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Attributive adjectives in eighteenth-century scientific texts from the *Coruña Corpus of English Scientific Writing*[1]

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ABSTRACT

This work will focus on the study of attributive adjectives through a comparison of two eighteenth-century sets of texts taken from *The Coruña Corpus: A Collection of Samples for the Historical Study of English Scientific Writing*. The first set draws on texts from Life Sciences, pertaining to the field of Natural Sciences, and the second set contains History texts, from the field of Humanities, following UNESCO's classification (1978). This comparison will enable us to discuss the frequency and use of attributive adjectives in eighteenth-century scientific texts, and to identify differences in the use of attributive adjectives in relation to three variables: discipline (Life Science vs. History), sex of the author and text-type (treatises, textbooks, letters, essays, etc). The analysis will include an examination of comparative and superlative adjectives, as well as compound adjectives and demonyms.

1. Introduction

Adjectives are commonly defined as words used to characterise other words, denoting properties or qualities of such words (see, for example, Bhat 1994 and Crystal 2006), and Huddleston – Pullum (2002: 527) describe the adjective as a syntactically distinct class of word whose most characteristic function is to modify nouns. According to Quirk et al. (1985: 403) and Alexiadou et al.

[1] I would like to thank Dr. Isabel Moskowich and Dr. Begoña Crespo for their invaluable help. I would also like to acknowledge the Department of Information Engineering of the University of Parma (Italy) that assisted me with the statistical analyses.

(2007: 289), among others, adjectives have three uses. First, they can function as a complement of a copula (predicative position), as in (1); second, they can serve as a prenominal modifier of a noun (attributive position), as in (2); and third, they can function as a postnominal modifier of a noun (postpositive position), as in (3).

(1) The boy is tall.
(2) the tall boy
(3) people careless in their attitude to money

Among the properties of adjectives are that they cannot be modified by (other) adjectives and that, with some exceptions, they do not take NP complements (Huddleston – Pullum 2002). However, Payne et al. (2010: 528) believe that it is possible for adjectives to function as modifiers of other adjectives, as seen in (4).

(4) blind drunk; pretty fine; bloody stupid

In terms of syntax, attributive adjectives are those which premodify the head of a noun phrase (Quirk et al. 1985: 417; Greenbaum 1996; Biber 1999), and – according to Biber (1999) – in most cases they modify common names and restrict the reference of the noun. From a semantic point of view, according to Bolinger (1967) and Bhat (1994: 19), attributive adjectives tend to denote fairly permanent properties. Borer – Roy (2010: 86) believe that the majority of the adjectival expressions in nominal contexts are attributive adjectives.

The current study aims to compare the frequency and use of attributive adjectives in two sets of eighteenth-century texts taken from the *Coruña Corpus* (henceforth *CC*). One of these sets contains texts from Life Sciences and the other History texts, these two sets pertaining to the fields of Natural Sciences and the Humanities, respectively, according to UNESCO's classification (1978). I would also like to determine whether the sex of the author (the *CC* does not deal with the issue of gender as a psychological characteristic of the individual, and records only the biological condition of authors as men or women – Moskowich (2013: 468)) and the text type have any influence on the use of attributive adjectives. Section 2 offers an outline of several classifications of attributive adjectives. Section 3 then deals with the description of the material and methodology used. In Section 4 I present the findings of the analysis in relation to each variable, and, finally, in Section 5 I provide some conclusions.

2. Semantic classifications of attributive adjectives

Many researchers have tried to classify adjectives that can be used in an attributive way. From a semantic point of view, Valois (2006: 71) argues that manner and thematic adjectives belong to this group. Fries (1986: 127-130) believes that those denoting identity, amount, and attitude of the speaker should also be included, and Bolinger (1967: 11) makes a case for the inclusion of adjectives referring to location in space and time in relation to the speaker. Additionally, Fleisher (2011: 345) notes that adjectives describing a mental state or attribute require that the nouns they modify denote sentient beings (most likely human).

