NP-BASED MODIFICATION STRATEGIES IN THE RECENT HISTORY OF THE ENGLISH LANGUAGE (“WHEN MATTER IS NO LONGER MODIFIED”)

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If the Soul is Fire, it must be extinguished; if it is Air, it must be dispersed; if it be only a Modification of Matter, why then of course it ceases, you know, when Matter is no longer modified (Francis Coventry 1751 Pompey the Little)

Abstract:
Davison and Lutz (1985: 60) maintain that “the high load of processing would occur in subject position of the target sentence”. In the same vein, in his Syntactic Prediction Locality Theory, Gibson (1998: 27) emphasises the relevance of subjects to the determination of the processing cost of a sentence; in his words, “modifying the subject should cause an increase in the memory cost for predicting the matrix verb, whereas modifying the object should not cause such an increment”. Subjects (external arguments) and objects (internal arguments) are, in consequence, worth investigating from the point of view of their structural or syntactic complexity.

In this investigation we assume (i) that text types can be graded in terms of complexity, (ii) that text types may differ as regards their linguistic complexity both synchronically and diachronically, and (iii), following Taavitsainen’s (2001: 141) definition of genre or text type as “a codification of linguistic features”, that structural and syntactic complexity can be measured out by means of linguistic variables. That stated, in this paper we undertake the study of structural and syntactic complexity in a selection of two text types or textual variants, namely letters and news, in the recent history of English by examining a representative sample of declarative sentences retrieved from a corpus of texts from 1750 to Present-day English, namely the British component of ARCHER (A Representative Corpus of Historical English Registers; Biber et al 1994). Aiming at focusing on formal written-to-be-read texts and informal (‘possibly’ speech-based’) textual material, we concentrate on the analysis of two text types which can be taken as representative of such labels, respectively news and letters.

In Perez-Guerra and Martinez Insua (2007) we offered the preliminary results of a pilot investigation on the complexity of subjects and objects in Late Modern English. In the present paper we focus on the internal structure of such external and internal arguments and pay attention to the pre- and post-modification strategies evinced in the corpus as well as to the syntactic depth of the head nouns in such nominal groups. The Late Modern English data will be compared with in-progress investigation on the Present-day English samples.

1. Introduction

The assumption which underlies this investigation can be summarised in the following quotation by Aristotle (in Poole and Field 1976: 305): “[t]he style of written prose is not that of spoken oratory”. In this paper we aim at exploring variation in a corpus of historical texts by paying attention to the connection between written/speech-based text types and structural complexity. The null hypothesis will be ‘there does not exist (synchronic and/or diachronic) variation among registers’, variation being measured by applying structural and syntactic metrics to a textual corpus. The variable which will be used as a potential determinant of this type of microvariation in the language will be the structure and the distribution of modifying material in the noun phrase. More specifically, we will investigate the modification strategies

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which affect noun phrases functioning as subjects (external arguments) or objects (internal arguments).

This paper is organised as follows. In section 2 we describe the corpus. Section 3 tackles the concept of expansion as well as the typology of expansion strategies which will be used in this investigation. In section 4 we analyse the data by examining variables such as the connection between expansion strategies and (i) the syntactic role of the noun phrase, (ii) the differences between pre- and post-head expansion, (iii) the text types in the corpus, (iv) the historical period, and (v) the length of the modifier. Finally, section 5 is devoted to the summary of the results and the account of issues left for further research.

