers.rtf [10]: 10400).

For my counts I have also excluded Latin NPs appearing in the material though their English equivalents have been preserved when provided. These Latin NPs are very often the names of medicines.

In this particular example (5), *emplaster nigre* is the direct translation of *emplastrum nigrum* and the original word order in the NP has been also preserved.

- 5) After be yt replete wiþ homely exsiccatyueȝ & be it couered wiþ diapalma or *emplaster nigre*, for it shal duelle quiete long tyme
(chauliac_ulcers.rtf [10]: 55971).

The distribution and frequency of adjectives is very different in the samples under survey. Thus, if we exclude *all*, *other* and similar forms, there are 12 tokens of *ulcerate*, *cavernose* and *evil* in the surgical text on ulcers whereas in a text such as the one by Gilbertus Anglicus and once we disregard the 30 occurrences of *suche*, *good* is the more abundant one with 26 tokens. No doubt the form *good*, if compared with the ones we have just mentioned, is rather unspecific in its semantic content.

Not surprisingly, after the 22 instances of *mychel*, the second more frequent adjective in *Seknesse* is *pryuy* with 17 tokens and *lytull* with 11. Though these are expected results, are they really the ones to be found in a specialised text such as this?

Table 5. More frequent types

<i>Ulcers</i>	Tokens	<i>Seknesse</i>	Tokens	<i>Compendium</i>	Tokens
ulcerate	12	pryuy	17	good	26
cavernose	12	lytull	11		
evil	12				

One of my interests was to see whether postposition was related to etymological origin or level of informativeness. Some of the cases where postposition could be attested were due to the fact that already in OE modifiers tended to be close to the words they modified to such an extent that when a noun had two modifiers, sometimes one preceded the noun and the other followed it (Millward 1996: 107).

- 6) mine þegnas twegen

- 7) And þat is in a *feble* persoun & *dredful*, it is better þat it be palliate þan if it were cured
(chauliac_ulcers.rtf [10]: 59957).

On other occasions if the modifier was long (containing a clause, for instance, it followed rather than preceded the head in order to comply with the end-weight principle.

These two exceptions make that my counts of what we could term “real” or “pure” postposition decrease. I have found 1694 NPs containing attributive adjectives. They have been divided in two groups according to whether these appear in front of the head of the phrase or not and this is shown in Table 6.

Table 6. Position of attributive adjectives in NPs

	N+Adj	Adj+N	Adj+N (NF)
Surgical	152	537	221
Specialised	15	388	37.2
Remedy	39	563	64.7
Total	206	1488	322.9

If we were to consider that postposition reflects a type of structure with which the average reader was not acquainted, the fact that remedies, the lower layer of texts, contains a higher proportion of it than the intermediate one, would be certainly strange. However, we can see that some of the cases of postposition in fact correspond to structures already existing in OE because they are either examples containing two adjectives as in (9) or an adjective followed by a complement as in (10).

Gilbertus shows 8 cases of postponed Germanic adjectives out of a total of 379 Germanic tokens.

- 8) comeþ of blode, but a maner *brovn-rede*. And þei ben hote
(gilbertus_anglicus_compendium.rtf [43]: 43539).
- 9) also fisshes of ryvers *smale and grete*, and þe fyss[*{h}*]es
(gilbertus_anglicus_compendium.rtf [43]: 19107).
- 10) And oken apples *soden* in wiyn [ʌf. 55v\] maken
(gilbertus_anglicus_compendium.rtf [43]: 12559).

Postponed adjectives of non-Germanic origin appear on 31 of 92 occasions which reveals a higher proportion of postposition in adjectives with this type of

provenance. In examples (11) to (16) we can see that many of them are somehow fossilised forms, name of medicines or processes that could be considered to be half-way between NPs and compounds.

- 11) as of men þat han þe feuer *tercian* (Gilbertus: 47416).
 12) þat haþ þis sekenes oximel *squillitike*, or oximel of radiche (Gilbertus: 31131).
 13) Summe is made of oximel *simple* and of oþer þingis y-put þerto (Gilbertus: 3364).
 14) Sugyr *roset* is þus made (Gilbertus: 659).
 15) muste medle with corrisiues *mitigatiues and confortatiues* (Gilbertus: 65911).⁴
 16) Take of gumme *arabike*, dragagantum, amyde (Gilbertus: 61594).

In *Ulcers*, 265 tokens have a Germanic origin. Of those, 30 (11.3%) are postponed. However, in this case postposition cannot be directly related to the French-type pattern, since it is due to other causes: in 8 of these 30 instances, it is the presence of two adjectives modifying the noun that seems to force postposition as in examples (18) to (21):

- 17) Of an vlcere *foule*, stynking & putride (Chauliac: 884).
 18) as of virulence *horrible & stynching*, sich þat it may noȝt... (Chauliac: 58846).
 19) þe vlcere, of figure *brode & rounde*, cauernose & reuersed (Chauliac: 58738).
 20) Cancer is an vlcere *brode & horrible*, sordide (Chauliac: 6811).

⁴ Example (16) deserves being commented on. Both *corrosiue* and *mitigatiue* could be both nouns or adjectives in Middle English. That is to say, it is impossible to tell whether we are in front of an Adj+N or a N+Adj structure.