Quirk et al. (1985: 435) propose a semantic division of attributive adjectives into inherent and noninherent; inherent adjectives characterise the referent of the noun directly, whereas noninherent adjectives do not. He also divides attributive only adjectives into intensifying and restrictive adjectives. There are three kinds of intensifying adjectives: emphasizers, amplifiers and downtoners, due to the fact that these three do not characterize the referent of the noun directly. They claim that "restrictive adjectives restrict the reference of the noun exclusively, particularly, or chiefly" (Quirk et al. 1985: 430).

Huddleston – Pullum (2002) have also classified attributive adjectives semantically, outlining a total of eight categories. The first of these is "degree and quantifying attributives" (D&Q), and refers to the degree to which the property expressed in the head nominal applies in a given case (5).

(5) a *complete* fool; a *definite* advantage; the *extreme* end

The second category, "temporal and locational attributives" (T&L), has to do with the relative time at which the description expressed in the head applies, or with its location in space (6).

(6) his *current* girlfriend; the *right* eye; the *southern* states

Third is the category of "associative attributes" (A), where the property expressed by the adjective applies to some entity associated with the head nominal (7).

(7) *clerical* duties; *criminal* law; *foreign* affairs

"Process-oriented attributives" (PO), the fourth category, reflects a context in which the property expressed by the adjective applies not to the denotation

of the nominal but to an associated process, and describes the degree or manner of this process (8).

(8) a *big* eater; a *fast* worker; a *firm* believer

The fifth category, "modal attributives" (M), express a modal qualification to the applicability of the nominal (9).

(9) the *actual* cause; an *apparent* discrepancy; a *certain* winner

"Particularising attributives" (PA), the sixth category, identifies a specific member or group of members of the set denoted by the head (10).

(10) a *certain* house; a *particular* area

Seventh is that of "expressive attributives" (E), which convey some kind of evaluative attitude or emotion (11).

(11) my *dear* mother; her *poor* father; the *wreathed* car

Finally, "transferred attributives" (T), the eighth category, is where the adjective does not apply literally to the head nominal (12) (Huddleston – Pullum 2002: 555-558).

(12) a *drunken* brawl; a *quiet* cup of tea

According to Quirk et al. (1985: 434), adjectives are characteristically stative, but many can be dynamic. Semantically speaking, dynamic adjectives seem to denote qualities that are thought to be subject to control by the possessor and hence can be restricted temporally.

Another semantic feature of adjectives is gradability, that is, they can be premodified by the intensifier *very* or *too*; they can also take comparative and superlative forms. The system of comparison in Modern English, according to González-Díaz (2007: 237), features three different strategies: simple inflectional comparatives, simple periphrastic comparatives, and double comparatives. The latter, she argues, are subdivided into double periphrastic comparatives (13) and double suppletive comparatives (14), although she adds that in late Modern English the double periphrastic forms are considered 'bad English', 'vulgarisms', or 'improper' comparative forms.

(13) more lovelier
(14) worser; lesser

Two other types of adjectives will be analysed in this study: demonyms and compound adjectives. A demonym is the name for the resident of a locality, usually derived from the name of a locality itself (Scheetz 1988); the form would be popularized in this sense by Dickson in his book *Labels for Locals* (Safire 1997). On the other hand, compound adjectives are adjectives made up of two or more words, usually joined by means of a hyphen, and, according to Oostdijk (2008), can be combined freely without being bound by any restrictions. In the present study only compound adjectives joined by a hyphen will be analysed.

3. Material and method

3.1 Corpus material

This study is based on an analysis of texts taken from *CC* (see also Moskowich – Crespo, this volume). The texts themselves are drawn from two of the subcorpora, reflecting two different disciplines: *CELiST* (*Corpus of English Life Sciences*) and *CHET* (*Corpus of English History Texts*). The total sample for analysis amounts to 39 samples of scientific texts, all written during the eighteenth century, with a total of 392,685 words. Of these, 16,906 words are adjectives, with the following syntactic distribution: 15,730 are attributive and 1,176 postnominal. Since my interest here is in attributive adjectives, I have limited my study to those reflected in Table 1.