2. The corpus

The empirical data for the study were drawn from The Helsinki Corpus of English Texts (for the periods Middle English III and IV, and Early Modern English II) and the British component of ARCHER (A Representative Corpus of Historical English Registers; for the Late Modern and Contemporary English periods). Trying to focus on written-to-be-read (and written-to-be-spoken) texts and informal (‘(possibly) speech-based’) textual material, two registers were considered: (i) news and handbooks, as representative of formal language written to be published, and (ii) letters, as representative of a more informal type of language that lies on the boundaries between writing and speech and private and public communication, thus permitting further comparison with other text types that are taken as prototypically representative of the aforementioned dimensions. With respect to the opposition of formal versus informal language, letters permit the inclusion of informal speech since they do not normally require any kind of literary expertise. As Hopper (1997: 3) puts it, letters are examples of vernacular written narrative, where “‘vernacular’ is meant to suggest that it is the kind of narrative that does not usually find its way into print, and is not held up as a model of prose to be imitated”. As far as the opposition between the binomial written versus oral language is concerned, letters occupy an intermediate position between prototypically written text types and other speech-based linguistic discourses. In fact, in a corpus of fifteenth- and seventeenth-century letters, Markus (2001) explores characteristics such as lack of agreement, dangling constructions with unclear referents, omissions and marked word order, all of which are typical of oral language. Biber and Finegan (1997) investigate the linguistic evolution of letters, as well as other genres, from 1650 to 1990 and corroborate the existence of a “general historical trend towards more ‘involved production’ (...) and more ‘situated reference’” (p.75), that is, a drift to orality. In this respect, Biber (2001: 212), dealing with the functional interpretation of the application of his multidimensional analysis to eighteenth-century letters, claims that “written registers were generally more sharply distinguished from spoken registers in the eighteenth century than they are at present”. Finally, as regards the public versus private dichotomy, Markus (2001: 182) claims that “[t]he language of letters is and, as can be assumed, was as close to the linguistic usage of individuals as can be, perhaps with the exception of diaries”.

The texts analysed belong to 1350-1500, 1570-1640 and the second halves of the eighteenth, the nineteenth and the twentieth centuries, and the number of words analysed amounts to 179,092, distributed as shown in Table 1 below.
### Table 1: Corpus

<table>
<thead>
<tr>
<th>register/period</th>
<th>1350-1500</th>
<th>1570-1640</th>
<th>1750-1799</th>
<th>1850-1899</th>
<th>1950-1990</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>handbooks</td>
<td>23,191</td>
<td>12,623</td>
<td>35,814</td>
<td>23,191</td>
<td>12,623</td>
<td>35,814</td>
</tr>
<tr>
<td>news</td>
<td>26,138</td>
<td>23,213</td>
<td>12,006</td>
<td>10,800</td>
<td>11,694</td>
<td>73,586</td>
</tr>
<tr>
<td>letters</td>
<td>21,909</td>
<td>13,283</td>
<td>12,006</td>
<td>10,800</td>
<td>11,694</td>
<td>69,692</td>
</tr>
<tr>
<td>Total</td>
<td>45,100</td>
<td>25,906</td>
<td>38,144</td>
<td>34,016</td>
<td>35,929</td>
<td>179,092</td>
</tr>
</tbody>
</table>

3. Expansion

Since text types are here understood as codifications of linguistic features (Taavitsainen 2001: 141), one can characterize a given text type or register by exploring its linguistic characteristics. That stated, this paper investigates complexity in such text variants by quantifying the strategies of pre- and postmodification in core noun phrases (henceforth, NPs), a factor which, according to the relevant literature (see references below), is determinant of structural complexity. The final picture consists of the connection between, on the one hand, diachronic textual variation and, on the other, structural complexity as evinced by NP modification. The description of text types in terms of the degree of structural complexity which they exhibit is not free of controversy. Where a number of scholars (O’Donnell 1974, Akinnaso 1982, Rijkhoff 2002 precisely on NPs, Biber 2003: 172-74 on newspaper and academic prose) support the view that written texts are structurally more complex, others (Poole and Field 1976, Halliday 1985: 63 when he says that “the complexity of written language is lexical, while that of spoken language is grammatical”) contend that speech is structurally more complex.

Our analysis of structural modification or expansion at the NP level is couched within the trend led by scholars such as Haan (1989), who investigates exclusively clausal postmodification, and especially Biber and Clark (2002), who, on data retrieved also from ARCHER (drama, fiction, newspapers and medical prose in the seventeenth, eighteenth, nineteenth and twentieth centuries), develop a research task similar to the one which we undertake in this paper.

As already pointed out, this analysis focuses on unmarked nominal arguments. Our database contains all the preverbal nominal subjects (unmarked external arguments) and postverbal nominal objects (unmarked internal arguments) of the declarative sentences in the corpus. A large number of non-nominal and pronominal arguments and constituents were, consequently, disregarded in our study:

(i) postverbal subjects, which are marked as far as word order is concerned:

(1) Gloucester, Jan. 3. Last week was married, at St. Nicholas church, Mr. Finch, of Grace-church-street, London, to Miss Cowcher, daughter of Mr. Alderman Cowcher, of this city (1785GEN2.N3)

(ii) preverbal objects, which are marked as far as word order is concerned:

(2) This tretis, divided in 5 parties, wol I shewe the under full light reules and naked wordes in Englissh; for Latyn ne canst thou yit but small, my litel sone" (CMASTRO.H1)
(ii) pronominal subjects and objects. No pronominal constituents have been considered in this study since the distribution of the very few examples of expanded NPs with pronominal heads (see example (3)) cannot be statistically tested.