In other 7 cases, it is the presence of a structure that complements the adjective that makes it follow the head of the NP in compliance with the end-weight principle:

21) & after *wonde*₃ *angred* with *mordificatiue*₃ (Chauliac: 31387).

As for etymological origin, *Ulcers* contains the higher number of non-Germanic origin adjectives in the material, 272. Of them, 122 appear following the noun, which is a much higher proportion than the one seen for Germanic adjectives. In this case, no doubt etymology is playing an important part.

The specialised text *Sekenesse* contains 306 NPs where the modifying adjective has a Germanic origin and only 82 in which the adjective has a non-Germanic provenance. Curiously enough, the proportion of postposition shows a different tendency: regarding etymology, 66.6 % of postponed adjectives have a Germanic origin whereas only 33% have a non-Germanic one.

Only 5 of the 10 cases of postposition found in *Sekenesse* have a non Germanic origin, so in this case, the French-type pattern cannot be considered as the main cause for the presence of N+Adj structures.

Table 7. Etymology and postposition

Texts	Etymology		n. N+Adj
<i>Ulcers</i>	Germanic adj.	265	30
	non-Germanic adj.	272	122
	all adjectives	537	152
<i>Sekenesse</i>	Germanic adj.	306	10
	non-Germanic adj.	82	5
	all adjectives	388	15
<i>Compendium</i>	Germanic adj.	471	8
	non-Germanic adj.	92	31
	all adjectives	563	39

Of the three layers of texts under examination, *Ulcers*, the surgical text corresponding to the top level of technicality, is the one with a higher proportion of postposition (22.1%), followed by the *Compendium* with 6.47%. The intermediate level of technicality represented by the specialised text comes last with 3.72% of postponed instances. I am conscious that the samples under survey are too small to render any definite conclusions. However, they may shed some light on the already initiated process by which syntactic structures in a moment in which English word order acquires more importance are relevant as characteristic of certain sub-genres too.

5. Conclusions

These results seem to demonstrate that etymology is directly related to the position attributive adjectives occupy in the NP but always in combination with text-level and, therefore, intended audience. As already claimed in other works (Moskowich 2002), other factors such as syntactic structure or morphological organisation seem to be playing an important role in adjective position. Etymology is related to the level of informativeness or technicality of texts so that the higher the layer the more non-Germanic forms are to be expected.

However, my results suggest that there is not the same progression from top to bottom in the level of technicality the compilers of *MEMT* have attributed to texts as in their use of syntactic structures related to the use of non Germanic sources. In my opinion, this can be accounted for according to three factors: In the first place, in the low-level text postposition is strongly influenced by OE NPs structure. Secondly, the fact that all the samples analysed have been translated from Latin may also account for some interference. Careless translation may have had an effect on this. Finally, the French-type pattern is also important as a source for specific vocabulary, as we have seen that most structures are used to refer to illnesses or processes of some kind.

REFERENCES

- Biber, Douglas
 1993 “Representativeness in corpus design”, *Literary and Linguistic Computing* 8/4: 243-257.
 2008 “Are there linguistic consequences of literacy? Comparing the potentials of language use in speech and writing” (a paper presented at the 29th *ICAME Conference*, Ascona, 14-18 May 2008).
- Dixon, R. M. W. – Alexandra Y. Aikhenwald (eds.)
 2004 *Adjective classes. A cross-linguistic typology*. Oxford: Oxford University Press.
- Dixon, R. M. W.
 2004 “Adjective classes in typological perspective”, in: R. M. W. Dixon – Alexandra Y. Aikhenwald (eds.), 1-49.
- Halliday, Michael A. K.
 1994 *An introduction to Functional Grammar*. London: Arnold.
- Green, Monica H.
 1992 “Obstetrical and gynecological texts in Middle English”, *Studies in the Age of Chaucer* 14: 53-88.
- Lareo Martín, Inés – Moskowich, Isabel
 forth. “Comparison ‘made possible’: Collocation of *make* plus adjective in 18th century science and fiction”, *English Studies*.

Millward, Celia M.

1996 *A biography of the English Language*. New York: Harcourt Brace.

Moskowich, Isabel

2002 "The adjective in English. The 'French type' and its place in the history of the language", *Folia Linguistica Historica* 23/1-2: 59-71.

2008 "To lerne sciences touching nombres and proporciouns": The proportion of affixation in early scientific writing, *English Studies* 89/1: 39-52.

Moskowich, Isabel – Begoña Crespo García

2002 "Adjectival forms in Late Middle English. Syntactic and semantic implications", *Studia Neophilologica* 74: 161-170.

Taavitsainen, Irma – Päivi Pahta (eds.)

2004 *Medical and scientific writing in Late Medieval English*. Cambridge: Cambridge University Press.

Taavitsainen, Irma

2004 "Transferring classical discourse conventions into the vernacular", in: Irma Taavitsainen – Päivi Pahta (eds.), 37-72.

Taavitsainen, Irma – Päivi Pahta – Martti Mäkinen

2005 *Middle English medical texts*. Amsterdam: John Benjamins.

Tucker, Gordon H.

1988 *The lexicogrammar of adjectives. A systemic functional approach to lexis*. London – New York: Cassell.