Table 1. Texts data

	TEXTS	WORDS	ATTRIBUTIVE ADJECTIVES	TOTAL ADJECTIVES
LIFE SCIENCES	20	200,453	9,662	10,711
HISTORY	19	192,142	6,058	6,185
TOTAL	39	392,685	15,720	19,896

The Coruña Corpus: A Collection of Samples for the Historical Study of English Scientific Writing is a project whose aim is to create a corpus for the diachronic study of scientific discourse from most linguistic levels, and thus to contribute to the study of the historical development of English for specific purposes. The compilation criteria of the *CC* were based on a number of external parameters as a means of ensuring fruitful linguistic analyses (Crespo 2012;

Moskowich 2012). All texts were originally published between 1700 and 1900, with first editions preferred. Only one text per author was selected, to avoid the over-representation of linguistic idiosyncrasies. Two texts per decade and per discipline were included, each sample containing around 10,000 words, excluding tables, figures, formulae, graphs, and any quotations not representative of the author's own speech. Finally, only English-speaking authors writing in English were included (Crespo – Moskowich 2009).

3.2 Tools

In order to study the distribution and use of attributive adjectives one main tool has been used: The *Coruña Corpus Tool* (henceforth *CCT*), as the main concordance program. The *CCT* software was developed by the Information Retrieval Lab in collaboration with the MuStE Group at the University of A Coruña ("MuStE Research Group" 2008). It should be noted that, since the *CCT* does not disambiguate adjectives, distinguishing attributive and postnominal forms had to be done manually.

To ascertain the statistical significance of findings, a number of statistical tests were carried out. In order to verify the assumptions of normality, that is, whether the data is well-modelled according to a normal distribution, and also to verify the assumptions of homoscedasticity, that is, if the samples have the same finite variance, the Kolmogorov-Smirnoff and Bartlett tests were performed (Sheskin 2007). In cases where the input data satisfied such assumptions, parametric tests were used. Otherwise, non-parametric tests were applied.

4. Data analysis

In this article I will discuss how the attributive adjectives vary according to three distinct variables: discipline, sex of the author and text type. All these variables will be considered in the analysis of dynamic adjectives, comparative and superlative adjectives, compound adjectives, and demonyms.

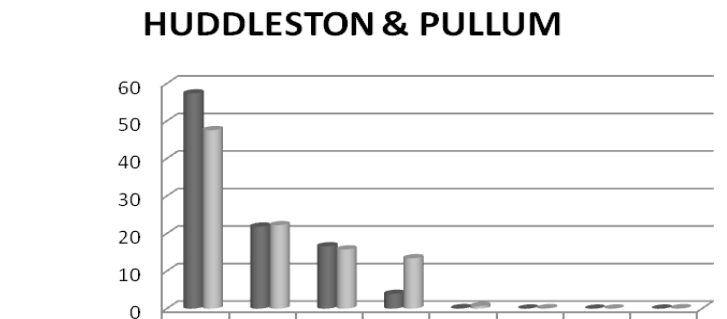
4.1 Discipline

A preliminary analysis shows that authors writing about Life Sciences use more attributive adjectives than writers of History (4.81% vs. 3.15%). Statistical tests showed significant differences here in *CELiST* and *CHET*.

This is, perhaps, not surprising; whereas writing in the Life Sciences tends to aim at an exhaustive description and classification of natural phenomena, History texts are less descriptive and more narrative, typically trying to explain the actions of the past in some area (Cook 1988).

So, one reason for the greater use of attributive adjectives in Life Sciences might be the descriptive nature of writing here. As Lu (2010) claims, writers of natural history often incorporate into their texts personal observations and philosophical reflections upon nature. On the contrary, History writing more commonly relates facts, and in doing so has relatively less need of attributive adjectives. Indeed, Macaulay (1828) stipulated that the good historian must be at pains to avoid being 'creative', and must not, for example, attribute expressions to the characters in his text.