(3) Alsoe he +tat tolde me this seid that it were better for yow to come upp then to be fotte out of your house with strength (CMPRIV.X1)

(iii) prepositional phrases:

(4) United Nations High Commission for Refugees officials in Malaysia estimate that between 15,000 and 17,000 Vietnamese will land on Malaysian shores each month for the next six months (1979STM2.N9)

(iv) coordinated constructions (or conjunction phrases):

(5) True, true; but by the world she has wit too, as well as beauty (1766GAR.D3)

(v) clausal constituents:

(6) but whether Tito, who attended in 1960 when Khrushchev held the stage, will come is still uncertain (1967STM2.N9)

(vi) ellipsis:

(7) [The dog’s dishes are here] and the cat’s ___ are over there

Table 2 below displays the distribution (raw numbers and normalised frequency per 1,000 words) of the 8,017 nominal constituents in the six periods and the two text types.

<table>
<thead>
<tr>
<th>register/period</th>
<th>1350-1500</th>
<th>1570-1640</th>
<th>1750-1799</th>
<th>1850-1899</th>
<th>1950-1990</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>news/handbooks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>subjects</td>
<td>351</td>
<td>206</td>
<td>830</td>
<td>968</td>
<td>1,078</td>
<td>3,433</td>
</tr>
<tr>
<td>nf= 15.13</td>
<td>nf= 16.31</td>
<td>nf= 37.75</td>
<td>nf= 41.86</td>
<td>nf= 44.48</td>
<td></td>
<td></td>
</tr>
<tr>
<td>objects</td>
<td>240</td>
<td>245</td>
<td>301</td>
<td>649</td>
<td>735</td>
<td>2,170</td>
</tr>
<tr>
<td>nf= 10.34</td>
<td>nf= 19.4</td>
<td>nf= 11.51</td>
<td>nf= 27.95</td>
<td>nf= 30.32</td>
<td></td>
<td></td>
</tr>
<tr>
<td>letters</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>subjects</td>
<td>236</td>
<td>227</td>
<td>231</td>
<td>192</td>
<td>190</td>
<td>1,076</td>
</tr>
<tr>
<td>nf= 10.77</td>
<td>nf= 17.08</td>
<td>nf= 19.24</td>
<td>nf= 17.77</td>
<td>nf= 16.24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>objects</td>
<td>211</td>
<td>259</td>
<td>375</td>
<td>228</td>
<td>265</td>
<td>1,338</td>
</tr>
<tr>
<td>nf= 9.63</td>
<td>nf= 19.49</td>
<td>nf= 31.23</td>
<td>nf= 21.11</td>
<td>nf= 22.66</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1,038</td>
<td>937</td>
<td>1,737</td>
<td>2,037</td>
<td>2,268</td>
<td>8,017</td>
</tr>
</tbody>
</table>

The main aspect which is investigated in this study is the presence/absence of expansion in the NPs under analysis, determiners not being considered an illustration of a strategy of expansion. The label ‘expansion’ thus refers exclusively to pre- and/or postmodifiers or complements of nouns in such NPs. Since this investigation is not couched in the generative tradition and thus is not subject to proposals such as the DP hypothesis (Bernstein 2001), in what follows we shall assume, first, that the noun is the head of the NP and, second, that all the constituents other than the determiners that surround the noun within the NP illustrate strategies of expansion. Since in this paper we have not made a distinction between modifiers
(in principle, optional and not subcategorised) and complements (subcategorised and required), we prefer to use the neutral label of expansion rather than modification, even though the qualifier ‘modifier’ will be used extensively in this paper as an umbrella term which cover both modifiers proper and complements.