If we focus on the classification made by Huddleston – Pullum (2002), described in Section 2 above, both disciplines, Life Sciences and History, exhibit a high number of Modal attributives (57.35% and 47.52% as seen in Fig. 1). It is worth mentioning that most attributive adjectives found in this study are Modal attributives, with Expressive, Associative, Transferred and Process-oriented attributives all represented at very low levels (less than 0.5% of the total number of attributive adjectives in each case), and for this reason they will not be analysed here.



	M	D&Q	T&L	PA	E	A	PO	T
LIFE SCIENCES	57.37	21.87	16.62	3.94	0.14	0.03	0	0
HISTORY	47.57	22.25	15.78	13.43	0.69	0.11	0.03	0.11

Figure 1. Discipline – Huddleston & Pullum

If we focus on individual disciplines, we see that Life Sciences contains more Modal and Temporal and Locational attributives, whereas in the use of Temporal and Locational attributives the two disciplines are not so distant (16.62% vs. 17.78%). The fact that Life Sciences describes and classifies nature

would seem to explain these findings. When classifying nature, writers are effectively located in space and time, and are thus likely to make relatively greater use of Modal attributives, which express the mode, manner or form of the nominal head to which they apply. By contrast, History writing contains a higher proportion of Degree and Quantifying (22.25% in *CHET* vs. 21.87% in *CELiST*) and Particularising attributives (13.43% vs. 3.94%). Again it is important to mention that the difference in the use of Degree and Quantifying attributives between Life Sciences and History is not very great; hence no definitive conclusions can be drawn. It is the aim of History to relate the history of nations, and since Particularising highlights a group, adjectives denoting the name for a resident of a locality form part of this group.

Hatzivassiloglou – Wiebe (2000: 187) believe that subjectivity "refers to aspects of language used to express opinions and evaluations". According to Bruce – Wiebe (1999), dynamic adjectives are correlated with subjectivity, and thus are used to communicate the speaker's evaluation, opinions, emotions and speculations (Facchinetti 2009). Of the two subcorpora analysed here, the samples from *CHET* exhibit the higher proportion of dynamic adjectives (11.10% vs. 4.78% in *CELiST*). History is a narrative science and often involves the expression of the writer's opinions. Such subjectivity may entail greater use of dynamic adjectives in History than in Life Sciences, which is more experimental and descriptive. In (15) and (16) examples of dynamic adjectives in the two subcorpora (*CHET* and *CELiST*, respectively) are seen.

(15) the *cruel* revenge (Hooke 1745: 47)
(16) by the *impetuous* charge of our squadrons (Pennant 1766: 2)

The findings show that Life Sciences used more comparatives and superlatives than History (see Fig. 2). If we look at the disciplines separately, Life Sciences used more comparatives (4.28% vs. 3.71% in History) and History more superlatives (5.66% vs. 3.71%). As was previously pointed out, given that the aim of Life Sciences is the description and classification of Nature, writers often resort to comparisons as a means of achieving this. History used more superlatives, perhaps because it studies mankind in its progress, fluctuations and interests; it would thus include depictions of the most relevant characters in history explaining their actions and behaviour. Statistical analysis of the findings indicated significant differences in the use of comparatives and superlatives in History – (17) and (18) show examples of comparatives in *CELiST* and superlatives in *CHET*, respectively.

(17) with *thicker* and *whiter* leaves (Sloane 1707: 62)
(18) amongst the *most eminent* patriots of the age (Crawfurd 1710: 84)

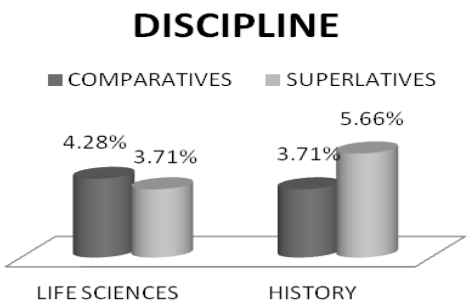


Figure 2. Discipline: Comparative vs. Superlative

In History texts a higher proportion of demonyms was found (8.35% in *CHET* and only 1.68% in *CELiST*), this difference between the two subcorpora being statistically significant according to our tests. Given that demonyms refer to names of nationalities, and that History relates the progress of mankind and nations, this finding is unsurprising. In (19) an example of demonyms in *CHET* can be seen.

(19) make room for the *Irish* ambassadors (Oldmixon 1716: 77)

Life Sciences, on the contrary, is the discipline using more compound adjectives (0.73% vs. 0.08%), and statistical tests show that the differences in this use between the two disciplines is significant. One possible explanation for this is that texts in Life Sciences simply contain more scientific terms than texts in History, and that the creation of new words by compounding lexical units is thus more probable; the opposite can be said of History texts. An example of compound adjectives in Life Sciences texts can be seen in (20).

(20) it arises *tendineo-membranous* from (Douglas 1707: 94)

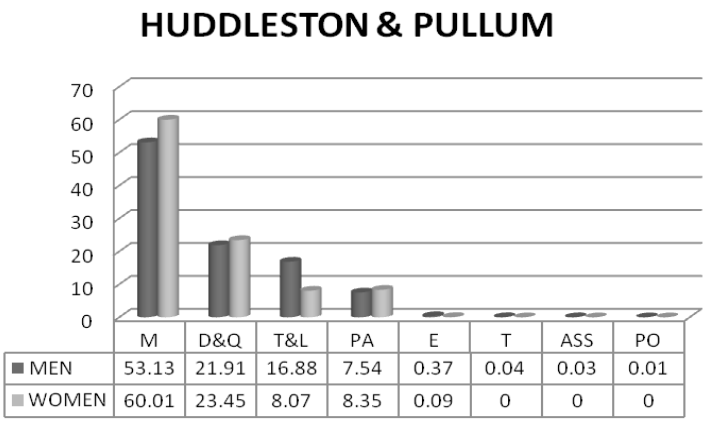
4.2 Sex of author

In order to understand the findings related to this variable, a brief summary of the broad gender differences in language use will be provided. Women's language tends to be more formal (Brown 1980), standard (Brown 1980; Cheshire 2003), elastic (Woolf 1990), conservative (Eckert 1997) and indirect (Tanenn 2003) than the language of men. Trudgill (1972) and Fasold (1990) (both in Cheshire 2003: 427) explain the higher proportion of standard variants of women's language production by saying that this would allow them to have a voice. According to Lakoff (1973), women's language often exhibits evidence of a lack of confidence, involving the use of empty adjectives.

Lakoff also observes that there are sets of adjectives that seem to be largely confined to women's speech in their figurative use (Lakoff 1973: 51); such is the case of adjectives used to name colours, with women reported to make far more precise discriminations in naming colours (Lakoff 1973: 49).

Of the total of 39 texts analysed, from both subcorpora, 36 were written by male and only 3 by female authors. The discrepancy reflects the fact that far fewer women than men were involved in scientific pursuits at the time the texts were written. In the data, men use more attributive adjectives than women (4.04% vs. 3.46%). This may be explained in part by the fact that women had little access to education at the time, and they tended to be more conservative in their writing (Eckert 1997).

Utilizing the classification by Huddleston – Pullum (2002), Modal attributives are the most frequent kind of adjectives. The distribution by sex is as follows: 53.13% of cases occur in samples written by male authors, and 60.01% by women. Other classes of adjectives have different distributions: men use more Temporal and Locational attributives (16.88% vs. 8.07%), whereas women use more Degree and Quantifying (23.45% vs. 21.91%) and Modal and Particularising attributives (8.35% vs. 7.54%). As can be seen in Fig. 3, the difference in the use of Degree and Quantifying and Particularising attributives is not very great, and, given the reduced size of the sample by women writers, no definitive conclusions can be drawn.