A wide variety of expansion strategies were attested; besides the unexpanded NPs, we have found instances of NPs containing pre-head expansion, post-head, and both pre- and post-head expansion (in (8)). The typology of pre-head constituents ranges from nouns and NPs (in (9)) to coordinative constructions or conjunction phrases (in (10)), including adjective phrases (in (11)), possessive phrases (in (12)) and adverb phrases (in (13)):

(8) Among alle Englysch men I fynd many Northffolk men the qwych hath this maner off laughing (CMMETHAM.H1)
(9) And I sent them to dyner a galon whyne and thay sent me a heronsew roste (CMPRIV.X1)
(10) and although nice and curious Hus-wiues will haue a third howre betwixt them (CEHAND2B.H0)
(11) but these wil giue their vsuall measure even the night before they calue; and therefore are said to be Kine deep of milke (CEHAND2B.H0)
(12) I seyd I sopposyd his lordys evydens were seche (CMPRIV.X1)
(13) but I hope, that, except in the Night, we shall have almost entirely your Company (1773HUME.X3)

The variety of post-head constituents is wider and includes not only phrasal (in (14) to (20)) but also clausal constituents (in (21) to (25)), the latter being either finite (e.g. relative clauses) or non-finite (mainly -ing and -ed clauses):

(14) my brodyr Rychard may vnnderstond that of my Lorde (CMPRIV.X1) [postmodifying NP]
(15) The Diuell himselfe hath not such a name (CEPLAY2A.D0) [postmodifying pronoun]
(16) Understand wel that these houres ineguals ben clepid houres of planetes (CMASTRO.H1) [postmodifying adjective phrase]
(17) The payling of the mwe parke is made an end of. (CEPRIV2.X0) [postmodifying of-prepositional phrase]
(18) that I hawe resseywyd an letter ffrom yow beryng date at London the xij day of Octobyr in hast / wheche Y do whell vnnderstond (CMPRIV.X1) [postmodifying prepositional phrase]
(19) Of whiche longe strikes the space bitwene contenith a myle wey (CMASTRO.H1) [postmodifying adverb phrase]
(20) and therefore are first to take barrels very close and wel made, and after they haue salted it well, they fill their barrels therewith (CEHAND2B.H0) [postmodifying conjunction phrase]
(21) That persone that ys born the fyrste day off the mone schuld be dysposyd to be wyse and dyscrete and longe lyffyd (CMMETHAM.H1) [postmodifying relative clause]
(22) but yt shall hawe that lysens that yt shall passe wythhowght howlde woll, appon yt selffe (CMPRIV.X1) [post-head finite clause]
(23) Thyn Astralabie hath a ring to putten on the thombe of thi right hond in taking the height of thinges (CMASTRO.H1) [post-head infinitive clause]
(24) And understond also that alle the sterres sitting within the zodiak of thin Astrelabie ben clepid sterres of the north (CMASTRO.H1) [postmodifying -ing clause]
(25) while the Squadron fitted out at Cadiz doth the same on the other (1762PUBL.N3) [postmodifying -ed clause]

4. Analysis of the data

4.1. Lack of expansion
Graphic 1 below represents the distribution of the NPs which do not contain a single modifier in our database, the filter being the syntactic role of the NP in the sentence. Graphic 2 offers the same information per period and text type.

Graphic 1: Unexpanded NPs (syntactic distribution)

Graphic 2. Unexpanded NPs (temporal and textual distribution)

Graphic 1 shows that the proportion of bare (unexpanded) NPs is slightly larger in the objects than in the subjects. Even though at first sight this conclusion seems hardly in keeping with the principle of end-weight (Quirk et al. 1985: 1362), we will demonstrate below that
end-weight is actually in the driving seat since the (fewer) postmodifiers in the object NPs are longer than in the subject NPs. Put differently, there are fewer expanded objects but the average length of those which contain (post-)modifiers is considerably larger than that of NP subjects.

As regards the distribution of the unexpanded NPs across time, Graphic 2 evinces that the frequencies of this type of NPs are similar in both text types (news/handbooks and letters) in the fourteenth/fifteenth centuries. From that period onwards, the news/handbooks material illustrates an increase of unexpanded NPs, especially from the eighteenth to the nineteenth centuries (n.f.: 19.7 in the eighteenth century, 27.2 in the nineteenth century). By contrast, the letters in our database do not undergo variation other than the general increase from Middle to Early Modern English, and the statistical differences in the remaining periods are not significant.

4.2. Expansion per text type and period

Graphic 3 sketches the relative proportions of the major pre-head expansion strategies per text type, and Graphic 4 shows the distribution of the most frequent post-head expansion strategies per text type.