	M	D&Q	T&L	PA	E	T	ASS	PO
MEN	53.13	21.91	16.88	7.54	0.37	0.04	0.03	0.01
WOMEN	60.01	23.45	8.07	8.35	0.09	0	0	0

Figure 3. Sex – Huddleston & Pullum

Female writers used more dynamic adjectives (11.2%) than male writers did (6.93%). One explanation for this is the fact that, according to Lakoff (1973: 51), there is a group of adjectives, those "indicating the speaker's approbation

or admiration for something", that are used more frequently by women; the majority of these adjectives in my data are indeed dynamic – (21) and (22) show examples of dynamic adjectives used by a female and a male writer, respectively.

(21) in a very *merciless* manner (Scott 1762: 143)
(22) of the *tyrannical* government (Oldmixon 1716: 50)

Although the findings show that both sexes use more superlatives than comparatives, male authors use more comparatives (0.16% vs. 0.08%) and superlatives (0.18% vs. 0.14%) than female authors: see (23a-b); indeed, as regards comparatives, the frequency for males is approximately double that of females. However, it is impossible to draw firm conclusions here since the sample of texts written by females is, as mentioned above, significantly smaller than that of texts written by males.

(23a) but *less agreeable* taste (Bancroft 1769: 230)
(23b) deserved the *severest* penalties the law could inflict (Tyrrell 1704: 966)

The use of demonyms is also more frequent in texts written by men (0.17% of attributive adjectives vs. 0.13%), although once again the small data set for women makes it impossible to draw definitive conclusions. An example of a demonym in a text written by a man can be seen in (24).

(24) makes a considerable part of the *Russian* dominions (Bancks 1740: 31)

Similarly, compounds are more frequent in the texts written by male authors (0.02% vs. 0.003%). One possible explanation for this is that, according to Jespersen (1998), women received less encouragement than men to create new words. Women use a higher proportion of standard variants (Fasold 1990, in Cheshire 2003) and, as has already been mentioned, they are generally more conservative than men (Eckert 1997), perhaps a consequence of a fear of criticism (Lakoff 1973: 48) – (25) displays an example of compound adjectives in texts written by men.

(25) these *worm-eaten* stones have (Borlase 1758: 282)

4.3 Text type

Although there is no general agreement on the distinction between the terms *genre* and *text type*; Biber (1988: 70) believes these two terms are clearly differentiated, genre regarding "categorizations assigned on the basis of

external criteria" and text type regarding categorizations "assigned on the basis of use rather than on the basis of form". Here I will follow those linguists who believe there is a difference between genre and text type.

The 39 texts analysed in this study represent five different text types: "Letter" (one text), "Treatise" (thirty texts), "Textbook" (five texts), "Essay" (one text) and what *CC* calls "Other", which encompasses biography and travelogue (one biography and one travelogue). Following the convention that the sample size should be equal or larger than ten, no statistical tests were performed here.

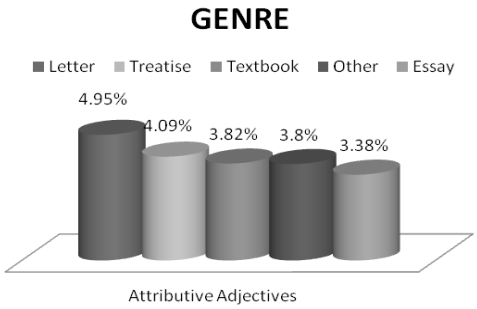
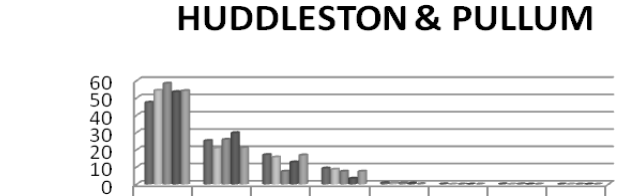


Figure 4. Genre

As can be seen in Fig. 4, the text type using most attributive adjectives is "Letter" (with 4.95% of attributive adjectives), followed by "Treatise" (4.09%), "Textbook" (3.82%), "Other" (3.8%) and "Essay" (3.38%). "Letter" is a descriptive text type. The letter used in this study belongs to the *CELiST* subcorpus, and since, as mentioned above, Life Sciences are comparatively more descriptive they tend to demand a higher number of attributive adjectives.

Following Huddleston – Pullum's classification (2002), all text types utilized more Modal attributives (see Fig. 5). If we focus on the different genres separately, "Textbook" is the genre using most Degree and Quantifying attributives (29.76% of the Degree and Quantifying attributive adjectives), although the rest of text types are not so far behind. Since the text type "Textbook" is represented by only one text, no definitive conclusions can be made concerning it. "Other" is the text type using most Modal attributives (58.37%); as noted above, both the sciences within "Other" in our data are descriptive, and hence are likely to use more Modal attributives. In relation to Particularising attributives, the frequency of use is relatively close in "Essay", "Letter", "Other" and "Treatise". However, "Textbook" is the text type using Particularising attributives the least (only 3.39%, compared

to 9.26% in "Essay"); the *OED* (2012) defines textbooks as manuals for instruction, and thus the text type does not in general need to highlight any specific member or group, the typical function of Particularising attributives. Something similar happens with Temporal and Locational attributives, with all text types, except for "Other", exhibiting very similar frequencies of use of this kind of attributives. Both pieces of writing included in "Other" are narrative, and hence few Temporal and Locational attributives are needed.



	M	D&Q	T&L	PA	E	A	T	PO
ESSAY	47.37	25.22	17.05	9.26	0.82	0.17	0.17	0.05
LETTER	54.32	20.92	15.69	8.65	0.6	0	0	0
OTHER	58.37	25.91	7.46	7.46	0.65	0	0.13	0
TEXTBOOK	53.52	29.76	12.79	3.39	0.52	0	0	0
TREATISE	54.13	21.22	16.87	7.47	0.25	0.05	0.02	0.008

Figure 5. Genre – Huddleston & Pullum

"Other" is the text type using the greatest proportion of dynamic adjectives (14.79%). This category, as already pointed out, embraces biography and travelogue, both narrative forms of writing. This might explain why "Other" uses a higher number of dynamic adjectives, in that these are correlated with subjectivity. Examples of dynamic adjectives in "Other" and "Treatise" can be seen in (26) and (27).

(26) and *amiable* manners (Cornish 1780: 5)
(27) was also by *gentle* words (Tyrrell 1704: 961)

Although all text types used more superlatives than comparatives, "Essay" exhibits the greatest use of comparatives (4.66%), and "Letter" the greatest use of superlatives (8.85%). In Fig. 6 it can be seen that differences in the use of comparatives and superlatives vary depending on text type. For example, the use of superlatives in "Letter", "Textbook" and "Other" more than doubles that of comparatives; on the contrary, the frequency of use in "Treatise" is almost the same. As seen in Section 3.1, Life Sciences texts use a higher proportion of comparative adjectives; History texts, on the other

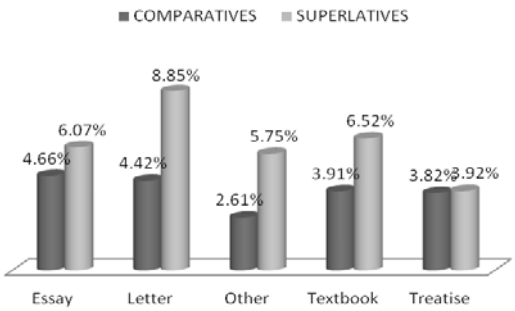


Figure 6. Genre: Comparative vs. Superlative

hand, use more superlative adjectives. The two "Other" texts and most of the "Essays" belong to *CHET*, which generally uses more superlatives. The similar number of "Treatises" per subcorpora might help to explain why no substantial differences are found in the use of comparatives and superlatives here. (28) shows an example of comparatives in "Essay", whereas (29) does it of superlatives in "Letter".