Graphic 3: Pre-head expansion strategies
The conclusions which can be drawn in the light of these graphics are those following. First, as far as pre-head expansion is concerned: (i) the adjectives are the prototypical dependents in the news/handbooks and the letters, the number of adjectives in the letters exceeding slightly the proportion of adjectives in the news/handbooks; (ii) there are more noun modifiers in the news/handbooks than in the letters; and (iii) the proportions of possessive phrases in the news/handbooks and the letters are similar. Second, as regards post-head expansion, (i) the prepositional phrases and the relative clauses (and, to a certain extent, appositive NPs) constitute the prototypical dependents, which is in keeping with Biber and Clark (2002: 57); moreover, the statistical differences between the news/handbooks and the letters as far as the productivity of postmodifying prepositional phrases are not statistically significant; and (ii) there are more relative clauses in the letters – we will find out below that their frequencies decrease both in the news and in the letters across time.

Graphics 5 and 6 display the evolution of, respectively, pre- and post-head expansion in the periods and text types analysed.

**Graphic 4: Post-head expansion strategies**

![Post-head expansion strategies](image)

**Graphic 5: Evolution of pre-head expansion strategies**

![Evolution of pre-head expansion strategies](image)
First, as regards pre-head expansion in the news/handbooks (Graphic 5), (i) a slight decrease of the adjectives is shown by the data, which absolutely contradicts Biber and Clark’s (2002: 51) findings; (ii) the number of premodifying nouns increases reasonably across time, which is in keeping with Biber and Clark (2002: 62); and (iii) even though statistically less relevant, the proportion of possessive phrases is gradually larger in the periods examined here. Second, the picture for the letters is as follows: (i) the proportions of adjectives are similar across time, which favours Biber and Clark’s (2002) findings; and (ii) a slight decrease of premodifying nouns is observed especially when one focuses on the transition from the nineteenth to the twentieth centuries.

The conclusions affecting the post-head expansion strategies (Graphic 6) are the following. First, the texts in the news/handbooks attest: (i) an increase of postmodifying prepositional phrases, as in Biber and Clark (2002: 60), even though not as dramatic as in their research; (ii) the decrease of the frequency of nouns; and (iii) progressively lower proportions of relative clauses. Second, the data for the letters lead to the following remarks: (i) the apparent increase of post-nominal prepositional phrases, which is not statistically significant and thus not as drastic as in Biber and Clark (2002: 60); (ii) a slight diachronic increase of nouns; and (iii) as regards relative clauses, providing the number of relative clauses in the news/handbooks and in the letters is considerably similar around the twentieth century, the proportion of relative clauses will not constitute a register-specific distinctive feature.

4.3. Length of the modifiers

The size or length of the constituents has been used as a metric for measuring structural complexity in a number of studies. Thus, Wasow (1997: 81) contends that grammatical weight implies “size of complexity”, Yaruss (1999: 330) claims that any “attempts to separate length and complexity are somewhat artificial” and, among others, Arnold et al. (2000: 35)
maintain that the degree of structural complexity exhibited by a constituent can be “measured as the relative length of the (...) constituents, in terms of the number of words”\textsuperscript{2}.

Graphic 7 marshals the normalised frequencies of pre- and postmodifiers (y axis) containing 1 to 15 words (x axis).

*Graphic 7: Pre- and post-head length (up to 15 words)*

This graphic shows that the postmodifiers tend to be considerably longer than the premodifiers. In more detail, whereas the vast majority of the premodifiers comprise up to 9 words and most are 1- or 2-words long (n.f. > 1), on the one hand, there are few examples of 1-word constituents in the postmodifying slot of the NPs (n.f.: 1.08) and, on the other, normalised frequencies higher than 1 are attested in NPs with postmodifiers comprising from 1 to 8 words. As pointed out above, these facts lead us to accept that the principle of end-weight is at work in the NPs examined.

Graphics 8 and 9 focus on the length of the premodifiers in, respectively, the news/handbooks and the letters.

\textsuperscript{2} Akinnaso (1982) measures the length of a constituent by paying attention to the length of each of the words in the constituent, a proposal which has not been backed up by the literature and, in consequence, is not followed in the paper.
The following remarks seem in order here with respect to the size of the premodifying material in the noun phrases investigated. First, the length of the premodifiers in the news/handbooks undergoes a dramatic increase across time from Middle to contemporary English, especially of 1-word constituents. Second, as far as the letters are concerned, the picture is considerably different since the data portray a decrease of the length of the premodifiers from the eighteenth to the nineteenth centuries. In fact, there are no examples comprising more than 4 words in the nineteenth and the twentieth centuries. Such a tendency towards the reduction of the premodifiers is particularly dramatic in the one-word constituents (n.f.: 14.8 in the eighteenth century and 9.2 in the twentieth century).