(28) has a much *more plausible* appearance (Chapman 1750: 67)
(29) was in the *most imminent* danger (Pennant 1766: 3)

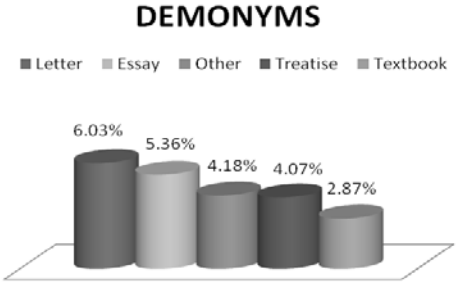


Figure 7. Genre: Demonyms

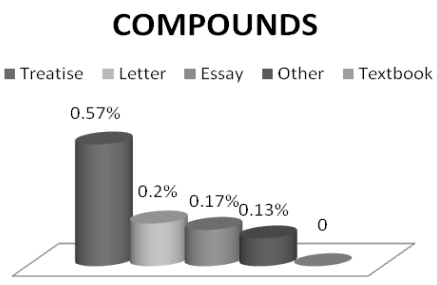


Figure 8. Genre: Compounds

Again the text type using most demonyms is "Letter", with 6.03% (see Fig. 7). Since texts of the "Letter" type typically describe a particular situation or place (cf. *OED* 2012), the use of demonyms in this text type may be higher than in the other text types; (30) displays an example.

(30) on the northern part of the *European* continent (Pennant 1766: 8)

As Fig. 8 shows, "Treatise" is the text type using the greatest proportion of compound adjectives (0.57%). The findings here might be explained in

terms of this text type being methodological and formal in nature, plus the fact that most "Treatises" are from *CELiST*. An example of compounds in "Treatise" can be seen in (31).

(31) of *fresh-water* fish (Hughes 1750: 80)

5. Conclusions

The main goal of this study has been to examine the use of attributive adjectives in scientific English in order to identify their differences in use in relation to three variables: discipline, sex of the author and text type. Findings suggest that attributive adjectives are characteristic of the descriptive sciences. Life Sciences, evidently more descriptive than History, is the discipline in which more attributive adjectives have been found. In terms of text type and frequency of attributive adjectives, the top three types are "Letter", "Treatise", and "Textbook". These text types, like the Life Sciences discipline, are generally descriptive in nature, and that seems to justify the abundant occurrences of attributive adjectives in them. As for the variable of sex, the study sheds a ray of light on male to female differences in scientific writing of the period under investigation. Attributive adjectives seem to have been used by women distinctly less frequently than they were used by men. This may have been linked to the fact that women had less access to education than men did at the time.

The attributive adjectives which show the greater presence in this study are what Huddleston – Pullum (2002) call Modal attributives, Degree and Quantifying attributives, Temporal and Locational attributives and Particularising attributives. Modal attributives, Degree and Quantifying attributives and Temporal and Locational attributives are, like all attributive adjectives, characteristic of descriptive sciences and are used more in descriptive scientific disciplines. Additionally, Modal attributives are seen to be used somewhat more frequently in texts written by women than those written by men. On the other hand, Particularising attributives seem to be utilized more in narrative sciences, since these adjectives are more present in the History texts, which are typically more narrative than Life Sciences texts are. "Other" and "Essay", both narrative text types, feature more Modal attributives and Temporal and Locational attributives, respectively, and "Essay" itself tends to use more Particularising attributives. "Textbook" makes greater use of Degree and Quantifying attributives.

As could be expected, stative adjectives are seen more frequently than dynamic ones are. As Hatzivassiloglou – Wiebe (2000) have noted, dynamic

adjectives reflect subjectivity. My findings on dynamic adjectives in the History discipline and the "Other" text type, both narrative in nature, appear to confirm their statement. Demonyms and superlative adjectives are also evidently characteristic of narratives, being most present in the History and "Letter" texts. In contrast, compound adjectives and comparative adjectives, both more frequent in Life Sciences and "Treatise" texts, seem to be associated more with descriptive, scientific works.

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