The length of the postmodifying material is investigated in Graphics 10 and 11, which are focused on the news/handbooks and the letters, respectively.
Unlike premodification, the length of the postmodifiers in the news/handbooks does not vary significantly from the eighteenth century onwards – the decrease which can be observed from the eighteenth to the nineteenth centuries is not statistically relevant. Similarly, the data corresponding to the letters evince the diachronic decrease of the length of the postmodifiers from the eighteenth to the nineteenth centuries, except (non-prototypical) 1-word constituents.

6. Concluding remarks
As part of a larger project on the linguistic characterisation of (strictly) written and speech-based text types in the recent history of the English language, this paper has dealt with the evolution of pre- and postmodification in NPs functioning as subjects and objects in a large number of English declarative sentences retrieved from a corpus from Late Middle to Present-day English. The following conclusions can be drawn from the previous investigation:
- The proportions of NPs without any (either pre- or post-) modifiers have proved that the lack of expansion does not constitute a clear distinctive feature as far as the linguistic characterisation of the text types news/handbooks versus letters is concerned, especially from a diachronic perspective. Whereas in the fourteenth and fifteenth centuries the proportions of unexpanded NPs were similar in both text types, an increase in the frequencies is observed in the Early Modern period, which is stressed by the data until the contemporary period exclusively in the news. That the number of NPs without modifiers or complements is higher in the news than in the letters wreaks havoc with the assumption that stylistic formality and structural complexity go parallel. On the other hand, we have shown that there are more expanded objects than expanded subjects, which, we have argued, does not contradict the principle of end-weight since the postmodifiers are considerably longer in the objects.

- As far as the NPs with modifiers are concerned, we have concluded that: (i) the categorial status of only the premodifiers is a significant variable as regards text-type variation since the nouns in the letters are prototypically premodified by adjectives whereas the nouns in the news/handbooks are commonly accompanied by pre-head nouns – what is more, the proportion of premodifying adjectives decreases in the news/handbooks, and the frequency of nominal premodifiers also decreases in the letters across time; (ii) the category of the postmodifiers does not play a role in the characterisation of the letters and the news/handbooks in the periods examined in this paper since in both cases the prototypical postmodifying category is the prepositional phrase.

- The examination of the length of the modifiers also contributes towards the characterisation of the text types and underlines the importance of the Modern and contemporary periods in this respect. More specifically, we have pointed out that: (i) the length of the premodifiers increases in the news/handbooks from Middle to contemporary English, (ii) the length of the premodifying material decreases in the letters from the eighteenth century onwards, (iii) the eighteenth century is the period in which the gradual decrease of the length of the postmodifiers is observed both in the news/handbooks and in the letters.

The aim of this investigation has been to give support to the view that register variation can be definable in terms of structural complexity. The study of microvariables of structural complexity can shed light on the characterisation of text types in the recent history of English. As Biber and Clark (2002: 64) point out in a study couched in a methodology similar to the one used in this paper, “we appear [in contemporary English] to be in the midst of a dramatic period of change for the preferred patterns of noun modification”. We thus reject other views which deny the connection between text-type variation and linguistic complexity – among others, Beaman (1984: 46), who contends that “spoken language is just as complex as written, if not on some measures”; Halliday (1985: 62), who claims that “each [sublanguage] is complex on its own way. Written language displays one kind of complexity, spoken language another”; and Biber et al. (1999: Chs. 8-10), who maintain that modification is prevalent in both spoken and written registers.

For further research we have left issues such as: (i) the comparison of our data with material from other text types; (ii) the consequences which left- versus right-branching expansion has for structural complexity – it is assumed that left-branching involves more (syntactic) complexity than right-branching (Yngve 1960, Frazier 1985, Hawkins 1994, Liiv and Tuldava 1996, Esser 2006); (iii) the differences between complementation and modification (Anderson 1997, Fries 1999, Keizer 2004); and (iv) the differences between phrasal versus non-phrasal modification (Biber and Clark 2002: 44, Rijkhoff 2002).
References


